

Igniting Growth for Six Decades

Spearheading Mission Sustainability
for Greener Future



ONGC Group

Sustainability Report FY 16

GRI G4.0 Report



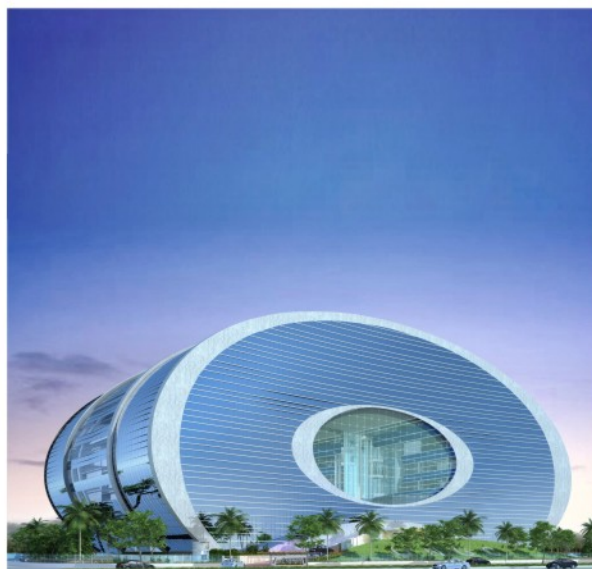
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From CMD's desk

Dear Stakeholders,

As one of the pioneering catalysts of India's industrial era, we successfully completed 60 years of our existence as the country's flagship oil and gas explorer in 2016. It is an incredible achievement and a moment for all of us to relish, enjoy and be proud of. It is a testament of our enduring commitment to the country's energy security and our tireless efforts to achieve it. On this occasion, I congratulate all the ONGCians, our brave and capable energy soldiers, who have always been, the most critical resource for the company in this entire journey. Our evolution in these 60 years from a small entity largely

comprising of geo-scientists to a globally renowned energy company is a reflection of your contributions.

Our growth shows the vast possibilities and promise of the domestic hydrocarbon sector. So, to commemorate our 60 years of operations as well as to create an ecosystem that could lead to a more vibrant and participative industry, ONGC, on 14th August 2016, launched a Startup India fund of ₹1000 million. An active indigenous services and technology setup is a must for sustained growth of the domestic Oil and Gas sector in our country. So, 'ONGC Startup' in alignment with the Government's 'Make in India' and 'Start-up India' campaigns, will serve to foster, nurture and incubate new and exciting local ideas.

ONGC continues to work diligently towards nation building and sustainable development of our society. With this thought in mind, I present to you the seventh consecutive sustainability report of ONGC and the third ONGC group sustainability report comprising of subsidiaries ONGC Videsh and MRPL. This report is based on the latest guidelines of the Global Reporting Initiative (GRI) and adheres to the GRI G4-in accordance 'core' option of reporting.

Speaking of the oil and gas industry at large, the onslaught on prices that began in mid-2014 has continued to garner most headlines for the better part of the last 3 years. Although prices have climbed up by more than 80 percent to over \$50 a



barrel in recent times from the lows of \$30 a barrel in early 2016, largely supported by decision of production containment between major producing countries, the certainty of a sustainable recovery still eludes us. Market demand remains subdued on account of weak economic sentiment and global inventories are still historically high levels. So, for an industry that had gotten used to unusually high prices in the period 2010-2014, must now quickly adapt to a 'lower for longer' environment. Not surprisingly, financial conservatism and strict capital discipline has become the order of the day for most companies.

Although ONGC registered an impressive year operationally, it is not feasible to be completely immune to all the complexities and challenges of the current market environment. Our PAT fell by 9.8% to ₹160 billion as compared to the previous FY. However, on the positive side, low oil prices has resulted in substantial reduction in our subsidy sharing burden - from ₹363 billion in FY15 to ₹10.96 billion in FY16. Cost of oilfield services and materials have also come down to an extent. To an extent, these factors have helped us to partly counteract declining oil prices.

As mentioned, FY'16 was a strong year for operations irrespective of the price regime. With a total of 17 hydrocarbon discoveries and RRR in excess of 1 for the tenth consecutive year, we accreted 65.58 million tonnes oil equivalent of 2P reserves. Production efforts were equally encouraging. The standalone domestic output

from ONGC operated fields during the reporting period stood at 22.36 MMT therefore making it the second consecutive year to register a rise in output despite a predominantly mature portfolio.

Even in difficult times, our fundamentals remain healthy, our project portfolio looks robust and our books still reflect a business that's in a good position to sustain its future plans and programmes. Most notably, we have sustained our capex levels during this period and that alone, especially in difficult market conditions, is a strong indicator of our commitment to achieving national energy goals.

Despite the tumultuous global business environment, ONGC group remains committed to manage business risks and invest for future growth that ensures value creation for all stakeholders. In March 2016, the ONGC Board approved its single biggest ever investment in a project - the development of KG-DWN-98/2 with an investment of ₹340 billion. In order to ensure our Nation's energy security, our overseas arm ONGC Videsh Limited has been continuously working towards securing equity oil from fields abroad. Towards this ONGC Videsh Limited and Rosneft (the During the year, we completed the acquisition of our 26 percent stake in Rosneft's Vankor Field in Russia's East Siberian region and our share of oil is over 110,000 bpd and it has already started accruing to our kitty. Moreover Rosneft and ONGC Videsh signed a Memorandum of understanding for cooperation for geologic survey, exploration and production of hydrocarbons onshore and on the continental

shelf of the Russian Federation. In the downstream business, our refining arm MRPL registered its highest throughput of 15.53 MT during FY16. The refining unit recorded an impressive GRM of US\$ 5.2 per barrel as well as a turnaround in its earnings with a net profit of ₹11.48 billion.

Social responsibility and sustainable development concepts are deep rooted in the governance culture of the group. A key initiative undertaken by ONGC is the Vision 2030 for the North East region of the country, developing it as a hydrocarbon hub at the forefront of India's energy economy. Our 726.6 MW OTPC Power Plant in Tripura, one of the largest Clean Development Mechanism (CDM) projects globally, is among the largest ever investment in the region's infrastructure sector.

I consider UN's Sustainable Development Goals (SDGs) as an opportunity for the ONGC group to further streamline its environmental and social programmes in line with the 17 goals that have been enshrined therein. Climate change is no longer a marginal concern for oil and gas producers and ONGC is committed towards the Government's goals as part of India's INDCs submitted at COP-21, Paris. Key measures and projects undertaken in this regard are outlined in this report.

ONGC group of companies also lays special emphasis on environment management as advocated by the United Nations Environment Programme. Various new initiatives of water management and other environmental protection

activities are outlined in the respective sections of this report for further consideration. ONGC has registered three green building projects (Delhi, Dehradun and Mumbai) as CDM projects with the UNFCCC. These buildings are a statement of the corporate's endorsement of a sustainable approach to doing business with a focus on energy efficiency, recycling and minimum resource wastage.

The group companies are guided by the MoU targets provided on a y-o-y basis by MoPNG. It broadly touches upon various aspects of a triple bottom-line growth.

Many of our ongoing social initiatives have been aligned to major National programmes like



CMD ONGC and MD ONGC Videsh along with Board of Directors at MoU signing ceremony

Swachh Bharat Abhiyaan. Various projects under the broad category of Swachhta Abhiyaan have been institutionalized at ONGC and similarly across group companies. During the reporting period, ONGC spent a total of ₹4.21 billion towards CSR related activities. Projects related biodiversity conservation and ecosystem related services have been taken up under the purview of



CSR in attempt to promote environmental sustainability as well as capacity building of local community in order to provide them with alternate sources of income. The Government of India Social Security Schemes like Pradhan Mantri Suraksha Bima Yojana (PMSBY) and Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY) are endorsed by ONGC for implementation in respect of all contractual workers of ONGC.

Human resources is the most critical asset in our industry as the talent pool of ONGC group is unique in terms of the scale of its varied experience and therefore process have been put in place so that our employees and staff contribute productively and are constantly groomed to rise up to the occasion. This year ONGC participated in the International Yoga Day as a measure for health & well-being of employees. It was an organization wide even and majority of ONGC centres participated by organizing yoga camps for its employees and family members.

ONGC group is guided by a 'Safety first' motto and aims to achieve zero accident by inculcating a safety culture among employees, various safety programmes throughout the year have been instituted across the organization. Despite our sincere efforts, some of the safety performance metrics have deteriorated because of few unfortunate accidents at certain sites that led to loss of life. Towards which remedial measures and corrective actions are underway. A campaign, 'Follow SOP, Avoid Accidents' has been launched at company level for promoting

safety culture and HSE rules have been enacted at the organization.

ONGC group has enacted policies and measures to ensure that the work environment meets the human rights standards as outlined in 10 principles of UNGC. Comprehensive procedures have been put in place in order to ensure that labour practices such as child labour, forced labour, etc. are not allowed within the ONGC group's sphere of operations. This report acts as a Communication of Progress to the UNGC 10 principles.

We are continuously reviewing our strategies, adopting new innovative technologies to remain competitive in a challenging environment. ONGC's new initiatives is a key element of our evolving strategies with focus on alternatives or unconventional sources of energy, ONGC is promoting Gas hydrates that is expected to be the next game-changer in energy sector, by taking a lead role in the National Gas Hydrates Programme in India. Our performance during such difficult times testifies the strength of our core domestic oil & gas portfolio as well as efficacy of our investment towards asset creation.

I hope you find this report more focused and informative, we are always open for constructive feedback to further improve the coverage of topics in the report.

Dinesh K. Sarraf

Chairman, ONGC Group of companies



From MD's desk ONGC Videsh

Dear Stakeholders,

I am delighted to share with you the triple bottom line performance of ONGC Videsh as part of the third combined sustainability report of ONGC group. This year the group report further raised the level of disclosure by adhering to the latest GRI G4 guidelines that is being adopted globally by major corporations. I will talk about some of the key risks and achievements during the year. Additionally, the performance metrics along with supporting case studies presented in the respective sections of this report will further provide you a deeper insight into the developments of the organization over FY16.

The year gone by was very challenging for upstream oil companies, the continued slump in global crude oil prices impacted the operating margins of E&P companies globally. The effect was further compounded by the sluggish global economic growth and geopolitical instability, therefore making it a testing time for us as well. However, the company had undertaken an elaborate exercise to take full advantage of the lower oil prices to further expand ONGC Videsh's portfolio through strategic acquisitions. The key one being the acquisition of 26% (15%+11%) stake in world class Vankor Project of Russia - which has consolidated our presence in Russia. The project is not only likely to augment ONGC Videsh production by more than 50% but the acquisition has also reinforced ONGC Videsh position as "Partner of Choice" as there were so many suitors for this coveted asset.

Last year, to rejuvenate the organization, the concept of business units was introduced. The vision behind setting up these business units is that they are expected to serve as a nuclei of growth in particular geographical areas resulting in time bound, effective and efficient management of assets and maximising the value from past and future investments by the company.

ONGC Videsh is growing from strength to strength as production from international assets registered an increase to 8.92 MMTOE in FY16 as compared to 8.87 MMTOE in FY15 and the organization is at the cusp of transition into a world class major E&P company with focused



endeavours for creating excellence in exploration and production operations, responsive and cohesive team management, innovation and proactive approach to complex project handling, strategic policies formulation and implementation, risk management besides regular operations. The growing organization requires migration to an organisation based on systems and procedures and a framework of adequate control and governance. Corporate governance of highest order has been one of core objectives of ONGC Videsh and steps are underway for SAP implementation and redefining BDP to ensure high standards in this regard. One of the initiatives is the establishment of a G&G



MoU between ONGC Videsh and Rosneft in presence of President of Russia & Prime Minister of India

Centre of Excellence in Houston, USA - a first of its kind in the company and are positive that the centre will provide a strong nucleus for capacity building, skill upgradation in E&P besides, value maximisation and operational support. ONGC Videsh received the ICICI Lombard & CNBC TV18 'India Risk Management Award' in public

sector unit of the year category, at the third edition of 'The India Risk Management Awards'.

Trained human resource is central for achieving the plans and there is an urgent need to retain and retrain workforce in multi-disciplinary skills that forge an organisational wide galvanisation of motivation. Number of new subgroups under different directorates have been created along with dedicated Strategic HR cell to facilitate this transition.

The year ahead will bring its mix of successes & challenges, as an organization the focus is on new value creating acquisitions, managing operational costs, create win-win opportunities for the company and local communities and groom a motivated workforce. The ONGC Videsh team is motivated by the achievements and accolades of the past year and it will serve as a benchmark for further pursuits of objective set for the company for the long term growth plan.

Narendra K. Verma

Managing Director, ONGC Videsh



From MD's desk MRPL

Dear Stakeholders,

I present to you the third consecutive sustainability report of MRPL as part of the ONGC group report. I hope through this report we are able to successfully disseminate our sustainability performance that is relevant to you and presents a fair & balanced picture of your organization.

Our economy is witnessing strong growth led by consumption and in line with the expansion of the economy, domestic demand for energy is also expected to increase. MRPL has aligned itself

with such growth trends and has planned various projects for creating infrastructure that will facilitate logistics value additions and profitability improvements. A key highlight of the year gone-by is our acquisition of majority stake in ONGC Mangalore Petrochemicals Limited (OMPL) and the process for complete merger of OMPL with MRPL is in progress. The subsidiary of the Company, OMPL, during the financial year achieved a turnover of ₹41.89 billion and with the merger of OMPL with your Company we will achieve a world class Integrated Refinery and Petrochemical complex.

Amidst increased competition in the market, we are riding on the strength of continuously expanding our market presence in the direct sales segment of petroleum products in the states of Karnataka, Kerala and few other states as well. MRPL has been successful in gaining significant market share and enhancing direct customer base for products such as Bitumen, Fuel Oil, Sulphur, Diesel, Petcoke and mixed Xylene in its refinery zone. MRPL has achieved a turnover of ₹508.64 billion and earned a net profit of ₹11.48 billion during FY16 after setting off losses of the first three quarter of the financial year.

In the petrochemical business, with a view to extract maximum value from every molecule, the Poly-propylene plant of MRPL was commissioned in June 2015 and dedicated to the nation by Honorable Minister of Petroleum & Natural Gas, State (Independent charge) Shri



Dharmendra Pradhan. The company has been successful in establishing itself as a dominant player in the polypropylene market in the south zone by achieving excellent sales performance of its polypropylene supplies. Moreover, MRPL has drawn up the required plans for implementing upgradation projects to produce BS VI grade of fuels by 2020 in line with the directives of the Government.

MRPL continues to leverage environment and sustainable development as an ingredient of its



MD MRPL receiving award from Hon'ble President of India

business policies and strategic plans. Some of the key initiatives of FY 16 include audit of New Mangalore Port jetties for oil spill management by Oil Industry Safety Directorate (OISD), environmental awareness programmes organized periodically in the neighboring villages in association with Karnataka State Pollution Control Board, continuous online monitoring analyzers are being installed to monitor Treated Effluents for various parameters in line with the

directions of Central Pollution Control Board (CPCB). Detailed information on our environment management projects is referred in the respective section of this report.

MRPL has nurtured a dedicated team who are passionate about their work and the company ensures that it continues to further motivate by providing them a good working environment, with equal emphasis on employee welfare and employee relation initiatives. An Advanced Strategic Leadership Program (ASLP), named "Project Uttisht" in collaboration with IIM Udaipur was undertaken to train 100 middle and senior level executives of the Company during the year.

In the times to come, we are steadfast on our mission to contribute towards the goals of ONGC group in an inclusive and sustainable manner. I request all stakeholder to go through this report and revert with comments that could help us improve it further.

H. Kumar

Managing Director, MRPL

Performance highlights

| ONGC | | | ONGC Videsh* | | | MRPL | | |
|---|--|--|---|---|--|--|--|------------------------------------|
| 691.28 MMTOE of Proved Reserves Accretion | 1.51 Reserve Replacement Ratio (RRR) with 2P reserves for its domestic basins | Zero Man-days lost on account of Labour-management issues | 8.92 MMTOE O+OEG production | 201.70 MMTOE of Proved Reserves | Zero Man-days lost on account of Labour-management issues | 15.53 MMTPA Crude processed in FY16 | 111 Energy index (MBTU/BBL/NRGF) of crude FY16 | Zero Reportable Injuries |
| ₹7.99 Billion spent towards environmental protection | ₹4.21 Billion spent towards CSR | 6.57% Permanent women employees | ₹0.75 Billion spent towards environmental protection | 26% (15%+11%) Stake acquired in Vankorneft field, Russia | ₹0.51 Billion spent towards environmental protection | 7.17% Permanent women employees | 2.16 Man-days of average training to employees | |
| 0.38 Lost Time Injury Frequency | | | | | | | | |

* Along with wholly owned subsidiaries



ONGC group at a glance

Oil & Natural Gas Corporation group¹ is in integrated energy business and aspires to be global leader through sustainable growth, knowledge excellence and exemplary governance practices. ONGC has a well-integrated hydrocarbon value chain structure with key focus on exploration and production of hydrocarbon.



ONGC Videsh acquired 26% (15%+11%) stake in Vankor, Russia

¹ONGC group for this report comprises of ONGC, ONGC Videsh and MRPL

Maharatna ONGC is the largest producer of crude oil and natural gas in India, contributing around 70% of Indian domestic production. ONGC's product line consists of three broad product categories - Crude oil, Natural gas and Value Added Products like LPG, Naptha, SKO, HSD, ATF. ONGC principally focuses on domestic operations that have pan-India spread. ONGC supplies crude oil to CPSE refineries, Natural gas is primarily sold to Gas Authority of India Ltd (GAIL) and VAPs to OMCs and other retail customers in India or overseas. The major locations, including JVs are following:

- Onshore (oil & gas producing) - Gujarat, Assam, Andhra Pradesh, Tamil Nadu, Jharkhand, Tripura, Rajasthan, West Bengal, Madhya Pradesh.
- Offshore (oil & gas producing) - Western offshore (Mumbai high asset, Panna-Mukta, Tapti, Bassein & satellite asset, Neelam and Heera asset), Eastern offshore (Eastern offshore asset, Ravva).

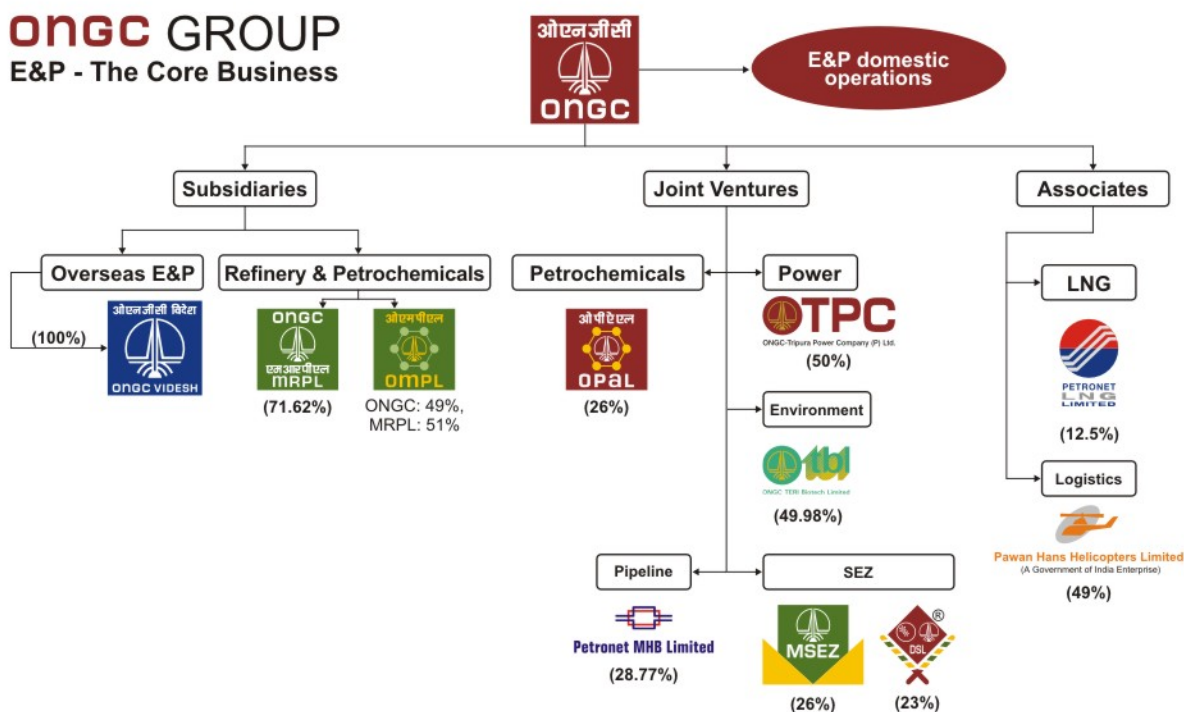
Additionally, ONGC has processing plants, training institutes/ R&D centres at oil & gas exploratory basins across India.

ONGC Videsh Limited, a schedule 'A' Miniratna is a wholly owned subsidiary of ONGC. It is the biggest Indian multinational in the energy space having participating interest in 37 oil and gas properties across 17 countries with the vision to source equity oil abroad towards securing energy security for the Nation. The major international locations w.r.t oil & gas production are Russia, Colombia, Vietnam, Brazil, Myanmar, Azerbaijan, Sudan and Venezuela. The major five locations as per oil & gas reserves are Russia, Mozambique, Venezuela, Myanmar and Vietnam. ONGC Videsh's global partnerships and interest as on 31st March 2016 (through subsidiaries) is referred in the ONGC Annual report FY16 (page nos. 368-370) and at the following web-link: <http://www.ongcvidesh.com/assets/>

The downstream subsidiary, Mangalore Refinery and Petrochemicals Limited is a Schedule 'A' Miniratna, with a single-location refining capacity of 15.53 million tons per annum and gives the group a presence in downstream activities.

ONGC also operates joint-ventures each serving a strategic purpose of ensuring ONGC's

ONGC GROUP E&P - The Core Business





presence in the entire hydrocarbon value chain. Details of these is referred at ONGC Annual Report FY16 (page no. 314).

Perspective Plan 2030 charts the roadmap for ONGC's growth aspiring to double ONGC's production over the plan period. In physical terms the aspirations under PP 2030 aims for:

- Production of 130 MMTOE per year and accretion of over 1,300 MMTOE of proven reserves.
- Grow ONGC Videsh Limited six fold to 60 MMTOE of international production per year.
- More than 20 MMTOE production per year in India coming from new unconventional sources such as shale gas, CBM, deep water and HPHT (High Pressure & High Temperature) reservoirs.
- Over 6.5 GW power generation from nuclear, solar and wind and 9 MMTPA of LNG.
- Scaling up refining capacity to over 20 MMTPA and targeted investments to capture downstream integration in petrochemicals.

ONGC group coverage for sustainability reporting would include the performance of two JVs, namely ONGC Tripura Power Company Limited (OTPC) and (OPaL) from the successive year. A brief introduction to these JVs are provided herewith.



A view of OTPC, Agartala

OTPC is a Joint Venture of ONGC, Infrastructure Leasing and Financial Services Limited (IL&FS), India Infrastructure Fund- II (acting through its investment manager 'IDFC Alternatives Limited') and Govt. of Tripura. A 726.6 MW (2 x 363.3 MW) Combined Cycle Gas Turbine power plant has



A view of OPaL, Dahej, Gujarat

been set up close to gas fields at Palatana in the state of Tripura by OTPC. The company's power is tied up through Power Purchase Agreements with states of Assam, Tripura, Nagaland, Meghalaya, Manipur, Mizoram and Arunachal Pradesh. OTPC is one of the biggest CDM project of ONGC generating 16.12 lakh CERs p.a. over a period of 10 years.

OPaL a multi-billion joint venture company was incorporated in 2006, as a Public Limited Company under the companies Act, 1956, promoted by Oil and Natural Gas Corporation (ONGC) and co-promoted by GAIL and GSPC. OPaL is setting up a grass root mega Petrochemical project at Dahej, Gujarat, located in Dahej SEZ-1, being developed by Dahej SEZ Ltd. - a SPV floated by ONGC and the Gujarat Industrial Development Corporation (GIDC). The complex's main Dual Feed Cracker Unit has the capacity to produce 1100 KTPA Ethylene, 400 KTPA Propylene and the Associated Units consists of Pyrolysis Gasoline Hydrogenation Unit, Butadiene Extraction Unit and Benzene Extraction Unit. The Polymer plants of OPaL has 2 x 360 KTPA of LLDPE/HDPE Swing unit, 1 x 340 KTPA of Dedicated HDPE and 1 x 340 KTPA of PP.

Organizational and operational structure

ONGC is headquartered at Tel Bhawan, Dehradun and Corporate office at New Delhi. As on 31st March 2016, ONGC's single largest shareholder is the Government of India with a shareholding of 68.93%. Life Insurance Corporation of India, Indian Oil Corporation and Gas Authority of India hold 8.66%, 7.69% and 2.403% respectively. The rest is owned by private corporate bodies, Indian public etc.

For ONGC Videsh and MRPL's organisational structure, please refer to their websites www.ongcvidesh.com and www.mrpl.co.in respectively.

Commitments to external initiatives

The ONGC Group endorses to a number of national and international level forums/associations related to sustainable development. Some of these are outlined as follows:

- United Nations Global Compact (UNGC) - ONGC is a founder member of the UNGC India Network and is completely committed to aligning its business with the UNGC's ten principles.
- Ministry of New and Renewable Energy's Green pledge - ONGC is signatory to the green pledge by Ministry of New and Renewable Energy.
- MoU with US Environmental Protection Agency (US EPA) under Natural gas Star International Programme for building extensive knowledge base and capacity for reducing methane releases to the atmosphere by implementing cost effective emission reducing technologies and practices.
- Integrity Pact in association with Transparency International: The integrity pact of group companies provides guidance and implementation guidelines for reducing the risk of corrupt practices across procurement processes.

- Membership in industry bodies: The group actively engages with its industry peers to share good practices, framing standards and engage in policy discourses etc. on issues relevant to the industry and stakeholders through its memberships in some of the key industry associations such as:

- Confederation of Indian Industries (CII)
- Federation of Indian Chambers of Commerce and Industry (FICCI)
- The Associated Chambers of Commerce and Industry of India (Assocham)
- Petrotech Society
- Society of Petroleum Engineers and Society of Petroleum Geologists (SPE and SPG)
- Standing Conference on Public Enterprises (SCOPE)
- Indo-Africa Business Council (IABC) for the Oil and Gas sector
- Petroleum Federation of India (PetroFed).



A drilling rig in operation in ONGC



Our business

Oil industry has reached an era of price volatility ruling in an unprecedented manner. The fall in crude price from a high of over \$100 per barrel to low of \$30 per barrel is a big challenge, however ONGC group takes it as an opportunity for further growth.



ONGC Groups' Investors' and Analysts' Meet 2015 at Mumbai

Exploration and production of hydrocarbon is a high risk venture, especially when the prices of crude oil and gas are highly volatile. Geological uncertainties with respect to the structure, reservoir seal and hydrocarbon charge add to the risk complexity. The current phase of turmoil in the oil industry is leading the group to explore all possibilities for sustained performance. The challenge posed towards carrying out planned E&P activities due to the declining return on investments is being addressed by effectively taking advantage of low rates of oil field services and working efficiently across the areas of work. Despite tough economic scenario, ONGC group has performed fairly well in FY16. ONGC group's consolidated net profit for FY16 stood at ₹141.24 billion as compared to ₹183.34 billion in FY15. The sharp decline in profit was offset to an extent by the reduction in ONGC's contribution to under-recoveries of Oil Marketing Companies from ₹363 billion in FY15 to ₹10.96 billion in FY16.

ONGC approved seven new projects (FDP of KG-DWN 98/2, Gamij, Nagayalanka, Neelam, Bokaro

CBM block, south Banskandi & Bhubandar field and life extension of 48 well platforms) at an estimated cost of ₹479.06 billion. In the present market context, project management practices are a vital element in ONGC's pursuit of success. The Project Management Office at ONGC, is leading the way by being a proactive monitoring agency for ONGC's most critical and high value projects. ONGC has successfully completed eleven projects totaling to a value of ₹283.8 billion during FY16.

ONGC Videsh is growing from strength to strength as production from international assets registered an increase to 8.92 MMT0E in FY16 as compared to 8.87 MMT0E in FY15. ONGC Videsh has recently acquired 26% (15%+11%) stake in Vankorneft (subsidiary of Russian national oil company - Rosneft) that controls the second largest, Vankor oil field of Russia. This participation will further add more than 5 MMT0A of oil production to ONGC Videsh's portfolio and its pursuit to goals outlined in PP2030.

The detailed break-up of financial performance of group companies is as given below²:

| Particulars | ONGC | | | ONGC VIDESH | | | MRPL | | |
|---|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|
| | FY14 | FY15 | FY16 | FY14 | FY15 | FY16 | FY14 | FY15 | FY16 |
| Economic Value Generated | | | | | | | | | |
| Total revenue | 906.03 | 882.38 | 845.60 | 222.24 | 191.49 | 127.72 | 721.35 | 582.68 | 405.05 |
| Net sales | 838.9 | 828.71 | 783.68 | - | - | - | 718.10 | 574.57 | 396.32 |
| Other income | 67.13 | 53.67 | 61.92 | - | - | - | 3.25 | 8.11 | 8.73 |
| Economic Value Distributed | | | | | | | | | |
| Operating Costs | 452.34 | 480.93 | 441.83 | 82.27 | 68.01 | 49.69 | 704.78 | 592.72 | 377.53 |
| Employee wages and benefits | 19.36 | 16.95 | 18.21 | 3.68 | 4.45 | 5.27 | 2.15 | 2.41 | 2.85 |
| Payment to providers of capital (interest and dividend) | 81.28 | 81.28 | 72.72 | 4.07 | 24.77 | 12.49 | 3.21 | 4.07 | 5.78 |
| Payment to Government | 119.99 | 134.05 | 112.53 | 23.86 | 18.18 | 12.38 | 3.87 | 4.42 | 3.10 |
| Community investments | 3.41 | 2.16* | 4.21 | 0.22 | 0.19 | 0.09 | 0.03 | 0.05 | 0.02 |
| Economic value retained | 233.07 | 164.21 | 196.10 | 108.16 | 75.89 | 47.81 | 7.29 | (21.00) | 15.77 |

Table 1: Financial performance (in ₹billion)

Towards achieving energy security for the Nation

ONGC group has a mandate of securing the Nation's energy security by pursuing E&P activities in India and overseas enabled by best in class technologies and collaborating with strategic partners. During FY16, some of the remarkable achievements by ONGC group companies are as follows:

- ONGC made 17 hydrocarbon discoveries. Of these, 8 discoveries are new prospects and 9 are new pool discoveries. Out of the 17 new discoveries, 7 discoveries (5 new prospects

and 2 new pools) are in NELP blocks and remaining 10 discoveries (4 new prospects and 6 new pools) are in nomination acreages.

- ONGC's 33.04% of crude oil production from IOR/EOR schemes and 13.8% from new fields
- ONGC's 23 out of 28 IOR/EOR, Redevelopment projects completed
- ONGC's western offshore crude production up by 1% defying declining trend for the second consecutive year
- ONGC Videsh acquired 26% (15%+11%) stake in Vankorneft
- MRPL registers highest-ever throughput of 15.53 MMT in FY16

² The accounting system of ONGC has undergone a revision in FY16 therefore accordingly the baseline figures were revised for comparability
*Represents the expenditure towards CSR only; for more details, refer Pg. No. 258 of Annual Report 2016.



Gas hydrates: the next frontier in unconventional energy source

Gas hydrates are crystalline form of methane and water that exist in shallow sediments of outer continental margins. They are envisaged as a viable major energy resource for future. As on date two National Gas Hydrates Program (NGHP) Expeditions - NGHP 01 in 2006 and NGHP 02 in 2015 - have been executed. The focus areas of NGHP 01 were Kerala-Konkan, Krishna-Godavari, Mahanadi & Andaman and for NGHP 02 are KG and deep offshore Mahanadi. 42 wells have been drilled under this mission and pilot production testing is planned for 2017-18 in KG area.

ONGC Videsh signs MoU with Ministry of Mines, Industry and Energy of Equatorial Guinea

ONGC Videsh Ltd signed a Memorandum of Understanding (MoU) with the Ministry of Mines, Industry and Energy of Equatorial Guinea. The agreement reportedly provides the basis for comprehensive cooperation in multiple areas of the energy sector, including offshore oil and gas exploration in Equatorial Guinea, plus midstream and downstream projects.

ONGC Videsh and Rosneft confirms successful cooperation

ONGC Videsh Limited and Rosneft signed an agreement of confirmation of successful completion of the first stage pre-completion actions in relation to the creation of a joint venture in JSC "Vankorneft". The document was signed in the presence of the President of Russia Mr. Vladimir Putin and the Prime Minister of India Mr. Narendra Modi by Managing Director of ONGC Videsh Limited, Mr. Narendra K. Verma and Rosneft Chairman of the Management Board Mr. Igor Sechin on 24th December, 2015. The document was signed in continuation of the agreement of sale and purchase of a 15% share in Vankorneft and the shareholders agreement in regard of the enterprise management. Moreover Rosneft and ONGC Videsh signed a Memorandum of understanding for cooperation for geologic survey, exploration and production of hydrocarbons onshore and on the continental shelf of the Russian Federation.

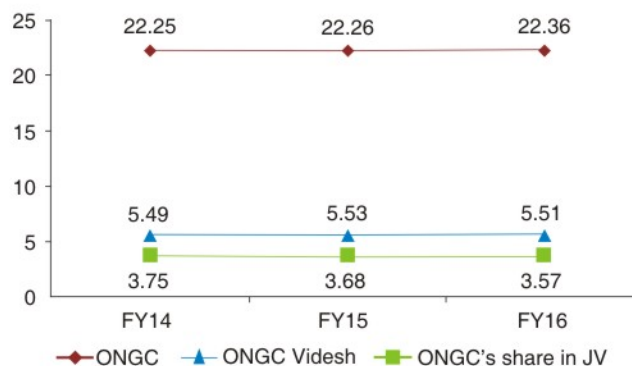


Figure 1: Crude oil production (in MMT)

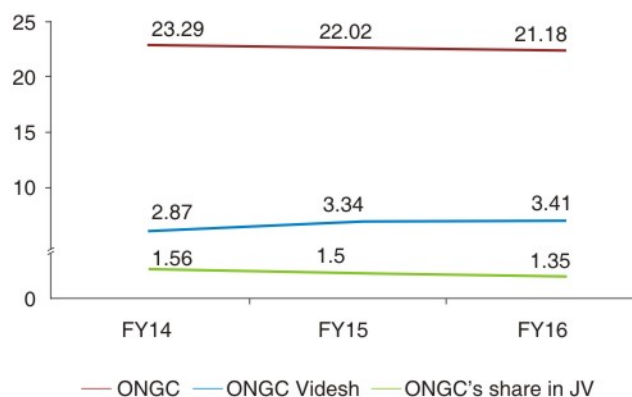


Figure 2: Gas production (in BCM)

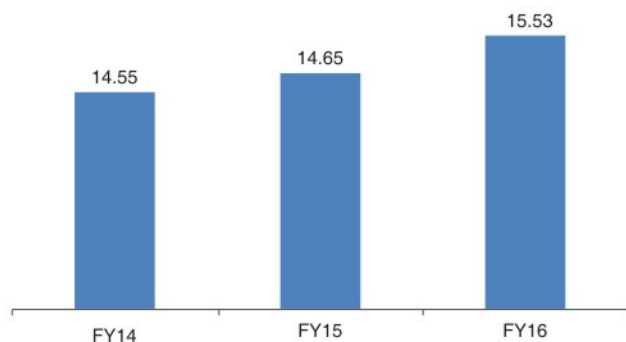


Figure 3: MRPL crude throughput (in MMT)

The proved reserves of ONGC group is as follows:

| Proved Reserves (MMTOE) | FY14 | FY15 | FY16 |
|-------------------------|--------|--------|--------|
| ONGC | 724.13 | 711.24 | 691.28 |
| JV Share | 30.65 | 22.56 | 18.59 |
| ONGC Videsh | 207.13 | 202.34 | 201.70 |

Table 2: Proved Reserves of ONGC group

Technology upgradation and new initiatives

ONGC Energy Centre collaborates with IIT Bombay

ONGC Energy Centre (OEC) has signed an agreement with the Indian Institute of Technology, Bombay for collaborative R&D on design and development of a Single Cylinder Free Piston Stirling Engine (FPSE) for net 3 KW electrical output using solar energy and also other renewable energy sources as input heat. Stirling engine is considered to be one of the most efficient heat engines. This system would be useful as a decentralised/ distributed/ standalone source of power.

ONGC Videsh's G&G center of excellence at Houston, USA

The G&G center of excellence has been conceptualized and formed to act as a think tank and resource base to augment the efforts of ONGC Videsh in its exploration, development and producing assets. The team at G&G center will develop work flows in their respective disciplines based on the best practices across major E&P companies. ONGC Videsh expects the G&G center of excellence to add value to the company through exploration success and increasing production from developing & producing assets.



Inauguration of G&G centre at Houston

Strategy meet at ONGC Videsh -Thought platform for interaction and exchange of ideas

ONGC Videsh's employees across functions and hierarchy gathered for an open house discussion and exchange of ideas with their leadership team. As an outcome of the 'Thought Platform' the focus areas emerged are structural reforms, enrichment of cadre, performance in line with global benchmarks, swift operational response and financial prudence.



BS - VI projects at MRPL

MRPL proposed to produce products that comply with BS - VI specifications in line with "Auto-fuel vision and policy (2014)" that outlines the specifications and tentative schedule for the nation to switch over to BS - VI by 2019-20. Following projects are underway for BS VI Compliance Projects.

- New selective desulphurization of gasoline from PFCC and a new MS upgradation unit from other hydrocarbons to attain sulphur levels less than 7 ppmw in the total MS pool.
- Sour water stripper units revamp to accommodate the incremental sour water generated from the deep hydro-processing in the revamped/new units.
- New Sulphur Recovery Unit to recover sulphur from additional H_2S generated
- New tankages and allied facilities along with new pipeline to coastal terminal to enable contamination-free delivery of BS VI grade auto fuels
- ETP revamp for additional effluents generated, if necessary

- Offsite and infrastructure facilities including logistics support is required to handle the treated products. The facilities needed are to be finalized during detailed engineering.

Delivering quality to our customers

ONGC group products are mainly supplied to CPSE customers. Regular co-ordination meetings of relevant groups are held with customers and the issues raised by customers are readily mitigated and communicated through various platforms and overall result is satisfactory.

There are statutory provisions on sale of various petroleum products and safety procedures. Compliance to the required statutory and safety provisions against various products are mandated in the contracts for the sale of products.

At MRPL, the quality of petroleum products are in compliance to Indian regulations. Special consideration is given to keep harmful ingredients like Lead, Benzene and Sulphur within the prescribed limits.



A view of MRPL Refinery

Safety and Security

ONGC group's motto is to ensure safe and secure operations and to provide safe & healthy work environment to its employees and related stakeholders. Occupational health & safety is critical to the group's business due to the risk intrinsic to the product. Also security of employees and assets is critical especially for sites located in conflict zones.



Tool box talk during rig building at drilling rig

The group companies have implemented HSE management system conforming to requirements of ISO 14001 and OHSAS 18001 at their operational facilities. The HSE management system is anchored in the HSE policy of respective group company and the implementation is overseen by their HSE departments with Board level oversight through a designated committee of the Board. Unit wise safety committee in accordance to the regulatory requirements are operational across the group. These committee have equal representation from the management and the workers. Tripartite safety meetings comprising of regulator, management and worker representatives are held to discuss HSE matters. In order to ensure well-being of the employees, Periodic Medical Examinations (PME) are conducted as per the PME policy.

Security of assets and employees is a critical operational issue for ONGC group as some of the operations are located in regions/countries prone to political turmoil and unstable environment that exposes the group to unique security related risks and challenges such as civil war, terrorist activities, sabotage, kidnapping, pilferage etc. Security and medical risks for executives travelling or working out of such sensitive countries is addressed by hiring the services of internationally reputed risk management companies.

Security management at ONGC

The security department is responsible for ensuring the security of employees and



Hon'ble Union Home Minister, Shri Rajnath Singh
decorating Fire Service medals

material at ONGC. This encompasses the security of work centres, colonies, drill sites, plants onshore. The security of the offshore installations is the responsibility of the Indian Navy as mandated by the Government. This responsibility is coordinated through the Flag



Officer Offshore Defence Advisory Group (FODAG) situated at Mumbai. The ED Chief Security exercises overall control and supervision. The Corporate and Regional Heads, in-charges security of Assets, Basins and Plants etc. are responsible for security in their respective jurisdiction. The security department ensures smooth and uninterrupted offshore operations through liaison with the Indian Navy, Coast Guard, Marine Police and Indian Air Force.

ONGC personnel are trained to handle contingencies through periodically organised training capsules/courses and seminars. Regular onsite and offsite mock drills are held in conjunction with the local administration and other agencies. The preparedness of each work centre is also evaluated through an internal audit carried out by independent senior departmental officer besides periodical IB audits of sensitive / hypersensitive installations. In order to inculcate a spirit of camaraderie and competition, the units are adjudged every year for award of best security unit. A detailed examination of organisation, training of personnel, procedures and practices is carried out by a team of officers for this award.

Offsite mock drill with Scenario

A mock drill of terrorist attack at oil installation was conducted at CTF Mehsana in association with District Administration. The information flow during the mock drill was satisfactory and messages were sent across to all concerned as per flow chart. Suggestions from Asset Manager, ATS chief and other officials from District Administration for improvement have been recorded for taking corrective actions.

Workplace safety at ONGC group

ONGC group aims to achieve zero accident by inculcating a safety culture among employees, various programmes such as the National Safety Day celebration, trainings, workshops, review meetings are organised regularly. Periodic safety audits by internal experts and external agencies are conducted to verify the efficacy of HSE management system and for maintaining the required certifications.



Pre job safety meeting

412

**installations of ONGC
were audited for
certifications during
the reporting period**

Safety trainings for employees and contractual workers at ONGC group

Safety trainings are the cornerstone of ensuring safe work practices across ONGC group. Following are some of the key safety trainings that were imparted during the reporting period:

- Mines vocational training (MVT) to contractual workers as per DGMS requirement.

- Initiative has been taken in association with DGMS to rationalize course content and duration of the Mines Vocation Training (MVT) for ONGC employees as well as contractual workers.
- ONGC Videsh has provided training on risk management to its 25 senior executives.
- MRPL has developed an industrial safety training package for all employees including contractor's employees who work inside the refinery. One day intensive industrial safety training programme is being conducted for new entrants and refresher program thereafter once in a year. All employees undergo one day Safety refresher training. The importance of safety while working in the refinery and methods of incident /accident prevention are included in training module.

The total man-hours of safety related training is included in the training data presented in the 'Our people' chapter of this report.

Quarterly HSE meet at Dehradun with EC, ONGC

The 5th quarterly HSE Review Meet with the theme - 'Follow SOPs and Avoid Accidents' was held at Dehradun in January 2016. The ONGC Executive Committee reviewed the safety performance and exhorted all ONGCians to be collectively responsible for adherence to SOPs with the aim to achieve the goal of zero accident. As an important outcome of the HSE meet, in line with other oil majors, ONGC has introduced Safety rules which was released on 45th National Safety Day-4th March 2016. These rules are based on IOGP lifesaving guidelines and root causes of the fatal and major accidents of last five years which took place in ONGC. There are ten safety rules that every employee, services provider and contractual worker must follow while in operational area.

National safety day celebrated at ONGC Videsh

The theme for this year's celebration was to 'Strengthen the Safety movement to Achieve Zero Harm'. Employees and families of ONGC Videsh participated with enthusiasm in poster, cartoon and slogan competition and online quiz. An informative video on 'How to avoid accidents', HSE report, message by MD and EC members were some of the highlights of the programme.

National Safety Day celebrated at MRPL

On the occasion of 45th National Safety Day various safety competitions for DPS school children, family members, contract labours and employees were organised. During the course of workshop, MRPL's senior executives shared the importance of National Safety Day celebration and various aspects of safety management and the role of safety department of the refinery.

Process safety and emergency preparedness

Given the nature of the risks involved in oil industry, ensuring the safety and integrity of the assets is of paramount importance to ONGC group. Focus of process safety is on ensuring that our facilities and installations are well designed, constructed, commissioned, safely operated, properly inspected and well maintained, with the aim to prevent process safety accidents, prevent spills and loss of primary containment. A team of specialized personnel ensure effectiveness of safety barriers. At present, safety events across the group are not being categorized as Tier-1 or Tier - 2.



During the reporting year, ONGC has reviewed and revised its Corporate HSE Management System document and also got it validated by a reputed third party, who is a member of International Association of Certified Societies Ltd. (IACS). For effective monitoring of all incidents including process safety events, data is being maintained in SAP module. Investigation and corrective actions are being taken to prevent recurrence of incidents.

There are potential emergency scenarios such as oil spillage, pipeline rupture, blowout of wells, fire etc. associated with the operations and natural disasters like earthquake. Due to the risk of such scenarios, Emergency Response Plan (ERP) and Disaster Management Plan (DMP), both onsite and offsite are prepared well in advance with due approval from competent authority. Corporate DMP is activated when emergency situation warrants intervention from the highest level. MoU/contracts are signed with local service providers and expert agencies to tackle any emergency situation. Built-in safety systems at the design stage greatly reduce the risk-fallout probabilities.



CMD inspecting control room at ONGC, Mehsana

Crisis Management Team at ONGC

In FY16 Crisis Management Team (CMT), ONGC successfully controlled well activities RVPP AA and KWDA in Rajahmundry, Karjisam #2 of Ahmedabad, YS6#AB, B-12#AD and B-127 N#A of Mumbai and major blowout at Olpad#31 of Ankleshwar asset. CMT gives training to its own officers and also officers & staff on blowout control at



CMT with Director (onshore) after controlling Blow out at Olpad

Rajahmundry which has got a Blowout simulator for training purpose. Besides this CMT also provided their expert services to other E&P companies within India like M/s GeoEnpro petroleum Ltd. by controlling blowout at Kharsang#60 in Arunachal Pradesh and M/s Oil India Ltd. by controlling the blowout at DND#9 in Thar dessert. CMT earned a revenue of about ₹20 million for the specialized services provided to these companies.

No major oil spill was reported for ONGC during the reporting period. However, in ONGC Videsh, there was an oil spill of about 308 barrels in Imperial Energy in August 2015, at oil pipeline Festivalnoye-Luginetskoye, which spread in an area of about 100 square meters, which was successfully controlled and area cleaned. It

was caused due to the mechanical impact on pipe body by the all-terrain vehicle of a third party.

A dedicated Onshore Pipeline Group has been formed in ONGC with terms of reference to take all necessary measures to comply with OISD guidelines and meeting other statutory obligations towards maintaining a healthy and safe pipeline network inclusive of flow lines, feeder lines, trunk lines and consumer pipelines.

Oil spill management

ONGC renewed its membership with internationally reputed Oil Spill Response Limited (OSRL), U.K. for managing larger oil spill of Tier-3 level. ED-Chief HSE of ONGC was elected to the Board of Directors of OSRL as Non-Executive Director.

Fire safety services group at ONGC

The corporate policy of ONGC with regard to all activities connected with safety, including fire safety, is not merely confined to strict adherence to all laws, rules, regulations and mandatory norms on these aspects, but also to adopt the best industry standards and

practices to ensure the highest level of safety of its men and materials as also the environment. In order to look after the fire safety of the installations and operational areas of ONGC, there are 7 Main and 16 Sub Fire Stations (Most of the fire stations are QHSE Certified) in Onshore apart from 12 Offshore Process Complex equipped with sophisticated, modern and state of art Fire Fighting Equipment to look after the fire prevention and protection requirement of ONGC Installations. Additionally there are 02 Main and 04 Sub Fire Stations which are manned by CISF Fire Wing in the Plants like Hazira, Uran, C2-C3 & CPF Gandhar and other locations at Nhava Supply Base and Head Quarter, Dehradun. A total 2495 Fire Awareness Training Programs were conducted across the ONGC during the year 2015-16 and 59,660 people participated from various fields.

Group's safety performance

ONGC group benchmarks its safety performance with international standards like International Oil and Gas Producers Association (IOGP)/ International Association of Drilling Contractors (IADC), the results have been better or comparable than these benchmarks.



Fire Services Week 2016 at ONGC, Delhi



ONGC group has been recognised for its efforts on employee safety and well-being. The group companies have been felicitated on various forums for their efforts. Detailed information

pertaining the awards received is presented in the ONGC Annual Report FY16 (refer –Annexure D to Director's report on page no. 98).

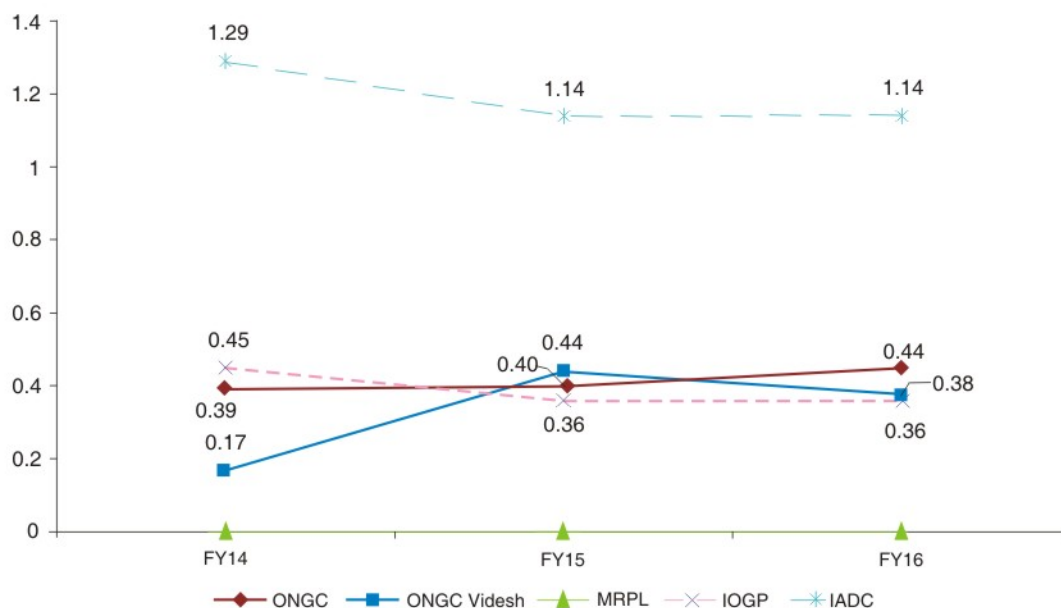


Figure 4: ONGC group's Loss Time Injury Frequency (LTIF) vis a vis IOGP & IADC benchmarks

The safety performance for the reporting period is presented for ONGC group companies (including the contractors engaged by respective companies) in the table given below.

| Parameter | ONGC | | | ONGC VIDESH | | | MRPL | | |
|----------------------|-------|-------|-------|-------------|-------|---------------------|------|------|------|
| | FY14 | FY15 | FY16 | FY14 | FY15 | FY16 | FY14 | FY15 | FY16 |
| Fatality | 3 | 3 | 9 | 1 | 3 | 2 | 0 | 0 | 0 |
| LTIF ³ | 0.39 | 0.40 | 0.44 | 0.17 | 0.44 | 0.38 | 0 | 0 | 0 |
| TRIR ⁴ | 0.71 | 0.55 | 0.80 | 1.41 | 1.30 | 1.14 | 0 | 0 | 0 |
| Recordable incidents | 336 | 358 | 483 | 95 | 58 | 44 | 0 | 0 | 0 |
| Lost -days | 300 | 368 | 818 | 150 | 458 | 214 | 0 | 0 | 0 |
| Near-miss | 6,091 | 5,654 | 6,572 | 1,580 | 2,149 | 11,577 ⁵ | 105 | 23 | 11 |

Table 3: Safety performance of ONGC Group of Companies

Across ONGC group there were no reported cases of occupational related diseases. The fatalities (all male) at ONGC happened at Ankleshwar⁶, Karaikal, Sagar Kiran, Agartala, Neelam, Assam Asset⁶ and Jorhat. The fatalities (all male) in ONGC Videsh happened at GNPOC, Sudan⁶. Incident investigation had been carried out and necessary corrective actions have been taken to prevent recurrence.

³Lost time injury frequency (LTIF): The number of lost time injuries (fatalities + lost work day cases) per million hours worked.

⁴Total recordable injury rate (TRIR): The number of recordable injuries (fatalities + lost work day cases + restricted work day cases + medical treatment cases) per million hours worked.

⁵Includes unsafe acts and unsafe conditions

⁶Two fatalities at the site



Insight from Mr. A.K.Dwivedi,
 Director (Exploration) and Director - In-charge
 CM&SG and Corporate HSE

ONGC is driven towards the vision of a secure energy future for the Nation whilst taking in cognizance of the impacts on the environment and communities around our areas of operation. Preserving the natural environment and conducting our business in a harmonious manner has long been a hallmark of ONGC.

Initiatives like reduction in GHG emissions through various CDM projects, periodic energy audits and investing in renewable energy is increasingly being adopted across ONGC. As an organization, our aim is to keep pushing ourselves further in our pursuit of developing a model organization for sustainable development in the Oil & Gas sector. A noteworthy step in that direction came early this year when ONGC took a giant leap towards paperless office by initiating the process of implementation of enterprise-wide paperless office solution.

We have been instrumental in institutionalizing corporate policies for water and waste management under which we are able to drive projects for water footprinting, setting up Rain Water Harvesting units & Sewage Treatment Plants across the organization.

Our environment

Protecting our environment is a part of the ONGC group's business strategy and is based on the fundamentals of sustainable development. Policies and systems are supported by project implementation across the spectrum of climate change and environmental pollution management.

Systems are managed by people and therefore it is critical to adequately enable them with requisite tools and trainings. ONGC group management takes full cognizance of this fact and therefore the employees are regularly trained on environmental friendly technologies and industry best practices pertaining to sustainability and environment management.

As a practice, regular capacity building workshops are conducted across ONGC group companies for employees and business associates to sensitize them on issues pertaining to sustainable development. As part of such capacity building programmes, workshops are conducted on sustainability reporting and the principles of sustainable development.

World Environment Day celebration at ONGC group on 5th June 2015

On the theme 'Seven billion dreams, one planet, consume with care', World Environment Day was celebrated across ONGC Group focusing on rising rate of natural resource consumption and its environmental impact. Presentations and talks by dignitaries focussed on the importance of balancing economic growth and its impact on the environment especially in the context of an emerging economy. Executive Committee (EC) and senior members of ONGC Group emphasised on the onus of environmental conservation by the ONGC group. At MRPL, this year's event saw participation from employees, school children and guests from state pollution board, forest officers. The highlight of the event was the exhibition of environmental models by school children.



Energy & climate change

Addressing climate risks is one of many important challenges that developing economies face on an ongoing basis, along with ensuring that energy supplies are affordable and accessible to meet the social and development needs. The world currently consumes majority of its energy from coal and oil & gas, where oil & gas sources make up for about 31% of the total global energy demand. As the global population increases and incomes rise, demand for energy will grow, implying a direct increase in production of petroleum products. While renewable energy sources are growing fast, there are technological challenges to achieving a completely renewable energy system. This reinforces the need to shift the existing energy production systems to more efficient ones that are less carbon intensive. From a policy perspective, it is envisioned that the Government will enact measures in line with the COP-21 agreement to mitigate the impacts of climate change. ONGC group being a premier CPSE, is expected to lead the pack of organization partnering with Government's action plan. As a proactive measure, ONGC has institutionalised a Carbon Management & Sustainability Group (CM&SG), a strategic group at corporate level with mandate to plan and monitor various activities relating to carbon and water management.

ONGC has registered 13 CDM projects with UNFCCC by 31st March 2016. One new CDM project was registered during the reporting period, Gas Flare Recovery at GGS Chariali, Assam. During the year total CERs generated is approximately 1.91 million.

ONGC embraces renewable energy with project

ONGC is targeting 1.5 GW in solar power generation by 2030. The company has taken up a research project to convert solar energy directly into grid quality electricity using sterling technology and are acquiring equity stake in promising solar photo voltaic technology for further development. Several renewable projects have been initiated at various locations.

ONGC has commissioned the following projects during the reporting period:

i) 102 MW wind power plant at Jaisalmer district, Rajasthan for a total project cost of ₹5.62 billion. During the reporting period, the plant generated a total of 122.73 million units of electricity.

ii) 1 MW solar project at ONGC Rajahmundry campus. The plant was installed over 4.5 acres on the ONGC campus to cater to the in house electricity requirements. The current annual consumption of power is 2.5 million units and the plant generated 0.8 million units of power thereby achieving a saving of ₹5.6 million during the reporting period.

iii) Uran plant installed a 125 KW Solar PV grid connected power plant. The installation consists of 506 solar PV panels of 250 W each and the project was completed at a lumpsum cost of ₹8.4 million. The plant generated 66.5 MWH during FY16.

During FY 16, total energy generated by renewable energy at ONGC was 123.53 million units and the total investment towards renewable projects was approximately ₹5.63 billion



A view of Tatipaka Refinery of ONGC

Energy audits at ONGC are carried out by an internal team of qualified and certified energy auditors. The Corporate Energy cell at Dehradun monitors and co-ordinates timely compliance to any observations from energy audits. In FY'16, ONGC had conducted 205 energy audits against a target of 200 and had achieved savings to the extent of ₹4.73 billion through energy conservation measures and efficient energy usage across the installations. CEC is also responsible for training, capacity building and awareness drives towards energy conservation measures like Oil and Gas Conservation Fortnight, Akshay Urja Diwas etc. Additionally, Corporate Energy Cell has initiated a number of projects and awareness program which are leading to year on year increase in energy savings achieved. During the reporting period, the guidelines for use of energy efficient lighting in ONGC was issued. According to the guidelines, LEDs lights will be used in all the upcoming facilities and revamp existing facilities by substituting incandescent lamps, FTL, CFL, T-5 tube lights, PLL lights, metal halides etc. with LEDs. Towards this, ONGC has entered in a MoU with Energy Efficiency Services Ltd (EESL) for providing project management services in accordance with the requirements of various work centres for implementing the LED lighting programme for a period of 5 years.

Some other key initiatives undertaken by CEC include:

- Waste heat recovery from gas turbine
- Improvement in power factor
- 1 MW solar power plant at Rajahmundry office complex
- 102 MW wind farm in Rajasthan
- 52 KW off-grid solar PV system for area lighting at officers' club, Dehradun
- Achieved ISO 50001:2011 (Energy

Management System) certification for Uran plant and GCP & GGS-II, Kalol.

Major energy conservation measures implemented at MRPL during the reporting period:

- Air Pre Heater (APH) replacement in Hydro Cracker Unit (HCU) -2
- Compressed Air and Nitrogen network leak survey and arresting
- Rewiring at SS41 & at UCR instrument cable cellar
- Running Polished Condensate pump instead of Refinery Pump(DM) at CPP3
- Harvesting Solar light for day lighting of Ph1 workshop corridor by using 5 sky-pipes
- Condensate Recovery from FB 7035 D/E/F/G MP Steam Coils
- CHT MP steam line capacity debottlenecking by routing a part saturated steam to header via start up line
- Flash Steam Recovery from SRU Phase-3

The measures as taken above resulted in Energy consumption reduction by approximately 3, 046 SRFT/Year, equivalent to a net saving of approximately ₹53.1 Million/year, with an investment of approximately ₹0.9 million.

| Organisation | Energy intensity |
|--------------|------------------|
| ONGC | 4,159.23 |
| ONGC Videsh | 1,528.81 |

Table 4: Energy intensity (Total energy consumed in TJ/MMTOE of product)

| Year | Energy Intensity Index (EII) |
|------|------------------------------|
| FY14 | 60.89 |
| FY15 | 67.45 |
| FY16 | 111* |

Table 5: MRPL Energy Intensity Index⁷

⁷Energy Intensity Index (EII) is a performance metric and is the ratio of the actual energy consumption and the refinery's standard energy consumption



*MRPL's refinery energy efficiency was being measured in terms of MBN (Old Method - CHT method) till FY15 and FY16 onwards, energy efficiency is being measured in terms of EII (Energy Intensity Index-Solomon method) therefore there is a sudden spike in the index.

| In TJ | MRPL | | |
|-----------------|--------|--------|--------|
| | FY14 | FY15 | FY16 |
| Direct energy | 50,186 | 60,892 | 60,904 |
| Indirect energy | 187 | 153.38 | 47.17 |

Table 8: Direct and indirect energy consumption at MRPL

Seminar on energy and sustainability organized by ONGC and Petrotech

A two day seminar on 'Energy for Sustainability' was organized in November 2015 by ONGC and Petrotech Society. The seminar provided a platform for mutual sharing of sustainability efforts made by industry and for deliberation on relation of energy and sustainability.

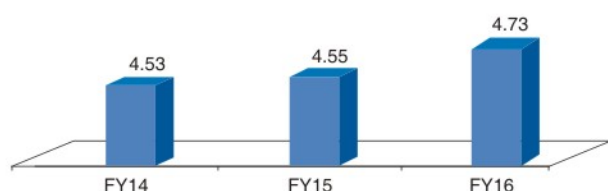


Figure 5: Energy savings in monetary terms from energy efficiency measures at ONGC (in ₹billion)

Direct and indirect energy consumption at ONGC group companies is summarized below.

| In TJ | ONGC | | |
|-----------------|----------|----------|----------|
| | FY14 | FY15 | FY16 |
| Direct energy | 1,87,750 | 1,93,245 | 1,78,671 |
| Indirect energy | 3,756 | 3,795 | 2,422 |

Table 6: Direct and indirect energy consumption at ONGC

| In TJ | ONGC VIDESH | | |
|-----------------|-------------|--------|--------|
| | FY14 | FY15 | FY16 |
| Direct energy | 12,901 | 11,217 | 13,212 |
| Indirect energy | 341 | 286 | 425 |

Table 7: Direct and indirect energy consumption at ONGC Videsh

MRPL derives low cost Petcoke from Delayed Coker Unit

MRPL has been striving to optimize operation for deriving low cost product. During the reporting period, a project for extracting low cost Petcoke from Delayed Coker Unit was initiated. The delayed coking process is a thermal cracking process for upgrading heavy petroleum residue in to lighter gaseous & liquid products and solid coke. The petroleum residue (feed stock) is heated in a specially designed heater to high temperature with a brief residence time. The thermal cracking reactions start in the heater coils and are completed in the coke drums (accumulator vessels with long residence time). The thermal cracking reaction in heater is carefully controlled to minimize coke build up in the heater coils. The solid product (coke) is retained in the drums and coke drum effluent vapour is quenched to arrest further cracking reactions and then fractionated into various distillate and light end products.

Emissions

ONGC group is committed to consistent reporting of GHG emissions. ONGC group has been following World Resources WRI Institute (WRI) & World Business Council for Sustainable Development (WBCSD) GHG protocol for GHG accounting and applied sector specific guidance provided in the Compendium of Greenhouse Gas Emissions Estimations Methodologies for Oil and Gas Industry developed by American Petroleum Institute (API).

* Source of ODP - <http://www.moef.nic.in/legis/ods/odssch1.html>

The global emissions factors for estimating emissions of ONGC Videsh and MRPL are sourced from the latest IPCC database and the grid emissions factor is sourced from CEA database version 11 (published April 2016).

In oil and gas operations, business growth increases GHG emission and we are continuing to work for emissions reduction in total to offset the impact of these emissions. Carbon dioxide makes up most of our GHG emissions and it comes predominantly from our processing & downstream operations, including exhaust from combustion units and flares.

Additionally, Ozone depleting substances (ODS) consumption in form of Halon at ONGC was 6.42 tonnes that has an Ozone Depleting Potential (ODP)⁸ of 19.26 tonnes of CFC-11-e and the consumption of R-22 at MRPL refinery was about 0.79 tonnes that translates to an ODP of 0.04345 tonnes of CFC-11-e. During the reporting period, no ODS was consumed at ONGC Videsh.

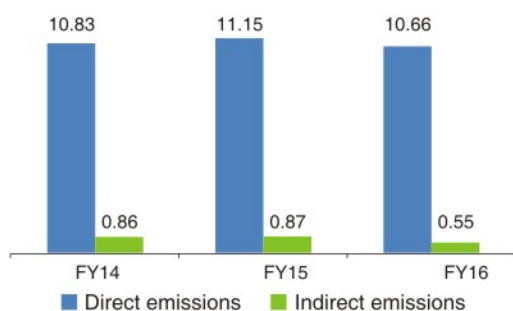


Figure 6: GHG emissions (in million tCO₂-e) for ONGC⁹

| Emission Type | ONGC VIDESH ⁹ | | |
|--------------------|--------------------------|------|------|
| | FY14 | FY15 | FY16 |
| Direct emissions | 2.41 | 1.70 | 2.08 |
| Indirect emissions | 0.09 | 0.07 | 0.11 |

Table 9: ONGC Videsh's GHG emissions (in MtCO₂-e)

| Emission Type | MRPL ⁹ | | |
|--------------------|-------------------|------|------|
| | FY14 | FY15 | FY16 |
| Direct emissions | 3.36 | 3.99 | 4.37 |
| Indirect emissions | 0.04 | 0.03 | 0.01 |

Table 10: MRPL's GHG emissions (in MtCO₂-e)

| Organisation | FY14 | FY15 | FY16 |
|--------------|--------|--------|--------|
| ONGC | 519.83 | 608.16 | 647.37 |
| ONGC Videsh | 387.22 | 452.67 | 558.03 |
| MRPL | 17.19 | 46.22 | 45.10 |

Table 11: Gas flaring (in MMSCM)

Water and effluents

ONGC operates in remote areas and recognises that water management is an important issue, especially where access to clean water for communities is a challenge. ONGC group takes due cognizance of the criticality of water resources for the local community and the ecosystem. Therefore regular monitoring of water consumption is carried out. Environmental statements are submitted to respective Pollution Control Board (PCB) and periodic renewal of consent to operate/ licenses are ensured from regulatory authorities.

Traditionally, E&P activities uses high volume of water for maintaining reservoir pressure of high volumes of water, which can compete with other local water needs. The operations are being designed to reduce the use of potable water and use non-potable water as far as reasonably practical.

The CM&SG at ONGC has taken up several sustainable water management programmes under its purview. Presently, it is focussing on water foot-printing, desalination of sea water at coastal units, Sewage Treatment Plant (STP) and Rain Water Harvesting (RWH) units. During the reporting period, contracts have been awarded for construction of 3 STPs at Mehsana each of capacity of 100 KLD.

⁹Includes emission from flaring of off-gases



Water foot-printing studies at ONGC

During FY16, water footprint studies using Global Water Tool for oil & gas sector developed by World Business Council for Sustainable Development (WBCSD) had been carried out in-house for Cachar Forward Base, Silchar and Rajasthan Forward Base, Jodhpur. Till 31st March 2016, water foot-printing studies of ten work centres have been carried out and based on the findings of the water footprint studies, improvement projects have been identified which are under different stages of implementation.

RWH project at Rajahmundry and IRS Ahmedabad

ONGC's Rajahmundry asset and IRS Ahmedabad have completed the commissioning of rainwater harvesting units in its campus. The entire harvested water is being utilised for recharging of ground water aquifers through filtration modules and recharge trenches.

| Source | ONGC | | |
|-------------------------------|-------|--------|-------|
| | FY14 | FY15 | FY16 |
| Volume of produced water | 45.95 | 103.94 | 48.92 |
| %age volume recycled/ re-used | 5.97 | 3.98 | 5.78 |

Table 14: Produced water data of ONGC (in billion litres)



Windmill in operation at Bhuj, Gujarat

| Source | ONGC | | |
|-----------------|-------|-------|-------|
| | FY14 | FY15 | FY16 |
| Ground water | 3.95 | 3.97 | 1.13 |
| Municipal water | 5.73 | 5.15 | 5.49 |
| Surface water | 16.32 | 15.45 | 17.67 |
| Total | 26.00 | 24.57 | 24.29 |

Table 12 : ONGC's total fresh water consumption (in billion litres)

| Source | ONGC Videsh | | |
|-------------------------------|-------------|-------|-------|
| | FY14 | FY15 | FY16 |
| Volume of produced water | 24.87 | 25.67 | 21.47 |
| %age volume recycled/ re-used | 3.60 | 5.00 | 5.00 |

Table 15: Produced water data (in million litres)

| Source | ONGC Videsh | | |
|-------------------------|-------------|--------|-------|
| | FY14 | FY15 | FY16 |
| Ground water | 2.95 | 4.45 | 4.78 |
| Tanker/ municipal water | 0.59 | 0.49 | 0.21 |
| Surface water | 0.001 | 0.0003 | 0.001 |
| Total | 3.55 | 4.94 | 4.99 |

Table 13: Water consumption at ONGC Videsh (in billion litres)

| Source | MRPL | | |
|----------------------|-------|-------|-------|
| | FY14 | FY15 | FY16 |
| Surface water | 11.80 | 15.20 | 17.54 |
| Collected rain water | 0.47 | 0.40 | 0.34 |
| Total | 12.27 | 15.6 | 17.88 |

Table 16: MRPL's water consumption (in billion litres)

Across ONGC and ONGC Videsh, the wastewater discharged meets the local compliance requirements and depending on the location of the site the effluent is discharged to sub-surface/ onshore/ off-shore.

At MRPL refinery, the treated effluent after maximizing the recycle (about 70% of treated effluent in non-monsoon season), is discharged to sea at a distance of 700 m and 6.5 m depth through submarine pipeline. The effluent discharged meets the quality stipulated by Karnataka State Pollution Control Board (KSPCB). During the reporting period, MRPL discharged a total of 3.68 billion litres of treated waste water into the sea and a total of 2.97 billion litres of water was recycled/ reused in the refinery operations.

Waste

Waste management is included in ONGC group's policy. Environmental issues have been identified and actions have been initiated based on the management hierarchy of preventing pollution at source, recycling & reuse of waste, treatment and disposal of the waste.

| Organisation | FY14 | FY15 | FY16 |
|--------------|--------|--------|--------|
| ONGC | 44,000 | 69,152 | 27,519 |
| ONGC Videsh | 444 | 382 | 312 |
| MRPL | 384 | 1,099 | 2501 |

Table 17: Hazardous waste generation data (in MT)

| Organisation | FY14 | FY15 | FY16 |
|--------------|--------|--------|--------|
| ONGC | 25,344 | 25,583 | 30,193 |
| ONGC Videsh | 1,409 | 1,802 | 851 |
| MRPL | 1,222 | 1,487 | 2,035 |

Table 18: Non-hazardous waste generation data (in MT)

Operations of ONGC Videsh units resulted in the generation of 10,393 cubic metres of drilling mud waste and 41,605 tons of drill cuttings respectively. ONGC group dispose hazardous waste through authorized third party approved by respective regulatory authority. The Group focuses on recycling non-hazardous waste to the extent possible.



Bio-remediation at ONGC site

Biodiversity

Globally, it has been observed that there are overlaps between hydrocarbon resources and areas that the conservation community considers important for biodiversity. Therefore, as a responsible CPSE, ONGC group's Environment Management System is based on the precautionary principle. Therefore, no activity is carried out in areas notified as environmentally sensitive. India and some other countries like Colombia have clearly outlined procedures for undertaking exploration and production activities as per their EIA notifications. The ONGC group companies carry out EIA studies as per the compliance requirements, however, sites allocated prior to enforcement of EIA notifications may not necessarily have the baseline assessment data. Every new project undertaken starts with conducting an EIA. During EIA study, the baseline environmental status of air, water, land and biological environment is carried out. The baseline status of biological environment is established by studying distribution pattern, community structure, population dynamics and composition of species of flora & fauna. This information plays a major role in preparing the environmental management plan for the respective site.

During the reporting period, a total number of 74 Environment Clearances were obtained for ONGC projects.

ONGC group takes due cognizance of the fact that there has to be a greater emphasis on the value of ecosystem based services that would enable a more nuanced approach to developing



resources in areas that require sensitive management of the social and environmental impacts and risks. As a signatory to UN Global Compact 10 principles, ONGC has adopted a two-pronged approach to address the major issue of biodiversity:

- Assessing the risk and impacts of our activities.
- Managing biodiversity and integrating it into Environment Management System (EMS).

Additionally, across ONGC group regular plantation drives are conducted where varieties of species are planted for maintaining biodiversity and providing aesthetic environment. Tree plantation in ONGC is carried out by selecting trees as per bio geo climatic conditions of the area to ensure desirable rate of survival.

ONGC group does not carry out any operations in known biodiversity hotspots. However the group companies have not taken up any specific biodiversity impact assessment studies.

Ringal Plantation in Upper Himalayas

To sustain fragile ecosystem of Himalayas, ringal plantation in Upper Himalayan Region is being carried out by ONGC in collaboration with Uttarakhand Bamboo and Fiber Development Board, an autonomous organization under the Forest Department, Govt. of Uttarakhand. This plantation drive has carbon sequestering potential, water recharge and soil conservation capacity. Plantation in 730 hectares in 5 years at a total cost of ₹39 million have resulted in annual sequestration potential of 33,458 tCO₂/ annum.



Ringal Plantation in Upper Himalayas

Mangrove Plantation project of ONGC

For protection & stabilization of shoreline close to ONGC Assets, mangrove plantation is being carried out. So far about 2 million mangrove plants have been planted in Gandhar area and 0.15 million near Hazira Plant. To spread awareness on significance of Mangroves plantation, protection and its continued cultivation programmes were arranged among children & local communities in these areas.



Mangrove plantation at Gandhar

Swamp Deer Conservation Project

ONGC in collaboration with Wildlife Trust of India and Forest Department of Assam initiated the "Eastern Swamp Deer Conservation Project" in Kaziranga National



Eastern Swamp Deer Conservation Project

Park (KNP) in an effort to understand the ecology of the swamp deer species and develop strategies to save the species from extinction. This project is helping in conserving of endangered species from extinction. It is also helping Manas National Park to retain its "World Heritage Site" status which was put under danger tag by UNESCO few years ago.

Workshop on bench marking environmental protection and natural resource conservation in E&P industry

ONGC conducted workshop addressing the need to standardise the Environmental Protection and Natural Resource Conservation practices in E&P industry. There were a total 15 presentations in the workshop including six from ONGC and others from domain experts from IITs, IMD and CPCB.

Skill development for biodiversity conservation and protection

ONGC has taken up a CSR initiative aimed at biodiversity conservation and sensitization along with skill development of local guides. The camp was kick started by CMD, ONGC at Sultanpur National Park, Haryana in association with Wildlife Trust of India. This initiative will develop the skillsets of the local guides who will not only be educated about the various species of flora and fauna but also sensitize them on the importance of biodiversity and its conservation. They in turn will be the brand ambassadors of environment protection and conservation. A week long workshop will be held where the participants

will visit various national parks across the country. The initiative will focus on livelihood generation in this area in its next phase.

Colombian National Park recognizes efforts of Mansarovar Energy Colombia Ltd

Colombian National Parks in its annual publication 2015 "In Situ" has recognized the private-public partnership between MECL (ONGC Videsh's subsidiary), Corpoboyaca (Local Authority) and the Unit for Rescue and Rehabilitation of Wild Animals for their contribution towards preservation of the natural wealth in the area of Puerto Boyaca in Colombia. As part of this partnership, a group of endemic monkeys (cebus albifrons versicolor) were released from confiscated or voluntarily delivered fauna. This partnership served as a contribution to the knowledge repository of the sub-species that conform the Colombian Mega Biodiversity.

ONGC groups invests in maintaining strict compliance to environmental laws across operating sites. There were no penalties paid by group companies in India during the reporting period. However, penalties were imposed on Imperial Energy, Russia (a subsidiary of ONGC Videsh) of about 0.11K RUR (approximately ₹0.11 million) due to environmental issues.

ONGC group companies invest in the best available technologies for monitoring and control of environmental pollution parameters like air, water, emissions and waste. The total environmental protection expenditure by each group company during the reporting period is provided in the table below.

| Organisation | FY14 | FY15 | FY16 |
|--------------|------|------|------|
| ONGC | 6.18 | 6.57 | 7.89 |
| ONGC Videsh | 0.18 | 1.03 | 0.75 |
| MRPL | 0.13 | 3.21 | 0.51 |

Table 19: Environmental investment (in ₹ billion)



B-193 Offshore Process Platform of ONGC

Our community

ONGC group is committed towards societal development and improving lives of community by extending social responsibility through a network of trusted partners.



Promoting hath kargha - CSR initiative

E&P activities may impact local communities settled nearby the sites of operations. At ONGC group, it is the constant endeavour to engage with communities to identify how to avoid, minimise or mitigate any negative impacts. This engagement also determines how and where the group can effectively collaborate with communities for its social investment programmes. As part of the EIA studies public hearing session are held with the local stakeholders, which also helps in understanding the societal needs and serve as an input to the organization's community development plans.

ONGC group has always valued the community and society that it thrives on. These interventions are driven by a strong CSR policy and implementation methodology. Being responsible public sector organization, the group companies adhere to the local laws/ Government guidelines on land acquisition, whether it is temporary or permanent.

The CSR policy of ONGC group is in line with the section 135 of the Companies Act 2013, Corporate Social Responsibility (CSR) Rules 2014 and also the guidelines on CSR and sustainability issued by the Department of Public Enterprise (DPE Guidelines 2015), Government of India. The ONGC foundation has been established under the Indian Trust Act, 1982 to strengthen the CSR activities impact. ONGC group's CSR approach focuses on the following areas:

- Healthcare and hygiene
- Education and skill development
- Environmental sustainability
- Women empowerment, supporting differently abled, protection of national heritage, art & culture and promotion of sports
- Rural development
- Other areas mentioned in Schedule VII of the Companies Act.



ONGC in the last ten years has contributed over ₹20.29 billion towards CSR activities and initiatives. However, in the reporting year FY16, out of the CSR budget of ₹5.93 billion, ONGC spent an amount of ₹4.21 billion that amounts to 71% of the total CSR budget as the unspent funds from the previous were carried forward. The funds have been committed for various on-going projects and some are in approval stage. Though there has been no formal social impact assessment of the organizations activities, however, EIA studies are being conducted for new projects/ modifications of which social impact is a key area of assessment. In due course, ONGC plans for focussed social audits of key programmes across significant sites of operation.

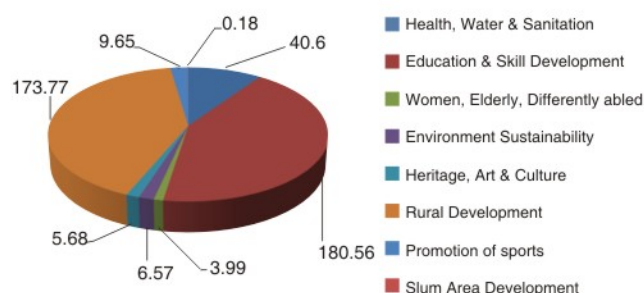


Figure 7: Break-up of CSR expenditure (in ₹billion) of ONGC for FY16

The group's CSR expenditure for last three fiscals is as given below.

| Organisation | FY14 | FY15 | FY16 |
|--------------|------|------|------|
| ONGC | 3.41 | 2.16 | 4.21 |
| ONGC Videsh | 0.22 | 0.19 | 0.09 |
| MRPL | 0.03 | 0.05 | 0.02 |

Table 20: Environmental investment (in ₹ billion)

Health and hygiene

Swachh Vidyalaya Abhiyan (SVA): A campaign to ensure functional toilets in each school in India by 15th August, 2019, and to make India open defecation free is part of Swachh Bharat Abhiyan (Clean India). This was rolled out on 15th August, 2014 by Hon'ble Prime Minister, and under this project, a total of 8,202 toilets were made functional by ONGC at a project cost of approximately ₹1,257 million.



Medical camp in Sudan by ONGBV

In order to bring awareness about hygiene, sanitation and cleanliness, ONGC has taken up the initiative in form of Information, Education and Communication (IEC) activities. This project is being rolled out in association with Auroville Foundation in 5,599 schools with financial support of ₹70 million for a period of two years.

ONGC has taken a unique CSR initiative in partnership with Indian Mountaineering Foundation for expeditions to remove the waste generated by tourists/mountaineers at different tourist spots of Himalayas. The project included cleaning expeditions in four locations of Himalayas. The duration of each expedition was 15 days. The expedition teams created awareness among the users and involved local climbers, youth, local Panchayats, local NGO's and school children to achieve the target and set an example to visitors of Himalayas about environmental awareness. The garbage collected from these expeditions were disposed-off in environment friendly manner with the help of local panchayat.

Education and skill development

ONGC's support for S-VYASA University, Bangalore

ONGC has supported 'Vivekananda Yoga Anusandhana Samsthana' (VYASA) by funding the construction of a 350 bedded boy's hostel at S-VYASA University campus located at Gidden Halli, Jigani Hobli, Bangalore. The hostel will have all the latest facilities including solar lighting, solar heating system, CCTV. Free accommodation is to be provided to SC and ST students of S-VYASA University whereas deserving poor students will be given 50% concession. During the year 2015-16, an amount of ₹71 million has been released towards this project.

Promoting Sanskrit language

In order to revive the Sanskrit language, ONGC has taken up this initiative through Sanskrit Promotion Foundation with a total financial implication of ₹50 million for a period of one year. This project includes development of online tools & tutorials for students, teachers and guardians at formal and in-formal school levels.



Promoting Sanskrit language

ONGC Videsh's skill Development programme held in Sudan

ONGBV, Country Office, Sudan organised a Skill Development Programme on 18th September 2015 in Ombuda area, Khartoum state in association with local authorities. ONGBV distributed 20 sewing machines to 5 training centres for training & development of poor women in the area. ONGBV is also looking forward to identify other areas with the help of local authorities to assist physically challenged/ disabled under its community development programmes.

Environmental sustainability

The ONGC – Green Hub project undertaken in association with North East Network (Tezpur) aims at training youth from across North East in creating literature and documentation in wildlife and environment conservation. The project started in 2015 for a duration of two year.

Women empowerment and supporting differently abled

ONGC supported several initiatives geared towards enabling women, some of which are mentioned as follows:

- Financial assistance for Project Swabhiman- a vocational training and



ONGC supports Project Swabhiman



education program for 180 girls/women of Sangam Vihar for a project cost of ₹1.65 million

- Partnered with Harijan Sevak Sangh to carry out renovation of school building of Kasturba Balika Vidyalaya at Delhi with a total financial implication of ₹7.3 million
- Construction of new wing at Government Lady Goschen Hospital, Mangalore with financial assistance of ₹19.193 million.

Imperial Energy supports differently abled

The Imperial Energy (IE) group of companies initiated a corporate responsibility initiative in the year 2014, the purpose of which was to add new colours to the lives of visually challenged and partially sighted people of Tomsk region. As part of this project, Imperial Energy presented special tables and table tennis gears to Tomsk Department of the National Association of Blind. IE also took under its patronage the kindergarten school no. 99 – the only pre-school educational institution in Tomsk, which is working for upbringing and social adaptation of visually challenged and partially sighted children.



ONGC Videsh supports Children's rehabilitation center

Restoration of 15th Century Step- Well

ONGC in association with INTACT took up the initiative to restore the ancient step well at Sawai Madhopur, at a total cost of ₹65.50 lakhs for recharging ground water by restoring the original character and usage of the step well. Step well apart from being an architectural heritage also serves as source of water for the local population living in nearby backward areas .



Restoration of Step Well at Sawai- Madhopur

Rural development

Free LPG Connections to BPL Families in Rural Areas

To improve the standard of life in rural areas, ONGC extended the usage of LPG for cooking purposes in rural/under-served areas. The project is being implemented as per the directives of MoPNG wherein ONGC is contributing 20% of the CSR budget towards this projects. This project aims at social upliftment of BPL families by providing LPG for cooking use and extend its reach in rural/ underserved areas where kerosene/ fire-wood is traditionally used. ONGC released the 7th instalment of ₹709.3 million towards a project which has benefited 34,75,358 BPL families across the country in the last 6 years.

Our people

ONGC group aims to foster a value based work-culture that hinges on the principles of transparency, meritocracy and inclusivity. An individual's growth is of paramount importance and is mapped to the functional level goals. To promote holistic development of employees, ONGC group extends adequate support in terms of training and other resources to enable them fully realize their potential.



Director(Onshore) inaugurating 1 MW solar power plant at Rajahmundry

As a group, ONGC values its people and their development as the foundation to the success of the group. The focus lies on employee development through a medium of various programmes and initiatives. Many programmes have been instituted to ensure that the employees are subjected to world class knowledge and technology. Moreover, the group focuses on fair practices, transparent policies and liberal welfare benefits to protect the rights of the employees and

help them achieve excellence that is reflected across the organization. The group respects the principles of non-discrimination and equal opportunity, adequate conditions of work. The rights of the employees are protected through compliance with the labour laws of the land and adhering to global best practices like the 10 principles of UN Global Compact. The group has a structured employees' grievance redressal mechanism. For employees the CDA (Conduct,



Discipline and Appeal) rules have been outlined along with the procedures to assist employees to voice their grievances for justifiable redressal of issues and concerns. Collectives and officers associations are engaged/ associated at every stage to discuss/ negotiate the vexed issues and address their concerns. An Executive Director level position oversees employee & industrial relations to ensure cordial and spirited work atmosphere. During the reporting period, a total of 157 grievances were received (this includes all grievances including those pertaining to human rights issues) from employees out of which 150 were closed within the year and the rest are under consideration.

| Parameter | | New hires | Separation | Hire rate | Turnover rate |
|-----------|----------|-----------|------------|-----------|---------------|
| Age Group | <30 | 1661 | 56 | 0.32 | 0.01 |
| | 30-50 | 620 | 41 | 0.05 | 0.003 |
| | >50 | 5 | 1647 | 0.05 | 0.1 |
| Gender | Male | 2150 | 1638 | 0.07 | 0.05 |
| | Female | 136 | 106 | 0.06 | 0.05 |
| Region | HQ | 235 | 238 | 0.06 | 0.06 |
| | Mumbai | 335 | 360 | 0.04 | 0.05 |
| | Western | 1169 | 502 | 0.12 | 0.05 |
| | Eastern | 121 | 348 | 0.02 | 0.05 |
| | Southern | 360 | 165 | 0.1 | 0.04 |
| | Central | 66 | 131 | 0.04 | 0.08 |

Table 21: Employee hiring and turnover data for ONGC and ONGC Videsh

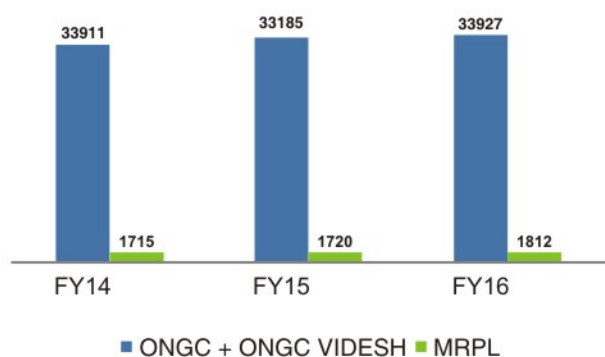


Figure 8: ONGC group permanent employee strength

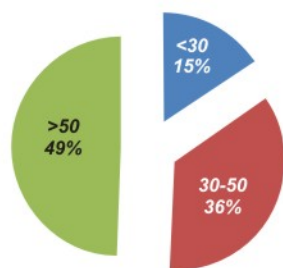


Figure 9: ONGC and ONGC Videsh employee break-up as per age-group as on 31st March, 2016

ONGC is responsible for meeting the manpower requirement for ONGC Videsh. At the end of the reporting period, the total employee strength at ONGC was 33,927 out of which 339 have been

deputed to ONGC Videsh. A total of 75 employees have been posted across various overseas sites of ONGC Videsh. The notional global manpower of ONGC Videsh based on the participating interests comes to 1,959 as on 31st March 2016 (calculation based on proportionate PI of the company in overseas projects).

| Parameter | | New hires | Separation | Hire rate | Turnover rate |
|-----------|--------------|-----------|------------|-----------|---------------|
| Age Group | <30 | 85 | 5 | 6.79% | 1.36% |
| | 30-50 | 33 | 9 | | |
| | >50 | 2 | 8 | | |
| Gender | Male | 113 | 21 | | |
| | Female | 7 | 1 | | |
| Region | Delhi office | 8 | 0 | | |
| | Refinery | 97 | 0 | | |

Table 22: Employee hiring and turnover data of MRPL

| HQ | Mumbai | Western sector | Eastern sector | Southern sector | Central |
|-------|--------|----------------|----------------|-----------------|---------|
| 4,126 | 7,714 | 10,063 | 6,628 | 3,767 | 1,629 |

Table 23: Region-wise distribution of employees at ONGC

| Male | | | Female | | | Total |
|------------------|-------|-----|--------|-------|-----|-------|
| Age-distribution | | | | | | 1,812 |
| <30 | 30-50 | >50 | <30 | 30-50 | >50 | |
| 399 | 1,120 | 163 | 41 | 74 | 15 | |

Table 24: Age profile of MRPL employees

Employment

ONGC group's recruitment policy is based on the DoPT's guidelines and has a national level hiring plan that complies with the Government of India's directives for engaging priority sections of the society. In sync with these Government directives, HR policies cover different aspects related to professional skill development, learning, employee well-being etc. Additionally, the policies also cover the aspects of women empowerment, SC/ST empowerment and other disadvantageous class of employees and post recruitment welfare measures. ONGC group prides in the fact that the group companies encourage local hiring to facilitate local socio-economic growth by recruiting individuals from local communities for its non-executive ranks.

The total number of employees hired on a temporary/ contractual basis in the FY16 were 17,609 while in addition to this 566 were engaged as contingent workers by contractors providing various services to ONGC throughout FY16. At its overseas assets ONGC Videsh also hires local contractual workers as per the need and quantum of work at the active sites. At MRPL a total number of 3,898 workers were hired for various jobs during the reporting period.

ONGC group's vision towards supporting the work life balance is formalized through its deep rooted culture of promoting healthy lifestyle amongst its employees. The townships at various locations are provided with state of the art facilities like gymnasium and other sports facilities along with various recreational areas being developed at the townships.

ONGC as a corporate entity also promotes culture of sports outside the organization.

ONGC has been driven towards the development of sports and has been consistently been investing in the sportspersons, associations, federations and sporting events. It has worked to foster the sportsmen in the weaker sections of the society by supporting them financially. Also, ONGC has continued to offer jobs and scholarships to the deserving sportspersons. It has been a part of the national journey in sports and has been instrumental in shaping the lives of the sports persons who have brought laurels to the nation. Looking into this, the ONGC now has a dedicated wing, Corporate Sports Division that looks into the sports activities. Till date, ONGC has supported 23 different sporting activities including activities like mountaineering.

ONGC at the XIIth South Asian Games

The 12th South Asian Games held in Guwahati and Shillong in February 2016 saw participation from eight countries namely Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka. ONGC had sent a contingent of 38 players to participate in the game representing different games such as Athletics, Archery, Basketball, Boxing, Badminton, Football, Hockey, Kabaddi, Shooting, Table Tennis, Tennis, and Volleyball. The overall medal tally for ONGC at the games was 44 comprising 28 gold, 15 silver and 1 bronze. It is noteworthy that in the tally of 28 Gold medals won by ONGC players is higher than the tally achieved by the second placed country Sri Lanka who got 25 Gold medals at the games.

Apart from the above mentioned initiatives, regular seminars and lectures on importance of work life balance are conducted across the ONGC group. Also various outreach programmes with families of the employees are organized.



Medical Helpline Launched At ONGC

ONGC is committed to ensure employee health and safety. As a part of this vision, ONGC launched a medical helpline in March 2016. This is the first time any organization has launched such a helpline in India. The helpline shall bring to life the vision of providing 24X7 medical help to all ONGCians and their family members. The helpline would be a call centre based helpline that couples with the patient engagement with health literacy. Aimed at providing a single point medical assistance to all ONGCians along with the retired employees and the dependent family members.

ONGC and ONGC Videsh have several benefit plans for employees and secondary workforce (deployed by contractors/service providers). Some of the marquee schemes introduced for the secondary workforce include

- **Fair wage policy** - While ensuring payment of minimum wages in all categories of contractual workers working for ONGC, it has also introduced fair wages where in ONGC pays 35% plus ₹50/- extra in addition to minimum wages across the company. Fair wage policy is implemented company-wide by taking authorized unions into confidence in the form of Memorandum of Settlement (MOS) between contractor's workers and unions in the presence of labour authorities.

- **Sahayog Yojana** - ONGC acknowledges that the next of kin of the contractual worker who die while on duty or who suffer disability in the course of duty preventing their adequate gainful vocation and/ or who have no other adequate means, need support till they are able to secure gainful livelihood. ONGC Sahayog Yojana is therefore introduced to grant financial assistance for the welfare of such work force and their next of kin. Welfare through this scheme includes provision for

sustenance, medical assistance, treatment, rehabilitation, education, marriage of female dependents and alleviation of any other hardship or distress, as applicable.

- **Insurance coverage** - The Government of India Social Security Schemes like Pradhan Mantri Suraksha Bima Yojana (PMSBY) and Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY) are endorsed by ONGC for implementation in respect of all contractual workers in ONGC.

Employee welfare committee at ONGC

ONGC has constituted an Employee Welfare Committee to look into matters of staff welfare focusing on:

- Organizing sports, athletic activities
- Organizing cultural activities
- Organizing workshops, coaching camps (education/sports) for wards of members during summer/winter holiday
- Organizing library cum reading room facilities.

The Employee Welfare Committee comprises of two representatives from recognized union, two representatives from ASTO and two representatives nominated by the management (one from staff and one from officer category). The head of the work-centre serves as the ex-officio President of the committee. The details of the duties and functioning has been laid down.

Benefit plans also exist for ONGC group employees and some of which are enlisted as follows:

- Employees contributory Provident Fund (ECPF)
- Post-Retirement Benefit Scheme (PRBS) Trust
- Composite Social Security Scheme (CSSS)
- Gratuity Fund Trust

Awareness programmes for contract workers on PMJJBY and PMSBY at ONGC

Awareness camp for Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY) and Pradhan Mantri Suraksha Bima Yojana (PMSBY) were conducted for contract workers, contractors, principal employers at different work centers.

Diversity

Across ONGC and ONGC Videsh, there are 189 number of employees with disabilities in the reporting year. The strength of female employees at ONGC and ONGC Videsh was 6.57% of the total employee strength in FY16. At MRPL, 7.17% of total employees comprised of female employees.

No cases of discrimination were reported across ONGC group. To promote women empowerment ONGC group has instituted several programmes to sensitize its workforce. ONGC has been always supportive towards female employees participating in events organized by Women in Public Sector (WIPS) and Women in Leadership Roles (WILR).

Women's day at ONGC

Honouring the spirit of womanhood and as a testament to ONGC's commitment towards Women Empowerment, International Women's Day 2016 was celebrated on 18 March, 2015 where Padma Shri Ms. Malini Awasthi congratulated ONGC for its dedication towards Women Welfare. While appreciating the work of Women Development Forum in ONGC, she said that ONGC is one of the few organizations which takes these issues extremely seriously. Patron WDF & Director (HR) Mr. D.D. Misra, too addressed the event and pointed out that a woman's progress enables collective progress of the



Women's Day 2016 Celebration at ONGC, Delhi

society. He mentioned that ONGC is proud of achievements of women workforce and praised the women officers for their tenacity and hard work.

Coker Heavy Gas Oil Hydrotreating Unit (CHTU) at MRPL refinery operated by Women

The 0.65 MMTPA Coker Heavy Gas Oil Hydro Treating Unit (CHTU), a secondary processing facility of the Phase III Upgradation and Refinery Expansion Project of MRPL went on stream on 11-05-2014. CHTU is the first unit in



Women Empowerment at MRPL

MRPL to be commissioned and operated by women operators, on round the clock shift basis.



Training and development

Across ONGC group, a lifelong development of professional competencies is facilitated through various training programmes and workshops conducted at in-house training institutions that include ONGC Academy, IPSHEM, IOGPT, IDT, RTIs and others.

Several specialized and advanced training programmes are also conducted across ONGC group companies, some of which are listed as follows:

- Certified training programmes through internationally accredited bodies were conducted in specific fields like project management, survival at sea, Helicopter Underwater Escape Training (OPITO approved), offshore installation management, well-control training, lead auditor course etc.
- Mines Vocational Training (MVT) to contractual workers
- Safety based trainings to contractual workers
- Risk management and foreign language training for ONGC Videsh's employees.
- Human rights related training as part of its induction programme. Furthermore, training on human rights related aspects like preventing physical/ verbal abuse, disrespectful treatment etc. are given to all security personnel on a periodic basis. The training hours on account of human rights is included in the total training man-hours provided.

During the reporting period, a total of 21,319 employees were trained through various training sessions employing a total of over one lakh person-days of training hours. On an average 4.85 man-days of training was provided to all employees of ONGC and ONGC Videsh.

| Category | Gender | |
|--------------------|----------|--------|
| | Male | Female |
| Management | 70,776 | 7,864 |
| Non-management | 3,07,416 | 34,160 |
| Contractual worker | 3,78,192 | 42,024 |

Table25: Training data for ONGC and ONGC Videsh as per category & gender (in man-hours)

Similarly, for MRPL, an average of 2.16 man-days of training per employee was provided during the reporting period.

Labour management relations and supplier's human rights assessments

Cordial relations with labour unions is essential for business continuity. ONGC group has enacted policies and measures to ensure that the work environment meets the human rights standards



Control room at ONGC

as outlined in 10 principles of UNGC. Comprehensive procedures have been put in place in order to ensure that labour practices such as child labour, forced labour, etc. are not allowed within the group's sphere of operations. The external stakeholder's have access to ONGC's grievance redressal portal with adequate procedures to escalate their concerns up the



Lighting of lamp in presence of Hon'ble MoS(I/C) PNG along with CMD ONGC, Director HR, President & General Secretary ASTO, CEC

organization hierarchy till the Board level (Stakeholder relationship committee – headed by an independent director). Also, ONGC facilitates resolving grievances through Independent External Monitors (IEMs) and Outside Experts Committees (OEC). During the reporting period, a total of 264 grievances were received from vendors and public out of which 247 were resolved within the year and the remaining are under consideration.

ONGC has recognized unions of executive cadre officers' association (ASTO), non-executive cadre (12 recognized unions) besides SC/ST Employee Welfare Association, All India OBC/MOBC Employee Welfare Association and Women Development Forum (WDF). ASTO has a membership of 90% of executives and the 12 recognized unions have membership of all the unionized categories of employees in their respective work centres. ONGC Videsh abides by the local labour laws at the respective sites and MRPL has equal representation from management and workers in the joint committee. Typical labour practices assessment criterions at ONGC includes items such as employment practices & human rights, health and safety

practices, incidents (such as of verbal, psychological, physical or sexual abuse, coercion or harassment), industrial relations, wages and compensation, working hours. A minimum notice period of 21 days as per the Industrial Disputes Act 1947 is given to the workers and their elected representatives prior to the implementation of significant operational changes.

ONGC group believes that it is equally important that the suppliers have appropriate policies, principles and standards in place within their own organization. Building strong relationships with suppliers is essential to achieving the group's triple bottom line goals and therefore it is critical that the suppliers place the same importance on health, safety, the environment and community impact. Additionally, there are pre-qualifying criteria for sale of tender documents to suppliers that typically requires:

- License under Contract Labour Act (Regulation & Abolition) Act, 1970, where applicable.
- Possess independent Code No. under the



Employees Provident Fund and Misc. Provisions Act, 1952.

- Possess independent ESI Code No. under the Employees State Insurance Act, where applicable

Every contractor/ supplier can be subjected to an audit by the respective group company on compliance of work with technical specifications of the tender requirements both at the stage of the tender procedure and during the course of the work. During the reporting period, the group companies did not receive any complaint relating to child labour, forced labour, sexual harassment or discriminatory employment. During the reporting period, audits were conducted to assess compliance with statutory laws pertaining to wages and social security. 40% of ONGC's suppliers were subjected to impact assessments

for labour practices and resultant actions and based on the findings of the audit the corrective measures are currently underway.

The group encourages the contractors to obtain gratuity cover and insurance cover for the labour they engage on behalf of ONGC across India. Under the Collective Bargaining agreements, 32% of the ONGC and ONGC Videsh employees are covered and include matters related to pay, allowances, perks, social security and employee welfare. However, these agreements specify that any changes will only be effected when a joint discussion about this is held with the stakeholders. During the reporting period, no man-days were lost on account of labours management issues across ONGC group.



MRPL Phase-3

Governance

ONGC group derives its strength from the governance that ensures transparency and business excellence. The group's policies emphasises on integrity and adherence to ethical and professional conduct that enables it to maintain a leadership position.



ONGC Board of Directors (Left to Right)

T K Sengupta (Director Offshore), Prof. Shireesh B Kedare (Independent Director), V P Mahawar (Director Onshore), D D Misra (Director HR), Shashi Shanker (Director T&FS), Amar Nath (Govt. Nominee Director), Dinesh K Sarraf (Chairman & Managing Director), A P Swahney (Govt. Nominee Director), Ajai Malhotra (Independent Director), K M Padmanabhan (Independent Director), A K Srinivasan (Director Finance), A K Dwivedi (Director Exploration)

ONGC group has been continuously striving to adhere to ethical standards for effective management, performance disclosure as a responsibility towards its stakeholders.

Each ONGC group company is governed by its own Board of Directors who independently formulate strategies, policies and performance reviews for their respective companies. For smooth functioning the group companies have Executive Committees consisting of Functional Directors chaired by CMD/MD that reports directly to the Board of Directors. These executive committees are responsible for reviewing the overall performance, risk management and executing, implementing and driving the strategic initiatives of the group companies. For details on composition of the Board of Directors, please refer to the Annual report or official website of the respective group company.

Training policy for Board of Directors

The training of directors is conducted based on the guidelines issued by the Central Public Sector Enterprises 2010, issued by DPE. It follows a training policy for its new directors that includes Induction Training, External Training and Board Presentation

Board level committees

The Board is supported by several committees with the mandate for providing direction and supervision. Additionally, the boards may constitute functional committees with specific terms of reference as per the requirements.



ONGC

There are 15 sub committees of Board:

1. Audit and Ethics Committee
2. Nomination and Remuneration Committee
3. Stakeholders' Relationship Committee
4. Human Resource Management Committee
5. Project Appraisal Committee
6. Health, Safety and Environment Committee (HSE)
7. Financial Management Committee
8. Committee on Dispute Resolution
9. Corporate Social Responsibility and Sustainable Development Committee
10. Committee of Directors for Issue of Duplicate Share Certificates
11. Risk Management Committee
12. Research and Development Committee
13. Project Review Committee
14. Committee for Review of Operations
15. Committee for Review of Subsidiaries and Joint Ventures

ONGC Videsh

1. Audit Committee
2. Financial Management Committee
3. Project Appraisal and HSE Committee
4. Human Resource Management and Remuneration Committee
5. Corporate Social Responsibility and Sustainability Committee

MRPL

1. Audit Committee
2. Nomination and Remuneration Committee
3. Stakeholder Relationship/ Investors grievance Committee
4. Project Appraisal and HSE Committee
5. Human Resource Management Committee
6. Corporate Social Responsibility and Sustainability Committee



ONGC Videsh Board of Directors

Promoting transparency

ONGC group has taken structured initiatives towards Corporate Governance and its practices, which revolve around multi-layered checks and balances to ensure transparency. Apart from the mandatory measures required

to be implemented as a part of Corporate Governance, the group has walked the extra mile in this regard and has implemented the Whistle Blower Policy, published Annual Report, MCA Voluntary Guidelines on Corporate Governance and Enterprise-wide

Risk Management framework. The ONGC group complies with the Right to Information Act 2005, and has appointed Central Public Information Officer (CPIO) to address any issue under this Act. Also, systems have been developed to effectively respond to the requirements of this Act.

During the reporting period, ONGC received 1,943 applications and 4 application were carried forward from previous year. In addition to the above DPI /RTI Cell also completed 58 second appeals during FY16 and a total of 1931 cases were disposed off during FY16. Similarly for ONGC Videsh 22 applications were received out of which 13 were replied, 5 forwarded to others and 4 are under process. At MRPL, a total of 172 applications were received out of which 163 were disposed off and balance 9 applications are under process.

ONGC Videsh's subsidiary in Colombia joins the Extractive Industry Transparency Initiative

Mansarovar Energy Colombia Ltd has voluntarily joined and signed the World Extractive Industry Transparency Initiative (EITI), participating in the development of the first EITI report for Colombia. EITI is a global standard for open and accountable management of natural resources. The Standard seeks to address the key governance issues of the oil, gas and mining sectors. Also, the initiative supports transparency about the contributions and financial investments to the stakeholders. The first report will specifically focus on the following components:

- Tax payment and revenue collection by the Colombian government
- Distribution of the collected revenues
- Social and economic spending
- Results and impact

Ethics and integrity

ONGC group is committed towards ensuring that its operations are carried out within a well-defined internal control framework. The group has instituted relevant policies and practices for ensuring that the highest levels of ethical conduct are upheld by each employee and management representatives based on the rules and guidelines set by the DPE, SEBI and MCA. ONGC group also encourages business partners to implement anti-corruption programmes.

In order to maintain high standards of anti-corruption practices, ONGC cooperates with the renowned international Non-Governmental Organisation "Transparency International" (TI) for implementing its Integrity Pact. As per the pact, ONGC expects full compliance from all stakeholders like employers, bidders etc. with all relevant laws and regulations and the principles of economic use of resources and of fairness and transparency in its relations. The pact serves as a tool for preventing corruption in public contracting. It is a multi-party agreement entered into by ONGC seeking to procure goods and services of significant value, the companies interested in bidding to supply the goods & services and a third party organisation such as a civil society organisation that will have a role in monitoring compliance with the terms outlined in the pact.

Across ONGC group, a well-structured vigilance department ensures that the integrity is held high across group companies. Regular training sessions have been organised for vigilance sensitisation of the employees. In the FY16, various training & sensitization programmes on anti-corruption and preventive & participative vigilance were organised across the organisation, wherein employees from all levels participated. At ONGC, two employees were dismissed from services on account of corruption charges being confirmed against them. At MRPL, a total of ten cases were investigated for corrupt practices and one case was confirmed where disciplinary actions was taken against the employee.



Risk management

ONGC group's systems & processes are developed embedding risk management. The group companies proactively manages current and potential risks through its extensive risk management framework. This is in part driven by the nature of the oil and gas industry which is characterised by uncertainties that are unique to this industry – from geological to geopolitical to price volatility of oil and gas.

These include risks associated with acquisition, partnership, country security risk along with risks of spillage, blowout of wells, earthquake, tsunami, terrorist activities, sabotage and pilferage etc. These inherent risks make it imperative to have an enterprise wide effective risk management framework.

ONGC and ONGC Videsh have established a robust risk management framework. The Risk Management is done through one of the most powerful Risk Management Tool, Governance, Risk Management and Compliance (GRC) module under SAP. A dedicated, Risk management cell is functional with specific role and responsibilities. The risk management covers three broad risks:

- a) Finance risk management through CSA module in SAP.
- b) Strategic risk management. This is dealt with separately under the domain of strategic and corporate planning.
- c) Process risk for the business units across the enterprise.

Risks along with risk drivers and mitigating factors have been mapped in risk registers for business units. The responses on risk control through surveys is compiled and analyzed for presenting to the Board on quarterly basis. The future plan is to make risk management maturity level high through validation of the process through audit process.

ONGC Videsh receives risk management award

ONGC Videsh received the ICICI Lombard & CNBC TV18 'India Risk Management awards' in Public Sector Unit of the year category, at the third edition of 'The India Risk Management Awards'. ONGC Videsh was adjudged the winner among more than 1000 applications, which went through a rigorous process of screening.

MRPL also has a well-defined policy framework for Enterprise Risk Management. Risk Managers are continuously monitoring the Risks pertaining to their area. Risk Management Committee was reconstituted consisting of majority of Directors pursuant to Regulation 21 of SEBI Listing Regulation, 2015 which monitors and evaluates the risk overview document once in quarter and recommends the same to the Audit Committee for evaluation. The Risk Management Committee's overview document is duly reviewed by the Audit Committee and placed before the Board on quarterly basis.



MD, ONGC Videsh receiving India Risk Management award

Report development

ONGC group has a well-established process for sustainability reporting. The group's approach towards reporting is etched in its approach of stakeholder engagement and the process of prioritizing relevant sustainability related issues. Through this the group is able to bring forth a focussed report that serves as a communication channel with its stakeholders.



ONGC Hazira Plant

This report presents the annual sustainability performance of ONGC group companies: Oil and Natural Gas Corporation Limited (ONGC) and its subsidiaries - ONGC Videsh Limited (ONGC Videsh) and Mangalore Refinery and Petrochemicals Limited (MRPL) for the period 1st April 2015 to 31st March 2016. This year ONGC group has transitioned from GRI G3.1 to the GRI G4 guidelines. This report adheres to the requirements of GRI G4 Guidelines 'In accordance – Core' on Sustainability Reporting along with the Oil and Gas Sector Supplement (OGSS).

ONGC has been reporting its sustainability performance annually for the past six years¹⁰ and from next year, ONGC group is planning to include performance of its JVs namely, ONGC-Tripura Power Company Limited (OTPC) and ONGC Petro-additions Limited (OPaL).

Supply chain

Given the nature of business, the supply chain of an integrated energy company like ONGC group comprises of multitude tiers of suppliers, contractors, JVs/ partners, Governments etc. that are geographically diverse and therefore it is enormously resource intensive to have even a dip-stick level assessment of the group's supply chain. Subsequently, for the first G4 report, the reporting boundary is based on the past

experience of G3.1 level reporting, regulatory requirements and is comparable with the leading industry practices. The group's reporting boundary comprises of ONGC's domestic exploration and production operations (Assets and Basins), processing plants and institutes. For ONGC Videsh, the boundary covers key material aspects across its global operations (through subsidiaries) across the following entities:

- Imperial Energy (Russia)
- Mansarovar Energy Colombia Ltd. (Colombia)
- Greater Nile Petroleum Operating Company (Sudan)
- San Cristobal Project (Venezuela)
- Carabobo, (Venezuela)

For MRPL, the boundary consisted of the refinery unit located at Mangalore, Karnataka.

Data presented in the report has been either sourced centrally from Enterprise Resource Planning system, standalone online system or directly from the work centres included in the reporting boundary. The calculation approach and consolidation methodology has been identified by a footnote along the report.

This report has been assured in accordance with AA1000AS (Type 1, moderate level assurance) by an independent external assurer, M/s DNV GL Business Assurance India Pvt. Ltd., that has been selected through a limited tender procedure as per ONGC procurement policy.

The Independent Assurance Statement is included in the report and the GRI content index is provided at ONGC official website and can be accessed at [>> sustainability>> corporate sustainability>> ongc sustainability reports¹¹](http://www.ongcindia.com). It also maps the contents to the principles of UNGC as well as the nine principles enshrined in the National Voluntary

¹⁰ONGC's last sustainability report covered the period from 1st April 2014 to 31st March 2015 and was released in December 2015



Guidelines on Social, Environmental and Economic Responsibilities of Business issued by the Ministry of Corporate Affairs.

Stakeholder engagement

Understanding the stakeholders' concerns and expectations is an essential part of the group's sustainability approach through regular engagements, both formal (conducted solely for the purpose of sustainability reporting) and informal (business as usual process). These engagements enable ONGC group to develop mutually beneficial relationships with its stakeholders.

ONGC has designated sustainable development officers (SDOs) for all its major installations across the country and these officers are responsible for data collection and co-ordinating sustainability related activities at their respective units. These SDOs are under direct functional control of Chief Carbon Management and Sustainability Group, corporate office, Delhi.

The current level of internal engagement at ONGC group formally involves these officers and few other nominated officers from ONGC corporate office/ other group companies for identification, validation and prioritisation of sustainability topics. These officers represent a good mix of departmental functions, level and roles within the organization thereby bringing in a holistic dimension. Given the existing constraints, the external stakeholders are primarily identified from regions nearby the major operating locations or the corporate office. The view of extended group



Chief Carbon Management and Sustainability Group, Shri Jai Singh

of external stakeholders such as the government, industry bodies, community, etc. are informally dealt.

At present there is no formal process to arrive at a focussed group of stakeholders for sustainability related discussions. However, during the course of reporting, ONGC group plans to extend the coverage of stakeholder groups coupled with a formalized system for stakeholder identification and prioritization. The stakeholder group comprises of all individuals, groups and entities that are impacted by its operations and/or impact the operations as its stakeholders and these include:

- Employees
- Customers
- Suppliers
- Contractors (including contractual labour)
- Joint venture/ business partners
- Government and regulatory bodies of host countries
- Shareholders, investors
- Communities and NGOs



Stakeholders Engagement at MRPL

¹¹For any further query/ clarification/ suggestion, please contact Chief Carbon Management and Sustainability Group, ONGC at chief_cmsg@ongc.co.in

Engagement modes, frequency and key areas of concern for each stakeholder group are presented below:

| Stakeholder Group | Mode of Engagement | Areas of interest |
|---|---|---|
| Employees | Workshops, trainings and capacity building sessions (ongoing) | Career progression and growth |
| | Seminars, newsletters, internal web portal (ongoing) | Employee welfare, HSE and security at workplace |
| | Officers/staff associations (periodic) | Employee welfare, HSE and security at workplace |
| | Forums like key executive meet, conclave, Strategy meet, brainstorming sessions, open forums etc. (periodic) | Formulating business strategy, growth, performance review, continual improvement, HR issues |
| | Interaction with the marketing/ operations team on pertinent issues (on need basis) | Supply & quality of product |
| Customers | | Payment terms, settlement. |
| | | |
| Suppliers, Contractors (including contractual labour) | Pre-bid conference, vendor's meet, interaction with commercial team (on need basis) | Tendering/ contractual/ technical issues |
| | Contract agreement and direct interactions at the work-centre level (on need basis) | |
| | Training and awareness programmes for contract workers and schemes like Sahyog (ongoing) | Workplace safety and welfare of contractual labour |
| Joint venture/ business partners | Committee meetings as per production sharing contract, joint operating agreement, MoUs etc. (periodic) | Operational and business synergies |
| | Joint audits (periodic) | Operational excellence |
| Government and regulatory bodies of host countries | Engagement with Government, ministries and relevant statutory authorities (on need basis) | Issues such as energy security, HSE, security, climate change |
| | Engagement through audits, inspections, and meetings with departments like Safety Directorate, Pollution Control Boards etc. (periodic) | Compliance |
| | MoUs, production sharing contracts (ongoing) | Contractual framework, operational performance |
| Shareholders, investors | Investors and analysts meet/ Meetings of Officers of Investor Relation Cell (periodic) | Economic value of the company |
| | Annual General meeting, Special General meeting (annual/ on need basis) | Future growth prospects, Transparency |
| | Quarterly and annual results, annual reports, sustainability report, press releases and investor presentations (ongoing) | Corporate governance and transparency |
| | ONGC Videsh's engagement with ONGC (its sole shareholder) through MoUs, meetings etc. (periodic) | Strategy and growth prospects |
| | MRPL's engagement with ONGC (its major shareholder) through meetings etc. (periodic) | |



| Stakeholder Group | Mode of Engagement | Areas of interest |
|-------------------|--|--|
| Communities/ NGOs | Stakeholder meetings across Assets, Basins and Plants (periodic) | Building effective partnerships |
| | Public hearing (on need basis) | Understanding community needs and specific socio-economic issues, awareness building and understanding the concerns/ needs for effective partnership |
| | Community engagement through need assessment surveys, group discussions, one-to-one meetings, campaigns and CSR programmes (ongoing) | |

Materiality

This year, ONGC group supplemented its materiality analysis from last year with additional stakeholder inputs. Structured engagements with internal and external stakeholders were conducted across the group companies at selected sites and corporate office. The focus of the workshops with internal stakeholders (employees from different functions) was to assess the impacts of identified sustainability topics on business. The external stakeholder workshop with some of the leading suppliers, business partners, civil society organisations was meant to assess the level of stakeholder concern with respect to each issue. Inputs from both these workshops were combined with inputs received last year to update the ONGC group's materiality map.

The ONGC group sustainability report FY16 focuses on the key sustainability challenges across the group companies and explores the many ways that group is responding to it. The aspect selection identifies the sustainability subjects that were relevant or prominent during the reporting period. The main steps involved in selecting the topics are:

- Step 1: Identifying and understanding topics that are important to group's stakeholders through formal stakeholder workshop with a select group of external stakeholders at ONGC corporate office in New Delhi.
- Step 2: Identifying topics that are important to ONGC group's business strategy through a

formal workshop with employees of the group companies at the corporate office in New Delhi and another session for MRPL employees at the refinery in Mangalore.

- Step 3: Collating all the topics identified and presenting it to the ONGC group sustainability core committee for a moderation process for relative prioritization of topics.
- Step 4: Additionally, to ensure that the final list of topics are relevant as per the broader sustainability context for oil & gas industry, the material topics for ONGC group have been compared with the disclosures by peer-groups and global oil & gas disclosure standards like IPIECA, API, IOGP.
- Step 5: For the first year of G4 reporting, topics of high importance to stakeholders and of high significance to ONGC group's business strategy have been reported as G4 level disclosure for this report
- Step 6: The other topics have also been included in the report's content however not fully conforming to the requirements of G4 level disclosure

This report has been prepared keeping in consideration the sustainability topics presented in the materiality map given in this chapter. Topics placed at the top-right corner of the map represent those sustainability issues that bear the highest impact on the business as well as on the stakeholders.

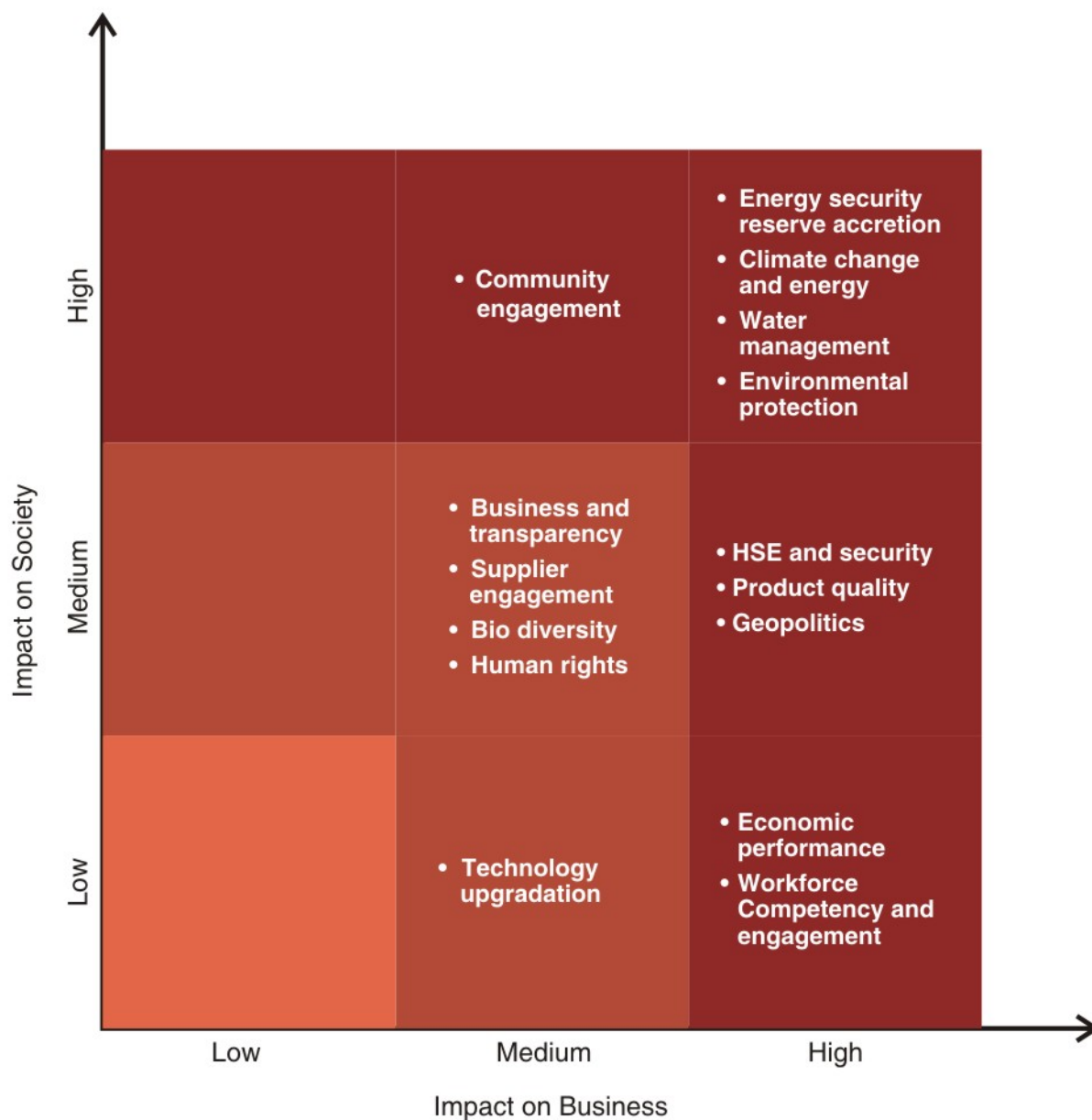


Figure10: ONGC group materiality map for FY16

To fully address the requirements of a G4 disclosure for ONGC group report, the issues coming under the category of high impact on business and high impact to society are considered for G4 level disclosure.



| Group's sustainability issue | GRI G4 material aspects | Aspect boundary |
|--|--------------------------------|---|
| Energy security/ reserve accretion | Reserves | Consolidated performance of ONGC group including all subsidiaries & Jvs |
| Climate change and energy | Energy/ emissions | <p>ONGC's domestic exploration and production operations (Assets and Basins), processing plants and institutes.</p> <p>ONGC Videsh's overseas entities:</p> <ul style="list-style-type: none"> • Imperial Energy (Russia) • Mansarovar Energy Colombia Ltd (Colombia) • Greater Nile Petroleum Operating Company (Sudan) • San Cristobal Project (Venezuela) • Carabobo, (Venezuela) <p>MRPL, the boundary consisted of the refinery unit located at Mangalore, Karnataka.</p> |
| Water management | Water | |
| Environmental protection (air emissions, waste & spills) | Emissions/ effluents and waste | |

Table26: Aspect wise boundary for high impact sustainability topics



A View of MRPL Refinery

All the sustainability topics presented in the materiality map have been addressed across various chapters of this report and table below maps out the ONGC group's universe of sustainability topics to the respective chapters of this report where they have been addressed.

| Sl. No. | ONGC group sustainability topic | GRI G4/ OGSS material aspects | Name of the chapter |
|---------|------------------------------------|--|---------------------|
| 1 | Energy security/ reserve accretion | Reserves | Our business |
| 2 | Climate change and energy | Energy, emissions | Our environment |
| 3 | Water management | Water | Our environment |
| 4 | Environmental protection | Emissions/ Effluents & waste | Our environment |
| 5 | HSE and security | OHS | Safety and security |
| 6 | Product quality | Product & services/ fossil fuel substitutes | Our business |
| 7 | Geopolitics | - | Governance |
| 8 | Economic performance | Economic performance | Our business |
| 9 | Workforce competency & engagement | Employment/ training & education, diversity, Labour-management relations | Our people |
| 10 | Community engagement | Local communities/ Indigenous rights/ Indirect economic impacts | Our community |
| 11 | Business & transparency | Anti-corruption | Governance |
| 12 | Supplier engagement | Procurement practices/ Supplier environmental assessment/ Supplier assessment for labour practices/ Supplier assessment for impacts on society | Our people |
| 13 | Biodiversity | Ecosystem services including biodiversity | Our environment |
| 14 | Human rights | Human rights/ Security practices/ Supplier human rights assessment | Our people |
| 15 | Technology upgradation | - | Our business |



Summary of performance

| Business Performance | | | | | |
|--------------------------------------|---|---------------------|----------|----------|----------|
| Indicator | | Unit | FY 14 | FY 15 | FY16 |
| Crude oil production | A | MMT | 22.25 | 22.26 | 22.36 |
| | B | MMT | 5.49 | 5.53 | 5.51 |
| Natural gas production | A | BCM | 23.29 | 22.02 | 21.18 |
| | B | BCM | 2.87 | 3.34 | 3.41 |
| Oil & Gas reserves (proved) | A | MMTOE | 724.13 | 711.24 | 691.28 |
| | B | MMTOE | 207.13 | 202.34 | 201.70 |
| Economic value retained | A | Billion ₹ | 233.07 | 164.21 | 196.10 |
| | B | Billion ₹ | 108.16 | 75.89 | 47.81 |
| | C | Billion ₹ | 7.29 | (21.00) | 15.77 |
| Environmental Performance | | | | | |
| Total primary energy consumption | A | TJ | 1,87,750 | 1,93,245 | 1,78,671 |
| | B | TJ | 12,901 | 11,217 | 13,212 |
| | C | TJ | 50,186 | 60,892 | 60,904 |
| Electricity purchased from grid | A | TJ | 3,756 | 3,795 | 2,422 |
| | B | TJ | 341 | 286 | 425 |
| | C | TJ | 187 | 153 | 47.17 |
| Fossil fuel-direct emissions | A | MtCO ₂ e | 10.83 | 11.15 | 10.66 |
| | B | MtCO ₂ e | 2.41 | 1.70 | 2.08 |
| | C | MtCO ₂ e | 3.36 | 3.99 | 4.37 |
| Electricity-indirect emissions | A | MtCO ₂ e | 0.86 | 0.87 | 0.55 |
| | B | MtCO ₂ e | 0.09 | 0.07 | 0.11 |
| | C | MtCO ₂ e | 0.04 | 0.03 | 0.01 |
| Total greenhouse gas (GHG) emissions | A | MtCO ₂ e | 11.69 | 12.02 | 11.21 |
| | B | MtCO ₂ e | 2.50 | 1.77 | 2.19 |
| | C | MtCO ₂ e | 3.4 | 4.02 | 4.38 |
| Total water usage | A | Billion litres | 26.00 | 24.57 | 24.29 |
| | B | Billion litres | 3.55 | 4.94 | 4.99 |
| | C | Billion litres | 12.27 | 15.60 | 17.88 |
| Environmental expenditure | A | Billion ₹ | 6.18 | 6.57 | 7.89 |
| | B | Billion ₹ | 0.18 | 1.03 | 0.75 |
| | C | Billion ₹ | 0.13 | 3.21 | 0.51 |

| People Performance | | | | | |
|-----------------------------|---------|-----------|--------|--------|--------|
| Indicator | | Unit | FY 14 | FY 15 | FY16 |
| Number of employees | A and B | Nos. | 33,911 | 33,185 | 33,927 |
| | C | Nos. | 1,715 | 1720 | 1812 |
| Turnover of employees | A and B | Nos. | 1,388 | 1,559 | 1,744 |
| | C | Nos. | 20 | 43 | 22 |
| Employee wages and benefits | A | Billion ₹ | 19.36 | 16.95 | 18.21 |
| | B | Billion ₹ | 3.68 | 4.45 | 5.27 |
| | C | Billion ₹ | 2.15 | 2.41 | 2.85 |
| LTIF | A | Factor | 0.39 | 0.40 | 0.44 |
| | B | Factor | 0.17 | 0.44 | 0.38 |
| | C | Factor | 0 | 0 | 0 |
| Total fatalities | A | Nos. | 3 | 3 | 9 |
| | B | Nos. | 1 | 3 | 2 |
| | C | Nos. | 0 | 0 | 0 |
| Social Performance | | | | | |
| Community investments | A | Billion ₹ | 3.41 | 2.16 | 4.21 |
| | B | Billion ₹ | 0.22 | 0.19 | 0.09 |
| | C | Billion ₹ | 0.03 | 0.05 | 0.02 |

Legend:

A - ONGC

B - ONGC Videsh

C - MRPL

*GRI G4 Index is uploaded separately on the website.



Independent Assurance Statement

Scope and Approach

Oil and Natural Gas Corporation Limited ('ONGC') commissioned DNV GL Business Assurance India Private Limited ('DNV GL') to undertake an independent assurance (Type 1, Moderate level of assurance as per AA1000AS) of ONGC Group of Companies' Sustainability Report 2015-16 ('the Report') in its printed format. The Report includes disclosures of the ONGC Group of Companies ('the Group' i.e. comprising ONGC Limited, ONGC Videsh Limited and Mangalore Refinery and Petrochemicals Limited) for the year 2015-16. The intended user of this assurance statement is the management of the Group. Our assurance engagement was planned and carried out in September 2016 - January 2017 for the financial year ending 31st March 2016.

We performed our work using AccountAbility's AA1000 Assurance Standard 2008 (AA1000 AS) and DNV GL's assurance methodology VeriSustain™, which is based on our professional experience, international assurance best practices including International Standard on Assurance Engagements 3000 (ISAE 3000) and the Global Reporting Initiative's (GRI's) Sustainability Reporting Guidelines.

The agreed scope of work includes the evaluation of disclosed information in the Report with respect to the systems and the processes the Group has in place for adherence to the three Principles i.e. Inclusivity, Materiality and Responsiveness of AccountAbility's AA1000 Assurance Standard (AA1000AS (2008)).

The reporting boundary is as set out in the Report in the section 'Report Development' i.e. covering sustainability performance of entities of the ONGC Group of Companies; these entities include:

- ONGC Limited, including domestic exploration and production operations (Assets & Basins), processing plants, office buildings, institutes, centres of delivery and residential colonies;
- ONGC Videsh Limited (OVL), including its Corporate Office in New Delhi and global operations through subsidiaries i.e. Imperial Energy (Russia), San Cristobal Project (Venezuela), Carabobo (Venezuela), Greater Nile Petroleum Operating Company (Sudan), Mansarovar Energy Colombia Limited (Columbia) and CPO-5 (Colombia); and,
- The refinery unit of Mangalore Refinery and Petrochemicals Limited (MRPL) at Mangalore, Karnataka.

We planned and performed our work to obtain the evidence we considered necessary to provide a basis for our assurance opinion. We have not verified the accuracy and reliability of quantitative data and sustainability performance information stated in the Report. We are providing a Type 1 Moderate Level of assurance in accordance with AA1000 AS (2008). No external stakeholders were interviewed as part of this assurance engagement.

We understand that the reported financial data and information in this Report are based on data from ONGC's Annual Report 2015-16, which are subject to a separate independent audit process.

Responsibilities of the Management of ONGC and of the Assurance Providers

The management of ONGC Group have the sole responsibility for the preparation of the Report as well as the processes for collecting, analysing and reporting the information presented in the Report. In performing our assurance work, our responsibility is to the management of ONGC Group of Companies; however, our statement represents our independent opinion and is intended to inform the outcome of our assurance to the stakeholders of ONGC Group. DNV GL was not involved in the preparation of any statements or data included in the Report except for this Assurance Statement.

DNV GL's assurance engagements are based on the assumption that the information provided by the client to us as part of our review have been provided in good faith, and is complete, true and free from material errors. We were not involved in the preparation of any statements or data included in the Report except for this Assurance Statement. DNV GL expressly disclaims any liability or co-responsibility for any decision a person or an entity may make based on this Assurance Statement.

Basis of our Opinion

A multi-disciplinary team of sustainability and assurance specialists performed work and as part of assurance, we undertook the following activities:

- Desk Review of the current sustainability issues that could affect ONGC Group and are of interest to stakeholders;
- Desk Review of ONGC's approach to stakeholder engagement and recent outputs. We did not have any direct engagement with external stakeholders;
- Desk Review of information provided to us by ONGC on its reporting and management processes relating to the Principles;
- Interviews with the core team involved in preparing the Report and key decision makers of the Group at ONGC's office in New Delhi with respect to the application of the three Accountability Principles of Inclusivity, Materiality and Responsiveness of Accountability's AA1000 Assurance Standard (AA1000AS (2008));
- Review of supporting evidence for key claims in the Report. Our verification processes were prioritised against ONGC's materiality determination process and we based our prioritisation on the materiality of issues identified at a consolidated corporate level;
- An independent assessment of ONGC's reporting against the Global Reporting Initiative (GRI) G4 Guidelines and the reporting requirements for its 'in accordance' - Core option.

During the assurance process, we did not come across limitations to the scope of the agreed assurance engagement. We did not carry out any site visits to ONGC Group companies for assurance engagement.

Conclusion and Observations

Based on the work undertaken, nothing came to our attention to suggest that the Report does not properly describe the requirements of the General Standard Disclosures and the Specific Standard Disclosures for the 'in accordance' - Core option of GRI G4.

Without affecting our assurance opinion, we also provide the following observations. We have evaluated the Report's adherence to the following principles on a scale of 'Good', 'Acceptable' and 'Needs Improvement':

Inclusivity

The participation of stakeholders in developing and achieving an accountable and strategic response to sustainability.

The stakeholder engagement process is well established and involves planned engagement with key stakeholders including supply chain partners, to identify and respond to significant sustainability concerns. The material issues emerging from materiality analysis were collected and prioritized, and the results are fairly reflected in the Report. In our opinion, the level at which the Report adheres to this principle is **'Good'**.

Materiality

The process of determining the issues that is most relevant to an organization and its stakeholders.



The Group has established a materiality assessment process for identifying, prioritising and reporting its performance with respect to significant material Aspects. The process considers inputs from various stakeholders, peers and emerging risks and opportunities in the oil and gas sector. However, the process may be further strengthened to determine emerging material issues having short, medium and long term impacts on the Group and be further expanded to include all exploration and production sites, to capture material aspects in the sustainability context of its operations in all geo-locations. In our opinion, the level at which the Report adheres to this principle is **'Acceptable'**.

Responsiveness

The extent to which an organization responds to stakeholder issues.

Response to key stakeholder concerns through its policies, management systems and governance mechanisms is fairly reflected in the Report at a macro level. In our opinion, the level at which the Report adheres to this principle is 'Acceptable'.

Opportunities for Improvement

The following is an excerpt from the observations and opportunities for improvement reported to the management of the Group and are not considered for drawing our conclusions on the Report; however, they are generally consistent with the management's objectives:

- ONGC may formally identify impacts on sustainability due to its operations through a structured risk assessment, and strengthen its disclosures on the Group's responses to these impacts in its extended external boundary. This can help establish short, medium and long term sustainability goals and targets for identified material Aspects in its supply chain.
- The Group may identify and bring out its responses to key material issues having short, medium and long term sustainability impacts, within the Report.
- The Report may bring out topics and Aspects related to upstream and downstream operations of Group companies including subsidiaries and joint ventures.

For and on behalf of DNV GL Business Assurance India Private Limited

New Delhi, India

7th January 2017

KANU PRIYA
Lead Verifier
DNV GL Business Assurance India Private Limited, India

NANDKUMAR VADAKEPATTH
Assurance Reviewer
Regional Sustainability Manager - Region India & Middle East
DNV GL Business Assurance India Private Limited



AA1000
Licensed Assurance Provider
000-10

Abbreviations

| | |
|-------------|--|
| ONGC | Oil and Natural Gas Corporation Limited |
| ONGC Videsh | ONGC Videsh Limited |
| MRPL | Mangalore Refinery and Petrochemicals Limited |
| ONGC group | Refers to ONGC group of companies - ONGC, ONGC Videsh and MRPL |
| ATF | Aviation Turbine Fuel |
| BCM | Billion Standard Cubic Meter |
| CPSE | Central Public Sector Enterprise |
| CSR | Corporate Social Responsibility |
| DGH | Directorate General of Hydrocarbons |
| DGMS | Directorate General of Mines Safety |
| DPE | Department of Public Enterprise |
| ESG | Environmental, Social and Governance |
| ETP | Effluent Treatment Plant |
| FY | Financial Year |
| GHG | Greenhouse Gas |
| GMI | Global Methane Initiative |
| GRI | Global Reporting Initiative |
| GRM | Gross Refining Margin |
| HP/HT | High Pressure/High Temperature |
| HSD | High Speed Diesel |
| HSE | Health, Safety and Environment |
| HVAC | Heating, Ventilation, and Air conditioning |
| IOR/EOR | Improved Oil Recovery/ enhanced Oil Recovery |
| ISO | International Organisation for Standardisation |
| JV | Joint Venture |
| LNG | Liquefied natural Gas |
| LPG | Liquefied Petroleum Gas |
| MMSCM | Million Metric Standard Cubic Meters |
| MMT | Million Metric Tonnes |
| MMTOE | Million Metric Tonnes of Oil and Oil Equivalent Gas |
| MMTPA | Million Metric Tonnes per annum |
| MoP&NG | Ministry of Petroleum and Natural Gas |
| MCA | Ministry of Corporate Affairs |
| MTOE | Million Tonnes of Oil and Oil Equivalent Gas |
| NELP | New Exploration Licensing Policy |
| NGO | Non-Governmental Organisation |
| O+OEG | Oil and Oil Equivalent of Gas |
| OGSS | Oil and Gas Sector Supplement |
| OHS | Occupational Health and Safety |
| OISD | Oil Industry Safety Directorate |
| PPE | Personal Protective Equipment |
| SKO | Superior Kerosene Oil |
| SPCB | State Pollution Control Board |
| VAP | Value Added product |



Reaching new horizons



Touching lives



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GRI G4 Index: ‘In accordance – core’

| GRI G4 disclosures | | Section reference | | Omissions (if any) | External assurance / page number | UNGC- COP | ABRR |
|-----------------------------|---|---|-----------------------------|-----------------------|---|--------------|--|
| General standard disclosure | | | | | | | |
| Indicator | Description | Section Name | Page number/ explanation | | | | |
| Strategy and Analysis | | | | | | | |
| G4-1 | Statement from the most senior decision-maker of the organization (such as CEO, chair, or equivalent senior position) about the relevance of sustainability to the organization and the organization’s strategy for addressing sustainability | From CMD’s desk, ONGC Videsh MD’s desk & MRPL MD’s desk | 02-09 | - | - | | |
| Organizational Profile | | | | | | | |
| G4-3 | Name of the organization | ONGC group at a glance | 11 | - | - | | Section-A: General information about the company |
| G4-4 | Primary brands, products or services | ONGC group at a glance | 11 | - | - | | |
| G4-5 | Location of the organization’s headquarters. | ONGC group at a glance | 13 | - | - | | |
| G4-6 | Number of countries where the organization operates | ONGC group at a glance | 11 | - | - | | |
| G4-7 | Nature of ownership and legal form. | ONGC group at a glance | 11 | - | | | Section C: Other details |
| G4-8 | Markets served (geographic/types of customers) | ONGC group at a glance | 12-13 | - | - | | |
| G4-9 | Scale of the reporting organization | ONGC group at a glance; Our people | 11; 40 | - | - | | |
| G4-10 | Details on workforce broken down by gender, employment contract, employment type | Our people | 41-42 | - | - | | |
| G4-11 | Percentage of total employees covered by collective bargaining agreements | Our people | 45-46 | - | - | | |
| G4-12 | Description of the organization’s supply chain | Report development | 52 | - | - | | |

| GRI G4 disclosures | | Section reference | | Omissions (if any) | External assurance / page number | UNGC- COP | ABRR |
|-----------------------------|---|------------------------|--|-----------------------|---|--------------|------|
| General standard disclosure | | | | | | | |
| Indicator | Description | Section Name | Page number/ explanation | | | | |
| G4-13 | Significant changes during the reporting period regarding the organisation’s size, structure, ownership, or its supply chain | GRI Index | As identified in the report at relevant sections in the report | - | - | | |
| G4-14 | How the precautionary approach or principle is addressed by the organisation | Report development | 52 | - | - | | |
| G4-15 | Externally developed economic, environmental and social charters, principles, or other initiatives to which the organisation subscribes or which it endorses | ONGC group at a glance | 14 | - | - | | |
| G4-16 | Memberships of associations and national/ international advocacy organisations in which the organisation holds a position on the governance body and participates in projects or committees | ONGC group at a glance | 13-14 | - | - | | |
| | Identified Aspects and boundaries | | | | | | |
| G4-17 | Entities included in the organisation’s consolidated financial statements with indication of coverage in the report | ONGC group at a glance | 14 | | | | |
| G4-18 | Process for defining the report content and the Aspect Boundaries | Report development | 52 | - | - | | |
| G4-19 | Material Aspects identified in the process for defining report content | Report development | 55-56 | - | - | | |
| G4-20 | Description of Aspect Boundary within the organisation for each material aspect | Report development | 52 | - | - | | |
| G4-21 | Description of Aspect Boundary outside the organisation for each material aspect | Report development | 52-53 | - | - | | |
| G4-22 | Explanation of the effect of any re-statement of information provided in the earlier Reports | GRI Index | No re-statements | - | - | | |

| GRI G4 disclosures | | Section reference | | Omissions (if any) | External assurance / page number | UNGC- COP | ABRR |
|-----------------------------|---|--------------------|--|-----------------------|---|--------------|--|
| General standard disclosure | | | | | | | |
| Indicator | Description | Section Name | Page number/ explanation | | | | |
| G4-23 | Significant changes from previous reporting periods in the scope and aspect boundaries | Report development | 52 | - | - | | |
| Stakeholder engagement | | | | | | | |
| G4-24 | List of stakeholder groups engaged by the organisation | Report development | 54 | - | - | | Section E: Principle 4- Stakeholder engagement |
| G4-25 | Basis for identification and selection of stakeholders with whom to engage | Report development | 54 | - | - | | |
| G4-26 | Organisation’s approach to stakeholder engagement | Report development | 54 | - | - | | |
| G4-27 | Key topics and concerns that have been raised through stakeholder engagement, and how the organisation has responded to those key topics and concerns | Report development | 54-57 | - | - | | |
| Report profile | | | | | | | |
| G4-28 | Reporting Period | Report development | 52 | | | | Section D: BR Information |
| G4-29 | Date of most recent previous Report | GRI Index | ONGC group sustainability report 2014-15 | | | | |
| G4-30 | Reporting cycle | GRI Index | Annual | | | | |
| G4-31 | Contact point for questions regarding the report or its contents | Report development | 53 | - | - | | |
| G4-32 | GRI Content Index | This table | 01-10 | - | - | | |
| G4-33 | Organisation’s policy and current practice with regard to seeking external assurance for the report; relationship with the assurance providers; the highest governance body’s involvement in seeking assurance for the organisation’s Sustainability Report | Report development | 52 | - | - | | |
| Governance | | | | | | | |
| G4-34 | Governance structure of the organisation; committees responsible for decision making on economic, environmental and social impacts | Governance | 48-49 | - | - | | |
| Ethics and Integrity | | | | | | | |

| GRI G4 disclosures | | Section reference | | Omissions (if any) | External assurance / page number | UNGC- COP | ABRR |
|-----------------------------------|---|-------------------|-----------------------------|-----------------------|---|--------------|------|
| General standard disclosure | | | | | | | |
| Indicator | Description | Section Name | Page number/ explanation | | | | |
| G4-56 | Organisation’s values, principles, standards and norms of behaviour such as codes of conduct and codes of ethics | Governance | 48 | - | - | | |
| Category: Economic | | | | | | | |
| Aspect: Economic Performance | | | | | | | |
| G4-DMA | Generic disclosure on management approach | Our business | 15 | - | - | - | |
| G4-EC1 | Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments. | Our business | 15-16 | - | - | - | |
| G4-EC2 | Financial implications and other risks and opportunities for the organisation’s activities due to climate change | Our environment | 26 | - | - | - | |
| G4-EC3 | Coverage of the organisation’s defined benefit plan obligations | Our people | 40 | - | - | - | |
| G4-OG1 | Volume and type of estimated proved reserves and production | Our business | 17-18 | - | | | |
| Aspect: Indirect economic impacts | | | | | | | |
| G4-DMA | Generic disclosure on management approach | Our communities | 36-39 | - | - | - | |
| G4-EC7 | Development and impact of infrastructure investments and services supported | Our communities | 36-39 | - | - | - | |
| G4-EC8 | Significant indirect economic impacts, including the extent of impacts | Our communities | 36-39 | - | - | - | |
| Category: Environmental | | | | | | | |
| Aspect: Energy | | | | | | | |
| G4-DMA | Generic disclosure on management approach | Our environment | 26 | - | - | - | |

| GRI G4 disclosures | | Section reference | | Omissions (if any) | External assurance / page number | UNGC- COP | ABRR |
|---|---|-------------------|-----------------------------|-----------------------|---|--------------|------|
| General standard disclosure | | | | | | | |
| Indicator | Description | Section Name | Page number/ explanation | | | | |
| G4-EN3 | Energy consumption within the organisation | Our environment | 28-29 | - | - | - | |
| G4-EN4 | Energy consumption outside of the organisation | Our environment | 28-29 | - | - | - | |
| G4-EN5 | Energy intensity | Our environment | 28 | - | - | - | |
| G4-OG2 | Total amount invested in renewable energy | Our environment | 27 | - | | | |
| G4-OG3 | Total amount of renewable energy generated by source | Our environment | 26-28 | - | | | |
| Aspect: Water | | | | | | | |
| G4-DMA | Aspect specific disclosure on management approach | Our environment | 26 | - | - | - | |
| G4-EN8 | Total water withdrawal by source | Our environment | 31 | - | - | - | |
| G4-EN10 | Percentage and total volume of water recycled and reused | Our environment | 31 | - | - | - | |
| Aspect: Ecosystem Services including Biodiversity | | | | | | | |
| G4-OG4 | Number and percentage of significant operating sites in which biodiversity risks has been assessed and monitored | Our environment | 32 | - | - | - | |
| G4-EN11 | Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas | Our environment | 32-33 | - | - | - | |
| Aspect: Emissions | | | | | | | |
| G4-DMA | Aspect specific disclosure on management approach | Our environment | 26-28 | - | - | - | |
| G4-EN15 | Direct greenhouse gas (GHG) emissions (Scope1) | Our environment | 30 | - | - | - | |
| G4-EN16 | Energy indirect greenhouse gas (GHG) emissions (Scope 2) | Our environment | 30 | - | - | - | |
| G4-EN20 | Emissions of ozone-depleting substances (ODS) | Our environment | 29 | - | - | - | |
| G4-EN21 | NOX, SOX, and other significant air emissions | Our environment | 29 | - | - | - | |
| Aspect: Effluents & waste | | | | | | | |

| GRI G4 disclosures | | Section reference | | Omissions (if any) | External assurance / page number | UNGC- COP | ABRR |
|--|---|-------------------|-----------------------------|-----------------------|---|--------------|------|
| General standard disclosure | | | | | | | |
| Indicator | Description | Section Name | Page number/ explanation | | | | |
| G4-DMA | Generic disclosure on management approach | Our environment | 26-28 | - | - | - | |
| G4-EN22 | Total water discharge by quality and destination | Our environment | 31 | - | - | - | |
| G4-EN23 | Total weight of waste by type and disposal method | Our environment | 32 | - | - | - | |
| G4-EN24 | Total number and volume of significant spills | Safety & security | 20-22 | - | - | - | |
| G4-OG5 | Volume and disposal of formation or produced water | Our environment | 31 | - | - | - | |
| G4-OG6 | Volume of flared or vented hydrocarbons | Our environment | 30 | - | - | - | |
| G4-OG7 | Amount of drilling waste (drill mud & cuttings) and strategies for treatment and disposal | Our environment | 32 | - | - | - | |
| Aspect: Compliance | | | | | | | |
| EN29 | Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations | Our environment | 34 | - | - | - | |
| Aspect: Product and services | | | | | | | |
| G4-OG8 | Benzene, Lead and Sulphur content in fuels | Our business | 19 | - | - | - | |
| Aspect: Overall | | | | | | | |
| G4-DMA | Generic disclosure on management approach | Our environment | 26 | - | - | - | |
| G4-EN31 | Total environmental protection expenditures and investments by type | Our environment | 34 | - | - | - | |
| Category: Social | | | | | | | |
| Sub-category: Labour practices and decent work | | | | | | | |
| Aspect: Employment | | | | | | | |
| G4-DMA | Generic disclosure on management approach | Our people | 40-42 | - | - | - | |
| G4-LA1 | Total number and rates of new employee hires and employee turnover by age group, gender and region | Our people | 41 | - | - | - | |
| G4-LA2 | Benefits provided to fulltime employees that are not provided to temporary or part-time employees, by significant locations of operation | Our people | 42-43 | - | - | - | |

| GRI G4 disclosures | | Section reference | | Omissions (if any) | External assurance / page number | UNGC- COP | ABRR |
|--|--|---------------------------|---|-----------------------|---|--------------|------|
| General standard disclosure | | | | | | | |
| Indicator | Description | Section Name | Page number/ explanation | | | | |
| Aspect: Labour/management relations | | | | | | | |
| G4-DMA | Aspect specific disclosure on management approach | Our people | 40 | | | | |
| G4-LA4 | Minimum notice periods regarding operational changes, including whether these are specified in collective agreements | GRI Index | 21 days as per the Industrial Disputes Act 1947 | - | - | - | |
| Aspect: Occupational health and safety | | | | | | | |
| G4-DMA | Aspect specific disclosure on management approach | Safety & security | 20 | | - | - | |
| G4-LA6 | Type of injury and rates of injury, occupational diseases, lost days, and absenteeism and total number of work related fatalities | Safety & security | 25 | - | - | - | |
| Aspect: Training and education | | | | | | | |
| G4-DMA | Generic disclosure on management approach | Our people | 40-41 | - | - | - | |
| G4-LA9 | Average hours of training per year per employee by gender, and by employee category | Our people | 45 | - | - | - | |
| Aspect: Diversity and equal opportunity | | | | | | | |
| G4-DMA | Generic disclosure on management approach | Governance | 48 | | - | - | |
| G4-LA12 | Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity | Our people; Governance | 41-42 48 | | - | - | |
| Aspect: Supplier Assessment for Labour Practices | | | | | | | |
| G4-DMA | Generic disclosure on management approach | Our people | 40-41 | - | - | - | |
| G4-LA4 | Percentage of new suppliers that were screened using labor practices criteria | Our people | 45 | - | - | - | |
| Sub-category: Human rights | | | | | | | |
| Aspect: Non-discrimination | | | | | | | |
| G4-DMA | Generic disclosure on management approach | Our people | 40-41 | - | - | - | |
| G4-HR3 | Report the total number of incidents of | Our people | 44 | - | - | - | |

| GRI G4 disclosures | | Section reference | | Omissions (if any) | External assurance / page number | UNGC- COP | ABRR |
|--|--|-------------------|-----------------------------|---|---|--------------|------|
| General standard disclosure | | | | | | | |
| Indicator | Description | Section Name | Page number/ explanation | | | | |
| | discrimination during the reporting period. | | | | | | |
| Aspect: Security practices | | | | | | | |
| G4-DMA | Generic disclosure on management approach | Safety & security | 20 | - | - | - | |
| G4-HR7 | Percentage of security personnel trained in the organization’s human rights policies or procedures that are relevant to operations | Our people | 45 | - | - | - | |
| Aspect: Assessment | | | | | | | |
| G4-DMA | Generic disclosure on management approach | Our people | 40 | | - | - | |
| H4-HR9 | Total number and percentage of operations that have been subject to human rights reviews or impact assessments. | GRI Index | - | We will be reporting Complete information on this indicator by 2018 | - | - | |
| Aspect: Supplier human rights assessment | | | | | | | |
| G4-DMA | Aspect specific disclosure on management approach | Our people | 40-41 | - | - | - | |
| G4-HR10 | Percentage of new suppliers that were screened using human rights criteria | Our people | 40-43 | - | - | - | |
| Sub-category: Society | | | | | | | |
| Aspect: Local communities | | | | | | | |
| G4-DMA | Generic disclosure on management approach | Our people | 40-41 | - | - | - | |
| G4-SO1 | Percentage of operations with implemented local community engagement, impact assessments, and development programmes | Our Community | 36-37 | - | - | - | |
| G4-OG10 | Number and description of significant disputes with local Communities and indigenous peoples | GRI Index | None | - | - | - | |
| G4-OG11 | Number of sites that have been decommissioned and sites that are in the process of being decommissioned | GRI Index | None | - | - | | |
| Aspect: Anti-corruption | | | | | | | |
| G4-DMA | Aspect specific | Governance | 49 | | - | - | |

| GRI G4 disclosures | | Section reference | | Omissions (if any) | External assurance / page number | UNGC- COP | ABRR |
|--------------------------------|---|--------------------------|--|-----------------------|---|--------------|------|
| General standard disclosure | | | | | | | |
| Indicator | Description | Section Name | Page number/ explanation | | | | |
| | disclosure on management approach | | | | | | |
| G4-SO3 | Total number and percentage of operations assessed for risks related to corruption and the significant risks identified | Governance; GRI Index | 50-51; At MRPL a total number of areas assessed is 60 and in this 40% are assessed with respect of corruption | - | - | - | |
| G4-SO4 | Communication and training on anti-corruption policies and procedures | Governance | 49-50 | - | - | - | |
| G4-SO5 | Confirmed incidents of corruption and actions taken | GRI Index | At MRPL, a total of ten cases were investigated for corrupt practices and one case was confirmed where disciplinary actions was taken against the employee | - | - | - | |
| Aspect: Compliance | | | | | | | |
| G4-SO8 | Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations | GRI Index | Nil | - | - | - | |
| Aspect: Emergency preparedness | | | | | | | |
| G4-DMA | Aspect specific disclosure on management approach | Safety & security | 20 | - | - | - | |
| Aspect: Involuntary settlement | | | | | | | |
| G4-DMA | Aspect specific disclosure on management approach | GRI Index | No instances of involuntary resettlement were recorded. | - | - | - | |
| G4-OG12 | Operations where involuntary resettlement took place, the number of households resettled in each and how their livelihoods were affected in the process | GRI Index | N.A. | - | - | - | |

| GRI G4 disclosures | | Section reference | | Omissions (if any) | External assurance / page number | UNGC- COP | ABRR |
|--|---|-------------------|---|--|---|--------------|------|
| General standard disclosure | | | | | | | |
| Indicator | Description | Section Name | Page number/ explanation | | | | |
| Aspect: Asset Integrity and Process Safety | | | | | | | |
| G4-DMA | Aspect specific disclosure on management approach | Safety & security | 20 | - | - | - | |
| G4-OG13 | Number of process safety events, by business activity | Safety & security | 21-23 | safety events are monitored and corrective actions taken across the group, currently they are not being categorized as Tier-1, Tier – 2. | | | |
| Aspect: Fossil fuel substitutes | | | | | | | |
| G4-OG14 | Volume of biofuels produced and purchased meeting sustainability criteria | GRI Index | As per the Govt.’s directive MRPL outlets sell 10% ethanol in MS (Petrol) | - | - | - | |