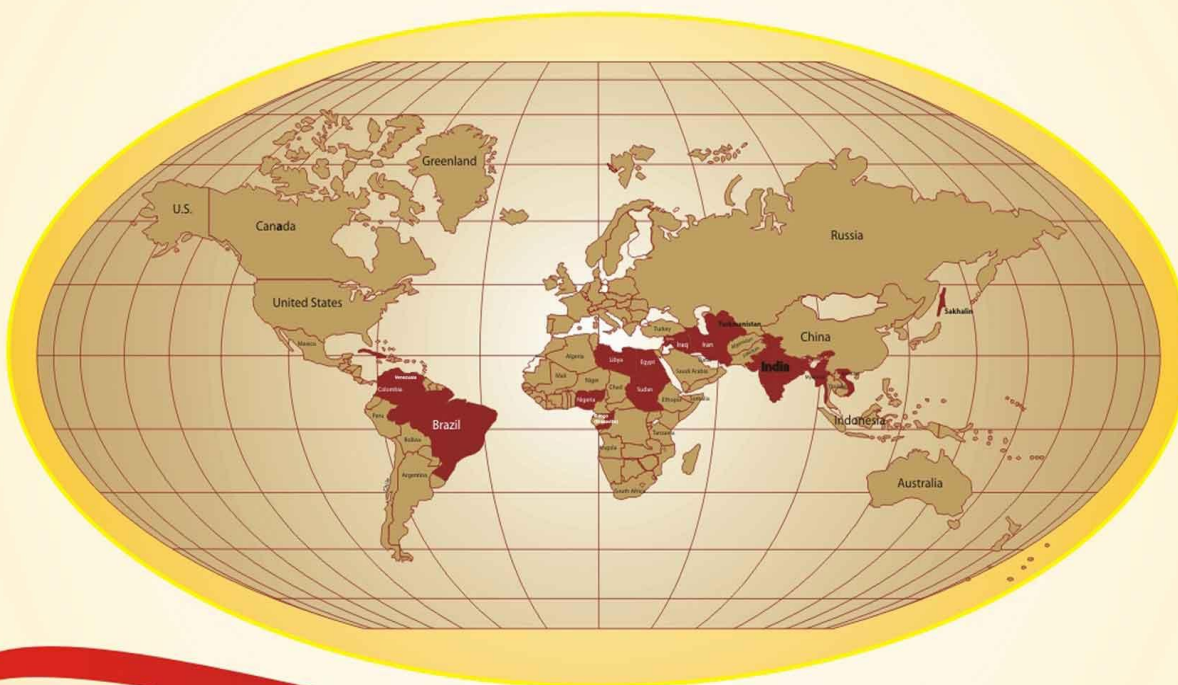


OUR COMPANY



Oil and Natural Gas Corporation Ltd.

Global Footprints



Projects

Sudan 🌊🌊🌊
Vietnam 🌊🌊
Colombia 🌊🌊🌊
Libya 🌊🌊
Myanmar 🌊🌊🌊
Nigeria 🌊
Cuba 🌊
Syria 🌊
Congo Brazzaville 🌊

• 18 countries • 38 projects

Qatar 🌊
Egypt 🌊
Nigeria STP JDZ 🌊
Brazil 🌊🌊
Russia 🌊
Iran 🌊
Iraq 🌊
Turkmenistan 🌊
Venezuela 🌊

Growth of ONGC Videsh Ltd. (Operations & Projects)

Till 2001 1 Project - 1 Country	2004-05 14 Projects - 13 Countries
2001-02 4 Projects - 4 Countries	2005-06 21 Projects - 12 Countries
2002-03 8 Projects - 7 Countries	2006-07 26 Projects - 15 Countries
2003-04 8 Projects - 7 Countries	2007-08 30 projects - 16 countries
	2008-09 38 projects - 18 countries

🌊 Number of projects



**First and only
Indian Company to figure in Fortune Magazine's
'World Most Admired Companies 2007' list**

- Discovered 365 oil and gas 'finds' in the country
- Established more than 6.4 billion tonnes of hydrocarbon reserves
- Plans to accrete cumulative 12 billion tonnes of reserves by 2020
- Won over 50 percent of the NELP bids over six rounds
- Produces more than one million barrels of oil equivalent a day
- Spread over 18 countries across the globe through ONGC Videsh Ltd
- Pioneered new energy sources like Coal Bed Methane, Underground Coal Gasification
- Renewables – harnessing wind energy and other non-conventional sources, 50 MW Wind Power Project in Gujarat

GLOBAL COMPACT ANNUAL COMMUNICATION ON PROGRESS 2008

ONGC CMD's statement on our commitment towards UNGC principles:

Being the premier Public Sector undertaking in India, ONGC abides by all the statutory requirements, land of the law and the social obligations around which the principles of Global Compact are woven. We at ONGC are committed to aligning our operations and strategies with ten universally accepted principles in the areas of human rights, labour, the environment and anti corruption. We firmly believe that business, trade and investment are essential pillars for prosperity and peace. Responsible business practices can in many ways build trust and social capital, contributing to broad-based development and sustainable economy.

Participant : Oil & Natural Gas Corporation Limited (ONGC), India

Sector : Oil & Gas

Countr(ies) of impact : India and the countries where it is operating through its foreign arm – ONGC Videsh.

Date : June 16 , 2008

Contact person : Dr. A. K. Balyan, Director (HR), e-mail: dir_hr@ongc.co.in / Ms. Alka Mittal, Dy.Gen.Mgr(HR), email: mittalka9@gmail.com / Shri Saket Gupta, EA to Director (HR), email: gupta_saket@ongc.co.in

Brief description of nature of business

Oil and Natural Gas Corporation Limited is in energy business with presence pan-world. It is mainly an Oil and Gas exploration and production company.

ONGC is undertaking value-multiplier integration projects like-Refinery, LNG, Petrochemicals, Power and SEZ etc., to establish its presence in the entire hydrocarbon value-chain

Statement of support

ONGC's vision and mission reflect ONGC's commitment to Millennium Development Goals by focusing on health, safety and environment and to enrich the quality of community life. Further, ONGC is aligned to imbibe high standards of business ethics and organisational values, foster a culture of trust, openness and mutual concern to make working a stimulating and challenging experience for ONGCians and strive for value addition for all its stakeholders. ONGC believes in action and strives to deliver the desired results under the following principles of Global Compact.

PRINCIPLE 1 BUSINESS SHOULD SUPPORT AND RESPECT THE PROTECTION OF INTERNATIONALLY PROCLAIMED HUMAN RIGHTS

ONGC has committed itself to support and respect the protection of Human Rights. For this there are certain policies in place like protection of the employees from the lower castes and aboriginal tribes; providing preferential employment to differently abled persons. It has full fledged programme for HIV/AIDS awareness for its internal stakeholders in collaboration with National AIDS Control Organisation, India (NACO). ONGC ensures its support to underprivileged persons, HIV/AIDS infected persons and differently abled persons by way of these policies and programmes.

Action taken:

1. During the last year, ONGC has organised a sensitisation programme at Dehradun, its headquarters, for HIV/AIDS. Around 3000 persons from ONGC Office, Dehradun and Women's Institute were sensitised through this programme.
2. Supported other seminars and conferences on the subject.

PRINCIPLE 2 BUSINESS SHOULD ENSURE THAT THEY ARE NOT COMPLICIT IN HUMAN RIGHTS ABUSES

ONGC's business is not at all complicit in human rights abuses as it deals strictly with any human Right abuse, ensures development and protection of women employees and other stakeholders.

Action Taken: A policy to deal with Sexual Harassment at workplace.

1. ONGC has gone a step ahead and opened Women Development Forums in all regions/projects/work centers of ONGC based on the recommendations of National Commission for Women. The functions of the WDF at every work center are:
 - Welfare of Women employees
 - Improvement in working conditions
 - Training and Development of Women employees
 - Redressal of Individual/general grievance of women employees including harassment etc.

Complaint Committees are established in ONGC to deal with cases of sexual harassment with a representative of a local NGO on the committee.
2. NCW Guidelines on "Code of Ethics at the Workplace" have been widely circulated and regularly reiterated throughout the organisation. The key executives personally take care of strict compliance of these stipulations.

PRINCIPLE 3 BUSINESS SHOULD UPHOLD THE FREEDOM OF ASSOCIATION AND THE EFFECTIVE RECOGNITION OF THE RIGHT TO COLLECTIVE BARGAINING

ONGC upholds the freedom of Association and effectively recognizes the right in collective bargaining by generously recognising and promoting the workers' unions, officers' associations, Mahila samities, ONGC uncha (Adventure Club), officers club etc.

Action Taken:

1. ONGC pursues the policy and practice of bipartite negotiations for maintaining harmonious Industrial Relations in the organisation, the corner stones of which are mutual trust, appreciation of mutual views and feelings. As a result, negotiations, consultations, periodical sharing of information with the recognised unions/associations on various issues, particularly prior to bringing about any change in employee related policies and organisational structure, are being ensured.
2. Being organised into the business models of Assets and Basins, at ONGC, Collective bargaining is done at three levels:
 - i. At Asset/Basin level-issues which are within the power of Asset/Basin Manager and concerning the asset only like transfers, overtime, wage fixation, leave etc are discussed between the recognised union representative and Management representative.
 - ii. At Regional level- issues like promotion, seniority, recruitment of staff level, which are maintained at Regional Office are discussed and settled.
 - iii. At Corporate level- issues which effects all the employees of ONGC like pay revision, change in recruitment and promotion policy, laying of new policy for employee welfare etc are discussed and settled.

ONGC has not faced any major dispute in the recent past(2006-07). However, the normal industrial disputes which rise up from time to time are dealt with, in accordance with the above mentioned policy and as required in the provisions of the Industrial Disputes Act, India. There has been no loss of workdays during 2006-07 on account of any labour dispute and complete freedom of Association and Collective bargaining is maintained.

PRINCIPLE 4 BUSINESS SHOULD SUPPORT THE ELIMINATION OF ALL FORMS OF FORCED AND COMPULSORY LABOUR,
PRINCIPLE 5 and BUSINESS SHOULD SUPPORT THE EFFECTIVE ABOLITION OF CHILD LABOUR
PRINCIPLE 6 BUSINESS SHOULD SUPPORT THE ELIMINATION OF DISCRIMINATION IN RESPECT OF EMPLOYMENT AND OCCUPATION

ONGC is in a knowledge based business, hence it does not use any form of forced and compulsory labour/child labour internally and at the same time ensures the elimination of all forms of forced and compulsory labour/child labour by mandating it in clear terms in all its associations with various stakeholders.

ONGC is an equal opportunity employer and all its policies on employment and occupation support the elimination of discrimination.

1. Supports organizations who are engaged in spreading the awareness on elimination of all forms of forced / compulsory and child labour.
2. In the Corporate Citizenship Policy of ONGC, Education is a focus area and we have been supporting voluntary organisations engaged in Child Education with special emphasis on securing employment only after formal education and requisite age as per the law of the land.
3. In this connection, support was extended to an NGO-Mobile Mobile Creche who are involved in providing Mobile Creche services at construction site and other migrant labour sites.
4. ONGC makes efforts to employ people at staff level from local community and no discrimination in respect of employment and occupation is allowed.

PRINCIPLE 7 & 8 BUSINESS SHOULD SUPPORT A PRECAUTIONARY APPROACH TO ENVIRONMENTAL CHALLENGES & BUSINESS SHOULD UNDERTAKE INITIATIVES TO PROMOTE GREATER ENVIRONMENTAL RESPONSIBILITY

Company's Environment Management System is based on the precautionary principle. Various significant 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. Various notable efforts done in this direction are as follows:

Action :

1. ONGC recognizes and shares the concerns of government and the public about climate change. We understand that fossil fuels, which we also produce, has contributed to an increase in Green House Gases (GHGs). Hence, ONGC has embarked upon ambitious initiatives to manage and reduce GHG emissions, which may be broadly classified into the following categories:

- Reporting of GHG emissions
- Energy efficiency / conservation plans
- Gas Flaring reduction
- Renewable energy

2. For these ONGC has specially formed the following groups for the dedicated efforts, close monitoring and deliverance of results

- i. Carbon Management Group
- ii. Energy Centre – For research in non-conventional energy sources
- iii. Health Safety and Environment Group

3. GHG emissions reporting

ONGC is committed to consistent reporting of GHG emissions. We have calculated direct GHG emissions related to our operations starting from the year 2003 till date.

4. We are following the *Compendium of Greenhouse Gas Emissions Estimations Methodologies for Oil and Gas Industry* developed by American Petroleum Institute (API).

In our oil and gas operations, business growth increases our GHG emission and we are continuing to work for emissions reduction in total to offset the impact of these emissions.

5. Carbon dioxide makes up most of our GHG emissions (to the extent of 55-57%) and it comes predominantly from our processing operations, including exhaust from combustion units and flares. Our GHG reporting includes direct emissions associated with the drilling, production and processing of oil & gas and indirect emission from purchased grid electricity for use in our operations.

6. Energy Efficiency

ONGC's E&P operations in India consumed approximately 1425 trillion British thermal units (BTU) of gas and electricity in 2005. In the financial year 2004-05 we have conducted 229 energy audits. As we consider new capital projects, we use proven tools and processes to improve the efficiency and emissions performance of our new investments. New capital projects and technical modifications in the design have resulted in saving of 152 Crores in the financial year 2006-07.

7. ONGC has established management systems that incorporate efficiency improvements and emissions reductions into the routine operation of our business.

8. This improved efficiency of engines, which are used for our operations was accomplished through audit of fuel (liquid/gas) for fixing the fuel consumption norms for various facility of ONGC. The study was conducted for 110 diesel engines and 17 gas turbines in all 127 equipments spread over 25 installations across the organization. Actual fuel consumption of each engine / turbine on different loads was recorded and fuel consumption curve was plotted. This fuel consumption curve is compared with design curve of the original equipment manufacturer; percentage deviation of each engine turbine is established. A baseline (fuel norm) was established for each facility/installation/rig for different depth of wells. Based on the study, saving opportunities have been established under different categories viz. operation, maintenance and others. The equipment wise norms are strictly complied by all the user groups in ONGC.

9. As a policy matter ONGC has decided that in future all its buildings for offices will be 'Green Buildings'. It has already started work on 4 of these buildings in Mumbai, Delhi, Kolkata and Dehradun. The Delhi building it proposed to be of **star** rating.

10. Flaring Reduction

The availability of a flare or a vent is absolutely necessary in oil and gas processing /production operations from safety point of view as well from environment point of view as the emissions emitting out shall meet the prescribed ground level ambient air quality standards it also ensures heat, soot and illumination control apart from emergency and shut down situations.

Global Gas Flaring Reduction public-private partnership (GGFR), a World Bank-led initiative, estimates that around 150 billion cubic meters of natural gas is flared or vented globally every year, equalling total world gas consumption for 20 days. The GGFR partnership facilitates and supports national efforts to use currently flared gas by promoting effective regulatory frameworks and tackling the constraints on gas utilization. The reduction of gas flaring will depend critically on three broad factors—international markets, domestic markets, and reinjection, GGFR is concentrating on these major issues.

ONGC understands and share community concerns about wasting energy resources and the potential impact of emissions from flaring.

11. Similarly for utilizing the natural resource in the right way, given the constraints, ONGC has planned to monetize idle gas and has conceptualised Gas to wire project with the establishment of a mega 750 MW Power project in the State of Tripura, India for utilizing the gas discovered by it, as this remote North Eastern part of the country is under industrialized and there was no demand of gas from the industry. This will also prevent flaring of Gas.

12. We continue to seek opportunities to reduce the amount of gas flared and vented. Flare gas recovery unit was set up in URAN – a highly integrated gas processing complex in India. We are working hard to achieve zero flaring.

Renewable energy

In order to meet the world's growing need for energy, we believe all potential sources must be considered. New technologies and renewable energy sources, including conservation related technology.

ONGC has made headway in using solar power at various platforms for powering all its ITC infrastructure. During the year 2003-04 we have generated 112 MWh of power using solar photovoltaic, avoiding use of fossil fuels. ONGC has also taken initiatives for setting up two wind power projects of 50 MW each in Gujarat with help from Suzlon Energy Ltd. and Karnataka. Power in Gujarat will be used in house and in Karnataka it will be sold. On 31st March, 2008, first unit of clean and green energy was generated by ONGC by fully commissioning three wind turbines of 1.5 MW capacity each. The power generated by this wind farm in 1st phase will have captive usage at installations of Ankleshwar and Ahmedabad.

Apart from above, ONGC's other initiatives in this direction are:

- Water Management
- Biodiversity
- CDM Project Activity
- Methane to Market
- Carbon Dioxide Capture and Sequestration
- Carbon Disclosure Project
- GHG Accounting
- QHSE Accreditation
- Corporate Policy on Climate Change and Sustainability
- Underground Coal Gasification (UCG)
- Coal Bed Methane (CBM)

Water Management

ONGC operates in one of the remotest areas and recognises that water management is an important issue, especially where access to clean water for communities is a challenge. This is of importance in most of the areas in which we operate. We therefore monitor our water consumption throughout our activities in that area. Environment Impact Assessment (EIA) is carried out before any of the projects are undertaken and prior environmental clearances are obtained for all development projects from Ministry of Environment and Forests. Environmental statements are submitted to respective State Pollution Control Board (SPCB) by each Assets/Projects of ONGC. The consent to establish and consent to operate are obtained from respective SPCBs under Water/Air Act. The renewal of these consents and authorizations are timely sought by the Assets and Projects. Many of our installations/establishments are availing 25% rebate in the water cess as an incentive for our compliance of the stipulations.

Project Saraswati

ONGC being a premier oil exploration company of the country has an enormous knowledge base about the geology of almost all basins of the country. Realizing the enormous potential of this knowledge in solving major issues of fresh water scarcity in arid regions, our top management conceived a project named 'Project Saraswati' to address the problem.

The aim of the ONGC Project Saraswati is to find deeper, unexploited groundwater resources in drought prone and water scare areas of India. The idea, which will have unscalable socio-economic ramifications on successful implementation, came from the great Libyan experience where a similar project (called Great Manmade River) was undertaken few years back at an investment of \$40 billion to transform the desert into a green habitat by another oil company. The target of the ONGC Saraswati Project is to study the technical feasibility of exploration and utilization of deeper ground water aquifers in drought-prone and water scare areas, with the hope of replicating Libya's Great Manmade River (GMR) Project.

The project pilot is in the North West Rajasthan area, for exploration of deep aquifers assumed to be left by the mythical river "Saraswati", which used to flow in the same area, some 5000 years back as per the oldest Hindu scriptures.

Biodiversity

ONGC has developed a two-pronged response to the major issue of biodiversity:

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

Every new project that we undertake starts with conducting an environmental impact assessment (EIA). During EIA we prepare baseline environmental status which includes air, water, land and biological environment. The baseline status of biological environment is established by studying distribution pattern, community structure, population dynamics and composition of species of flora & fauna. We gather data of available species from already available information from secondary sources and through critical field survey. We assess biological diversity through species diversity indices which are defined by the ratio between the number of species and importance values of individuals. This information plays a major role when we prepare our environmental management plan.

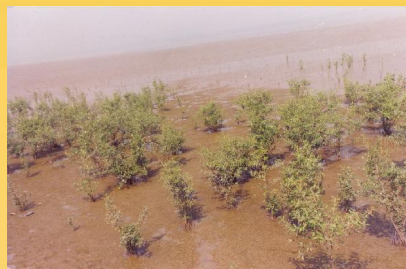
Expanding green cover

Plantation of varieties of species of plants provides cleaner air apart from 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. Every year ONGC sets a target of planting trees and monitors the progress. In the year 2006, ONGC has planted 33030 trees in and around our working area. Apart from yearly target of tree plantation around our working area, we take up specific big projects. A recent example is the 'Dronagiri' project which was aimed at greening of the barren Dronagiri hills and arid beach near Uran Plant of ONGC. It posed a challenge to the organisation because of a harsh terrain devoid of vegetation and showed resilience when we commenced our operations. While improving capacities of our plant we have demonstrated our commitment to the environment in intent and execution. Seeds of fast growing species were served along with fertilizer across the Dronagiri Mountains from the helicopters in collaboration with Department of Forests, Government of India. Over 2.5 lac fully grown trees and 20 varieties of plant species make Dronagiri hills completely green. More than a quarter million trees support the industrial ecosystem.

The once barren Dronagiri today is a nature trail to an environmental friendly mindset. Years of concerted efforts in afforestation have resulted in a verdant green cover that adorns the landscapes surrounding the plant and nearby villages. A steadily growing green belt along the beach has erected a protection against erosion and is a virtual oasis for the stunning backdrop.



Stage I



Stage II



Stage III



Stage IV

Mangrove Conservation

Realising the importance to protect and enhance biodiversity alongwith coastal conservation, ONGC's top management initiated a project on conservation of Mangrove eco-system in the country as part of its corporate social responsibility. Mangroves are unique tropical plants which form an Eco System that is a buffer between sea and land and protects the coastal area not only from degradation but also serve as habitat for numerous species like crustaceans, mammals, fishes, reptiles etc. Mangroves also serve as a protecting wall against Tsunami which recently brought disaster to coastal areas of India and islands around.

Presently, massive Mangrove plantation is being undertaken in collabotation with Bombay Natural History Society (BNHS) near our Gandhar oil Field along the course of Dadher river at a cost of about US\$ 5 million. The project not only concieves of plantation of Mangroves but also integrated in this peoject is an Educational Compaigh whcih spreads the importance of conservation of Mangroves to the local community, who are part of the Eco system, starting at the school level. A number of college students are involved in the project and helping us in our endeavour. This biodiversity management approach has become an integral part of the Environmental Management System and an indicator has been designed to track the implementation of biodiversity action plans.

CDM Project Activity

As a concerned corporate citizen, ONGC has made CDM projects a part of its MoU that it entres with its administrative Ministry-Ministry of Petroleum and Natural Gas, Government of India. ONGC has already registered 2 CDM projects in the year 2007-08 wth UNFCCC, thereby achieving 100% target as per the performance parameter of the MoU. ONGC thus overall, has four registered CDM projects with an overall accruable annual CERs of 119655 for ten years. ONGC is the only central Public Sector Undertakings in India to have achieved this feat.

Methane to Market(M2M)

ONGC has signed MoU with the United States Environment Protection Agency (US EPA) under the Natural Gas Star International Programme for identifying and capturing fugitive methane emission from various operations in ONGC.

Carbon Dioxide Capture and Sequestration(CCS)

ONGC has entered into a MoU with StatoilHydro, Norway to jointly develop CCS projects and projects related to Carbon Management on February 6, 2008. As per the MoU, StatoilHydro will

help ONGC in developing CCS projects through technology assistance.

Carbon Disclosure Project(CDP)

ONGC has also joined the global initiative on Carbon Disclosure Project(CDP). The CDP, launched at London in December, 2000 represents an efficient process whereby many institutional investors collectively sign a single global request for disclosure of information on GHG emission. The CII-ITC Centre of excellence for Sustainable development has spearheaded the movement in India and the CDP in India has been launched in May 2007.

GHG Accounting

ONGC has pioneered in the field of GHG accounting, the first step towards carbon foot printing and full fledged carbon disclosure system, which is being practiced worldwide by companies committed to sustainable development. GHG accounting will also help ONGC in benchmarking its operations leading to energy efficiency and help develop new CDM projects. To start with GHG accounting of nine sample operational activities of ONGC will be performed during 2008-09.

QHSE Accreditation

ONGC has accorded great importance to environment management to resolve its environmental issues emerging from its various activities. This is evident from the fact that organization formulated its environmental policy in 1983. Guided by the environmental policy ONGC has in place a range of best available pollution abatement equipment and monitoring system. However, it was realized that pollution problems of the organization were dealt in isolated manner and environmental management system (EMS) was a reactive system.

Realizing the importance of proactive EMS we took a small stride in the year 1999-2000 to reorient the existing EMS of Uran plant to the requirements of international benchmark system i.e. ISO-14001. The EMS based on Plan-Do-Check-Act principle of ISO-14000 was developed with the help of a consultant.

Subsequently the organization took up the challenge of developing internal resources to develop EMS based on ISO-14001. Various environmental lead auditor courses were organized and soon a team of about 300 lead auditors were groomed. In 2002 three more installations established EMS based on ISO-14000. The efforts of the organization have brought in motivation among the employees and implementation of EMS ISO-14001 at different installation propagated as a chain reaction. In 2002-03, 33 numbers of installations and 69 installations in the year 2003-04 were certified.

In 2003, ONGC's senior management launched a campaign regarding QHSE accreditation. Today 100% of our installations are QHSE certified. Integrated QHSE management system provides a systematic, structured and documented approach to address quality, health, safety and environmental issues on precautionary principles. Integrated system apart from creating a total management solution help the organization to work as a complete unit with a common objective, while promoting development in a balanced and holistic way.

Carrying forward this endeavor towards aligning our CSR initiatives to business plans, a concise policy focused on **Climate Change and Sustainability** has recently been launched by CMD to integrate the economic, environmental and social dimensions in our business decisions at different levels.

1. We are committed to enhance contribution to sustainable development through a greater integration of economic, environment and social dimensions.
2. We shall endeavour for GHG emission mitigation from our operations and participate in Kyoto and other protocol where India is a signatory. We shall strive to achieve quantifiable milestones in these aspects.

3. We shall partner with sustainability advocacy organizations where our strengths are complementary and also actively propagate the idea of GHG mitigation of national and international operations where we are business partners.
4. We shall develop and invest in advanced low carbon technologies to meet growing demand for affordable energy products while improving security of supply and reducing environmental impacts.
5. Our aim shall be to achieve competitive business advantage from GHG abatement programmes, particularly through process efficiency, besides improving environmental performance.
6. We shall endeavour to develop new business opportunities through investment in climate change.
7. We shall try to adopt triple bottomline accounting and reporting to raise awareness of the true cost and benefits.
8. Above all, we shall make sustainability a foundation of our business strategy





Environment

- ONGC has pioneered Clean Development Mechanism (CDM) initiatives in line with United Nations Framework Convention on Climate Change
- 4 CDM Projects registered with UNFCCC - only central PSU
- Plantation of 50 hectares of Mangroves at river Dhadar, ONGC Gandhar field, plantation of bamboo in upper reaches of Himalayas
- Awareness and Educational Campaign on Conservation
- Partnership with TERI for development of microbes for enhanced oil recovery
- Launched two recycling station for proper recycling of waste involving the waste picking community

PRINCIPLE 9

BUSINESS SHOULD ENCOURAGE THE DEVELOPMENT AND DIFFUSION OF ENVIRONMENTALLY FRIENDLY TECHNOLOGIES

Knowing fully the importance of development and diffusion of Environmentally friendly technologies, ONGC has integrated the development of such technologies in its strategic planning. Some of the initiatives of ONGC under this principle are :

1. Energy Centre : ONGC has invested to establish an Energy Centre with a corpus of Rs. 500 crore for an exclusive R&D on the Energy generation using Environment friendly technologies under which following is proposed
 - Geobioreactors : Taking a cue from the success of Biogenic Methanogenesis of the coal seams and residual oil reservoirs in the USA and other places, ONGC has already signed MOU with reputed institutes like BHU and TERI unminable coal seams and AR&MRRC for gas generation from depleted oil reservoir. All four institutes have submitted the interim reports.

Thermochemical Generation of Hydrogen

Background

Hydrogen will be an important part of future energy systems. Hydrogen will squarely address the issues of long-term energy availability; GHG and global warming.

ONGC has opted for R&D in hydrogen generation on a commercial scale. Hydrogen economy will provide a clean, green and efficient alternative to petroleum based economy. Hydrogen is an energy carrier and requires other primary energy sources. Whether utilized in a fuel cell or in ICE or blended with CNG, Hydrogen is an exceptionally clean energy carrier. Development is underway on processes to produce hydrogen from methane or water through reformation or electrolysis or thermo-chemical reactor. To break the circle of use of fossile fuels again to prduce hydrogen. The electricity and/or heat required must be obtained from renewable sources like solar, wind etc.

OEC(ONGC Energy Center) has entered into an MOU with BARC to develop processes for generation of hydrogen from water. A great deal of R&D requires to be done to develop both the processes. Each process involves several reaction and product separation steps which need to be researched.

OEC has undertaken collaborative research projects with IIT, Delhi to study the different reactions and separation methods in the SI process. To study the different reactions in the Cu-Cl process, projects have been undertaken with UICT, Mumbai and CECRI, Karaikudi.

Other initiatives

Besides the above, OEC is scanning other projects not only on clean energy sources but also projects to conserve energy and promote energy efficiency. Examples are Solid state (LED) lighting, biological production of value added products from low rank coals, alcohols from agriwaste.

OTBL – ONGC-TERI Biotech Ltd. A joint venture has been formed to exclusively explore the option of Bio-remediation for Enhanced Oil Recovery, Oil spills, treatment of waste drilling fluids etc.

PRINCIPLE 10

BUSINESS SHOULD WORK AGAINST CORRUPTION IN ALL ITS FORMS, INCLUDING EXTORTION AND BRIBERY

ONGC firmly believe that busienss should work against corruption and for this has a full fledged vigilance wing headed by Chief Vigilance Officer, generally a working senior Civil/Police Servant. It monitors all the projects and activities of ONGC w.r.t. all the stakeholders of the project/activity.

It regularly conduct a Vigilance Awareness Week and comes out with a monthly publication to communicate with the employees. Following are the initiative :

- Integrity pact
- Installations of document verification system
- Initiated a study on corruption
- ONGC has implemented an ERP, SAP, R3 platform for busienss processes using this system e-procurement.
- Vender meet.

ONGC has introduced the Integrity Pact – a tool designed by the Transparency International – in its contracts, from 1st July 2005. we are the first public undertaking to take this initiative towards ensuring transparency and ethics in our business decisions.

The Primary Objectives of this initiative are:-

- (a) Enable Companies to abstain from bribing by providing assurances to them that:
 - i. Their competitors will also refrain from bribing,
 - ii. Government procurement, privatization and licensing agencies will undertake to prevent corruption, including extortion, by their officials and to follow transparent procedures;
- (b) Enable Governments to reduce the high cost and the distortion impact of corruption on public procurement, privatization or licensing.
- (c) Establish mutual contractual rights and obligations.

Recent introduction of e-procurement and reverse auction has resulted in absolute fair dealing in ONGC's high value tenders. Payments to vendors are now done through electronics gateways, reducing avoidable paperwork and faster clearances. Meetings are held with vendors and investors every year as confidence building measure and to understand their perspective in relation to ONGC's procedures and practices. Most of the issues are addressed during the meet itself and others are included in the Action Taken Report.

