

SUSTAINABILITY REPORT 2011-12

A GRI-G3.1+OGSS Compliant Application Level A+ Report



GAIL (India) Limited
A MAHARATNA COMPANY



GAIL (India) Limited
A MAHARATNA COMPANY

Contents



About the Report	2
Shaping the future	5
GAIL's Sustainability Policy	6
Message from C&MD	7
Ingraining sustainability in GAIL	9
Business profile	15
Awards and Recognition	20
Corporate Governance	21
Engaging with our stakeholders	28
Determining material issues	34
Strategy to shape the future	39
Investors: Creating wealth	41
Communities: Fostering social capital	48
Customers: Addressing customer needs	64
Suppliers: Building partnerships	70
Employees: Agents of change	73
Our Sustainability Performance	82
Communication on NVG- SEE	86
Assurance statement	89
Glossary	91
GRI Content Index and UNGC / IPIECA Reference	95
Way forward	115



About the Report

“Shaping the future” gives an account of GAIL’s sustainability efforts and performance for the financial year 2011-12. This is a communication on progress that we have achieved on aspects of sustainability significant to our key stakeholders and also essential for fostering inclusive growth.

This is our second sustainability report covering¹

- ✕ Gas Processing Units (GPUs) at Gandhar, Pata, Vaghodia, Vijaipur and Usar;
- ✕ Petrochemical unit at Pata;
- ✕ Natural Gas compressor stations at Hazira, Vijaipur, Vaghodia, Jhabua, Khera and Dibiyapur;
- ✕ LPG pumping/ receiving stations at Loni, Mansarampura, Nasirabad, Abu Road, Samakhiali, Jamnagar, Vizag and Cherlapally;
- ✕ Regional pipeline offices at NCR, Baroda, Mumbai and Rajahmundry;
- ✕ GAIL Training Institute (GTI), Noida;
- ✕ Corporate Office; New Delhi and
- ✕ Info Hub, Noida.

We have developed this report in line with the requirements of GRI G3.1 Guidelines on Sustainability Reporting and the Oil & Gas Sector Supplement. This report meets the requirements of application level ‘A+’ and addresses 64 core² and 23 additional³ indicators of these guidelines. For more details on the performance indicators and other disclosures, please refer to the GRI content index on page 95 of this Report. While the data presented is essentially for the financial year 2011-12, to give a balanced perspective of our performance, we have also discussed on some of our critical achievements and developments on Sustainability that have occurred in the recent past. This report also addresses the

nine principles of National Voluntary Guidelines on Social, Environmental and Economic responsibilities of business, published by the Ministry of Corporate Affairs, Government of India. This helps us to address sustainability issues that are material to the Indian context. Further, to increase the comprehensiveness of our sustainability disclosures, we have also aligned this report to meet the requirements of:

- ✕ Oil and Gas industry guidance on voluntary sustainability reporting (2010) developed by IPIECA, the global oil and gas industry association for environmental and social issues and the American Petroleum Institute (API).
- ✕ Principles and disclosure requirements under United Nations Global Compact (UNGC).



Horton Sphere LPG Storage Tank at GAIL Installation

¹ We have included the following sites under the report scope: Agartala, Puducherry, Corporate Office, GAIL Training Institute and Noida Info Hub. We have excluded Agra site from the report scope as it has been transferred to GAIL GAS which is not within the boundary of this report.

² Out of 64 core indicators in the GRI G3.1 Guidelines combined with OGSS.

³ Out of 25 additional indicators in the GRI G3.1 Guidelines combined with OGSS.



LPG Recovery Plant, Auraiya

We remain committed to further enhance and transparently disclose our performance on the three bottom lines of Sustainability to all our stakeholders. Our Management has constituted a number of committees and sub-committees that assume control of various sustainability dimensions. We have also developed Sustainability Aspirations 2020 to achieve our milestones in a focused manner. We continue to improve our partnerships with the Government, industry associations, thought leaders and experts to develop solutions that increase our operational efficiencies and also address social challenges.

The data and information presented in this Report is based on our internal management systems and processes. We have also used assumptions, standard equations and calculation methodologies for estimation and quantification of data, wherever required. We continue to improve our data management systems and as a result have made

certain amendments to our approach followed in the last year resulting in variation of some data indicators. The same has been explained wherever relevant. For all monetary values presented across the Report, we have used an exchange rate of 1USD = 51.63 INR. Certain information included in this Report refers to our future plans and intentions, in order to present a holistic account of our sustainability activities. This information relates to our strategy, operations, performance goals and targets, business plans, research & development and investments in the countries, sectors or markets where we operate. By their sub-nature, such information involves a certain degree of uncertainty as the end result is dependent on future market conditions and geo-political developments, most of which are beyond our control or cannot be predicted by us. While we will strive to achieve progress on these, we cannot ensure a desirable outcome in all cases.



Shaping the Future

Today, there is a tremendous pressure and need to achieve a balance between conservation and preservation of environment, achieving economic prosperity and ensuring societal growth. Being sustainable is no longer a wish list item and has become the bare essential of being in business, doing business and growing it.

At GAIL, we endeavour to ensure availability of natural gas and associated value added products across India, thereby fuelling industrial and national growth. We provide customers with a cleaner form of energy for their own sustainable good as well as to the benefit of this planet. Our focus has been on creating a sustainable organization by - developing profitable marketing and financial business models; embedding aspects of sustainability in to the decision making process; establishing measurable goals; hiring and retaining the right talent; and monitoring, evaluating and reporting on our performance on a regular basis.

Through small steps every day and by working together with our employees, suppliers, customers, governments and communities, we plan to create a better tomorrow and help “shape the future” of millions of people towards achieving shared objectives. In line with this thought, we present a transparent and fair communication of our efforts on fostering sustainable development and how these will help in shaping the future of our stakeholders. This stakeholder-centric report reflects our strategies and actions towards analysing impacts and working towards creating a “positive stakeholder value”.





GAIL (India) Ltd.

Sustainable Development Policy

At GAIL, we strive to achieve leadership in natural gas and beyond by integrating our commitment to economic, environmental and social concerns into the core of our business process to create value beyond business in all our endeavours. We aim to continue growing in a sustainable manner to the benefit of our communities, environment and stakeholder at large. We further aim to achieve this growth in the three pillars of sustainability by:

Environment

- ✓ Optimizing use of natural resources through material substitution, recycling and reuse;
- ✓ Adopting eco-friendly and cleaner technology for our business operations;
- ✓ Focusing on improving energy efficiency, water conservation, biodiversity conservation and waste management across all our operations;
- ✓ Actively engage in mitigation of GHG emissions;
- ✓ Caring for the environment through actions in line with national commitments;
- ✓ Preference to use eco-friendly products and services;

Social

- Addressing the concern of communities;
- Generating awareness on sustainability issues amongst all stakeholders;
- Encourage employees to implement and promote sustainability initiatives;
- Acquiring, developing and nurturing talent;
- Minimizing safety and health impacts of our products and services;

Economic

- Ensuring high quality products and services and adopting practices related to customer satisfaction;
- Enhancing energy security by promoting cleaner and efficient energy sources including alternate energy;
- Aligning our business relationships in fair, transparent and ethical manner;

We are committed to allocate adequate resources and set-up a Board committee & senior-level Steering committee for integrating sustainable development in our overall business strategy and report on our sustainability performance on an annual basis.



S Venkatraman
Director (Business Development)

11th May, 2012

A word from our Chairman & Managing Director

Dear Stakeholders,

It is my pleasure to present GAIL's Sustainability Report for 2011-12 titled "Shaping the Future". It has been GAIL's continuous endeavour to shape a sustainable future for all stakeholders by ensuring supply of clean and efficient energy across the length and breadth of India. This report describes our intent and initiatives to co-create such a future by working with employees, suppliers, customers, government and communities. We believe that acting in accordance with this philosophy and our core values is essential for superlative performance in the long term.

Ensuring availability, accessibility and affordability of energy for people and industry is crucial to underpin India's long term economic and social progress. Energy demand in India is rising and it is expected to be the 3rd largest energy consumer by 2025. GAIL is actively engaged in sourcing and delivering reliable and affordable natural gas and other clean energy sources to support this growth. GAIL is investing around \$8 billion over

the next few years to create new transmission and regasification infrastructure, tie-up new sources of gas, seed new markets, and support new or existing downstream consumers based on gas. These steps will enable us to support green industrialization and a cleaner climate.

We work with local communities to support their development and alleviate societal concerns while minimizing any potential negative impacts of our operations.

GAIL is taking several steps to ingrain sustainability in its business operations and Corporate Strategy 2020. Besides several initiatives in core business areas, we are broadening our horizons to venture into gas-based power, renewables, and unconventional energy sources like Shale Gas, CBM and Coal Gas. We laid emphasis on conservation of energy and promotion of renewable technologies and commissioned around 115 MW of wind energy projects. Some of our environmental initiatives included development of green belt of over one million trees around various site offices, implementation of flaring systems at important sites to prevent discharge of hydrocarbons into the atmosphere, and rain water harvesting to effectively recharge groundwater amongst others.

GAIL recently developed its Sustainable Development (SD) Policy which will guide our sustainability initiatives in the years to come. We have also put the necessary structures and processes in place to effectively present our sustainability commitments, exercise better control on the performance indicators and transparently report progress on these

commitments and indicators. This includes having designated Coordinators at site offices along with Aspect Owners and SD Core team at corporate/site level who have received specialized training on SD aspects.





W It is through the dedicated efforts of our people that we achieve and exceed our goals and I am proud of their commitment, creativity and enthusiasm. I thank our stakeholders who have always believed in the company and contributed to its success.



GAIL became a signatory to the United Nations Global Compact (UNGC) to further align its operations and strategies with the ten universally accepted principles of UNGC. We formulated the SD Aspirations 2020, which identifies specific targets for GHG reduction, energy conservation, and water conservation etc. Going forward, we plan to continue with our efforts to increase awareness levels and engagement with all stakeholders including employees, customers, suppliers and others.

GAIL has been actively contributing to inclusive growth in India through various Corporate Social Responsibility (CSR) initiatives. We work with local communities to support their development and alleviate societal concerns, while minimizing any potential negative impacts of our operations. GAIL also continues to implement its flagship programmes towards literacy enhancement, skill development, women empowerment and healthcare facilities etc. These programmes are designed to make a sustainable impact on the lives of children and youth belonging to disadvantaged sections. During 2011-12, we allocated over \$17 million for various CSR initiatives.

You would be happy to know that GAIL is the first company in India's Oil & Gas Sector to be included in the first environment friendly equity index launched by Bombay Stock Exchange called BSE-GREENEX. Further, in recognition of our robust governance processes, we were conferred with the 11th ICSI National Award for 'Excellence in Corporate Governance' in 2011.

It is through the dedicated efforts of our people that we achieve and exceed our goals and I am proud of their commitment, creativity and enthusiasm. I thank our stakeholders who have always believed in the company and contributed to its success. We remain committed to maintaining the trust of our stakeholders and look forward to your feedback to better our sustainability performance.

B. C. Tripathi

Chairman & Managing Director
GAIL (India) Limited

Ingraining Sustainability **in GAIL**

As we work on our aggressive growth strategy to become an INR 1,000 billion company by 2016-17 and further to an INR 1,300 billion company by 2020, with an estimated profit of INR 100 billion; there is a tremendous responsibility on GAIL to contribute to India's energy security and in turn lead her into a sustainable future. To realize this growth, we have identified critical growth areas and appropriately planned initiatives in the upstream, midstream and downstream segments of the hydrocarbon value chain. The contribution of our key stakeholders will play a pivotal role in GAIL realising its ambitions, and we have planned several partnership programs to ensure a symbiotic relation with them. Employees continue to be the driving force behind each and every success of GAIL. The shareholder's and investor's confidence on our capabilities to achieve our dreams ensures a seamless continuity of our operations and projects. The ever-increasing expectations of our customers drive us to innovate and create effective and efficient business models. The unwavering support extended by our suppliers ensures that we meet deadlines and achieve arduous milestones. And finally the endorsement provided by the local communities and the society helps us to create sustainable livelihoods for one and all. Our Directors under the able leadership of the Chairman & Managing Director are responsible for shaping our future in a sustainable manner and to the benefit of all.



Left to Right Shri (s) S. Venkatraman, R.D. Goyal, B.C. Tripathi, S.L. Raina, Prabhat Singh, P.K. Jain



R.D. Goyal (Director – Projects)

We are India's premier integrated gas company.

GAIL has been distinguished as the only company in Asia to receive the "World's No. 1 company in downstream operations" award by Platts in 2011. We now have similar aspirations across the hydrocarbon value chain.

It is our invariable effort to develop gas infrastructure throughout the country for efficient delivery of gas to end consumers. Several new pipelines are in different stages of execution across the country which will lead to doubling of existing pipeline length in the next five years. Commissioning of LNG re-gasification terminal in Dabhol is going to further increase the utilization of the company's infrastructure. Expansion is underway in our Petrochemical plant at Pata.

Our objective is always to go beyond compliance with laws and regulations minimizing environmental impacts using environment & risk management strategies.

We have given topmost priority to environmental consideration throughout the various phases of project execution and operation. Our operations maintain Environmental Management Systems certified to ISO 14001 standards. All operations undergo annual independent audits of ISO 14001 Environmental Management Systems to ensure standards are met.

Considering the limited availability of conventional sources of energy, we strongly feel that there is a consistent need to improve energy efficiency of our processes thereby managing and reducing greenhouse gas emissions from our facilities for which various initiatives are taken across our operations.

Moving ahead with our commitment to implement GAIL's vision and strategies on sustainability, execution of 5 MW Solar-PV project in Rajasthan is planned with targeted completion by 2012.

Wind power project of 117.75 MW installed capacity has been commissioned and is being utilized for captive consumption in Gujarat and commercial production in Tamil Nadu & Karnataka.





S.L. Raina (Director – HR)

At GAIL we believe that our people are a determining factor in the success of our company.

We have achieved our goals which have only been made possible by the dedication, loyalty and contribution of our Human Capital.

It is the capability, passion, enthusiasm, drive and strive-for-excellence attitude in our people that differentiates us from others and gives us that extra edge. Each of our employees adds value to our growing organisation. We invest in our employees in order to sustain their motivation and engagement levels, which in turn is essential for achievement of one organisation's strategic goals. We continuously provide opportunities for constant training and development and for career development. We provide support to our employees through internal job rotation that gives them an opportunity to gain a broad experience in a wide range of disciplines. In fact, "engaging our employees for superior results" has been one of our success mantras as we fall under Hewitt's "Best Employer Zone" in terms of the latest employee engagement survey. This is demonstrated by the fact that GAIL has one of the highest profitability per employee ratio amongst all CPSEs with a continuously increasing "Year-wise Value added per employee ratio".

GAIL values commitment, dedication, integrity and sincerity. Right from the early stages, employees are expected to walk the extra mile to surpass the set expectations.

We treat everyone with dignity and respect and have developed policies to promote diversity and equity in the workplace. Our sincere endeavor is to go beyond laws and adopt international best practices to make GAIL a smart organization to work for. We are an equal opportunity employer and recognize people on their merits and skill sets irrespective of their race, caste, religion, colour, ancestry, marital status, gender, age and nationality.

We recognize the importance of the communities we operate in and are committed towards addressing their concerns. Our structured framework to identify the issues & needs of community reflect through our social responsibility programs. A robust governance structure following a top-to-bottom approach with a dedicated team helps in evaluating and selecting programs in the identified thrust areas.

In other words, we as organisation have embarked upon a journey of mutually beneficial and sustainable relationship with our people as well as the society in which we are operating.



Shaping the Future

Prabhat Singh (Director – Marketing)

Being a leader in Natural gas, we have a strong market position with a 75% market share in Natural gas transportation and 51% market share in Natural Gas marketing.

We value our customers and significant investments have been made for up gradation of our existing gas transmission network in order to double our transmission capacity and reach out to the newly developing gas consumption centres. We are constantly exploring customers who can switch over to CNG as fuel to replace the polluting fuel under use. In addition, we have a sophisticated Gas monitoring system, duly capable of handling multiple sources of supply and delivery of gas on a real time basis. **Our gas customers are facilitated with information through our gas management system to well plan and utilize our gas supply.**

Apart from educating and generating awareness, **we promote product responsibility** and have partnered with Indian Centre for plastics in the Environment (ICPE) to research and further propagate the positive impacts of plastics in comparison to other alternatives both in terms of utility as well as environment impact. However it will be our aim to emerge stronger in new business segments such as renewable energy.

GAIL Polymer Technology center (GPTC), located in Noida serves as a platform for customers to avail technical solutions and insights that help address their problems.

Our customer satisfaction index stood at 89%. Further, regular interactive meets with customers & suppliers ensures systematic and timely addressing of their concerns and also in bringing out improvements in our customer redressal system.





S. Venkatraman (Director-Business Development)

Moving ahead in our Sustainability journey, our second edition of the sustainability report '**Shaping the Future**' FY-11-12 focuses on our efforts in this direction. As India is on its way to become world's 3rd largest energy consumer by 2025, ensuring sustainable supply of natural gas to pursue greater energy security is gaining imperative concern for India.

At GAIL, we are working towards meeting the exponentially growing demand of Natural Gas. We are aggressively expanding our pipeline & city gas distribution network in India and transcending to trans-national pipeline with TAPI, wherein Gas sales and purchase agreement with Turkmen gaz of 38 MMSCMD for 30 years has been executed. In the wake of constrained domestic supplies, we have further expanded our global presence to acquire new expertise & resources through overseas tie-ups in Shale gas and LNG. Our Strategy 2020 envisages diversification in alternate sources like wind & solar energy. This year we moved from being a captive to commercial producer after commissioning of around 100 MW of wind energy projects. Further, we are setting a 5 MW solar PV plant in Rajasthan and bidding for solar energy projects in the country.

Being an energy company we have taken strategic steps to improve our technological capabilities. As per the DPE mandate our 1% of PAT is utilized in R&D investments for exploring new opportunities in this field. We have taken up a pilot project for extraction of landfill gas from municipal solid waste in New Delhi to generate CNG. This project demonstrates our commitment towards harnessing all sources of energy. In addition, we are also actively exploring potential technologies in Shale Gas, Underground Coal gasification, Gas Hydrates, Hydrogen, Gas Storage etc.

Sustainability is ingrained in GAIL's vision and we are driven by our commitment to create value for all our stakeholders and also looking beyond compliance of the regulatory requirements.

Our Initiatives are driven by our desire to reduce the carbon footprint, Water footprint etc. and have taken concrete targets for reduction of our GHG emissions, water consumption intensity, etc. in SD Aspiration 2020. Further, we have taken up GHG accounting at one of our major sites and plan to take it forward across other sites of GAIL.

We follow a top-to-bottom approach for governance of sustainability initiatives in the Company. The Sustainable Development Board Committee regularly meets to plan and prioritise related issues and activities giving thrust to our sustainability initiatives.



Shaping the Future

P. K. Jain (Director – Finance)

The year 2012 witnessed a strong financial growth with our turnover increasing by 24% to INR 40,281 crore and PAT increasing by 3% to INR 3,654 crore.

We have embarked on a pipeline network augmentation for laying another 7,500 Km of pipelines at an investment of about INR 30,000 crore, ensuring availability of gas & creating access to newer demand centres for major domestic source points and the LNG re-gasification facilities. While perusing the financial growth ***we also believe in following a growth path that is environmentally & socially sustainable and creates long-term value for all our stakeholders.***

This ensures long-term success of a business while contributing toward economic & social development, a healthy environment, and a stable society.

The role of companies in a society is currently going through a transition that presents important opportunities.

In the dynamic global economic condition, it becomes essential for GAIL to recognise its growing significance and develop strategies that work towards a low-carbon economy that provide us with significant business and investment opportunities.



Business Profile



GAIL started as a Natural Gas transportation company in 1984 and today is India's No.1 Natural Gas Company. We have gradually evolved into a major integrated and customer focused Gas Company with significant presence across the natural gas value chain. We have been aggressively pursuing our objective to increase global presence and penetrate into the international energy markets for ensuring a sustainable energy future. Since inception we have played a significant role in India's growth by catering to the needs to several gas dependent sectors including power and fertilizers.

KEY HIGHLIGHTS

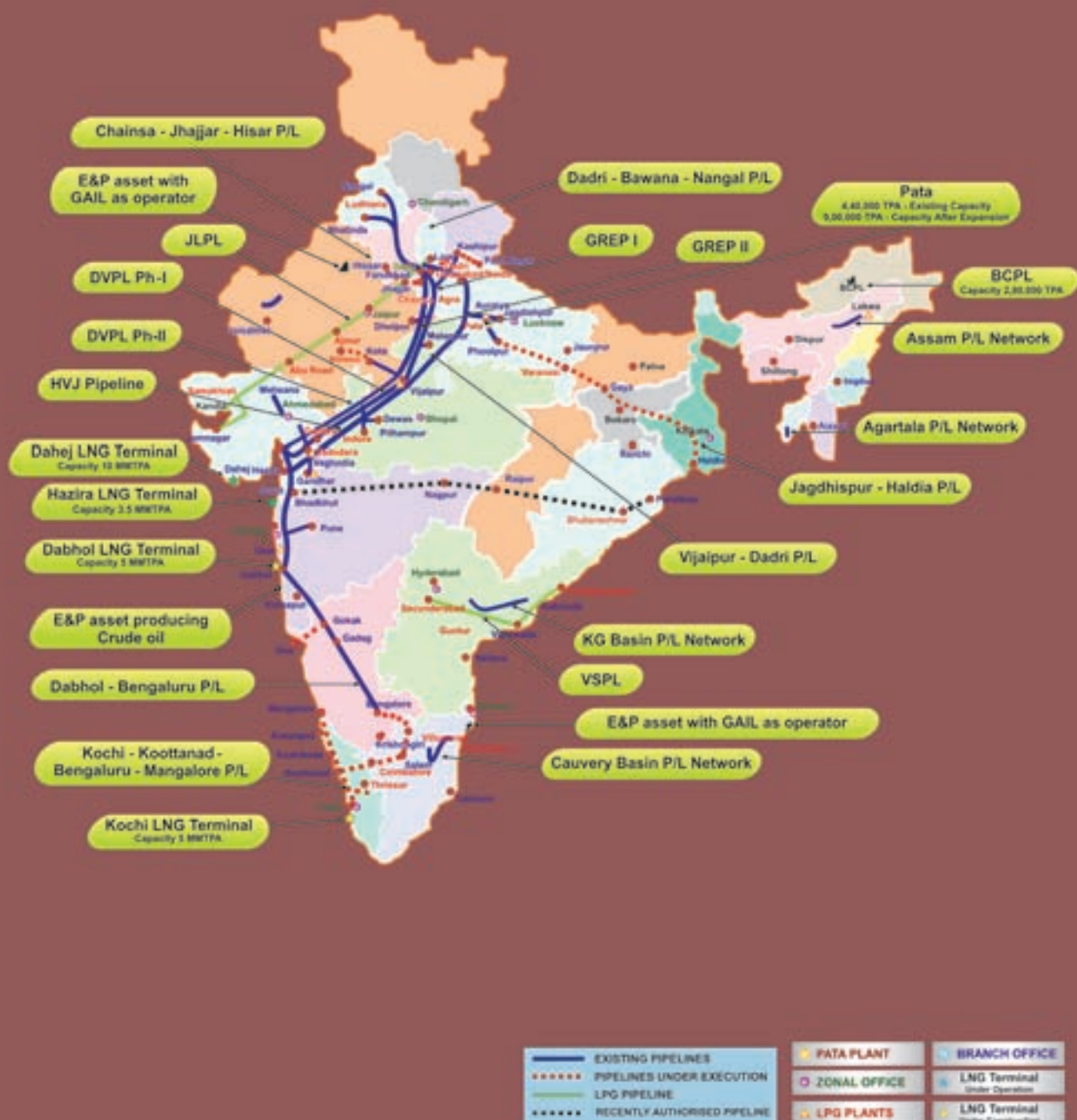
- 75% market share in Natural Gas transmission
- 51% market share in Natural Gas marketing
- 117.62 MMSCMD gas transmission
- 3.36 Million MT of LPG transmission
- Total LHC Production of 1.44 million MT along with 7 LPG plants
- Produced 4,41,000 MT Polymers during FY 11-12
- 31 E&P/ CBM blocks (29 in India and 2 Over Seas)
- World's longest exclusive LPG pipeline infrastructure
- 23 cities covered through city gas distribution
- INR 7,000 million investment in wind energy projects
- 12%+ 10 year PAT CAGR
- Formation of GAIL Global (USA) Inc.
- Start of International Gas Sourcing and trading through GAIL Global (Singapore) Pte.
- Commissioned Dadri Bawana Nangal Pipeline
- Commissioned Dabhol LNG Terminal

OUR BUSINESSES, PRODUCTS AND SERVICES


















GAIL's Pan-India Presence





Awards and Recognition

GAIL's efforts have been recognized at National and International forums for exceptional performance across a number of business areas. Some of those include:

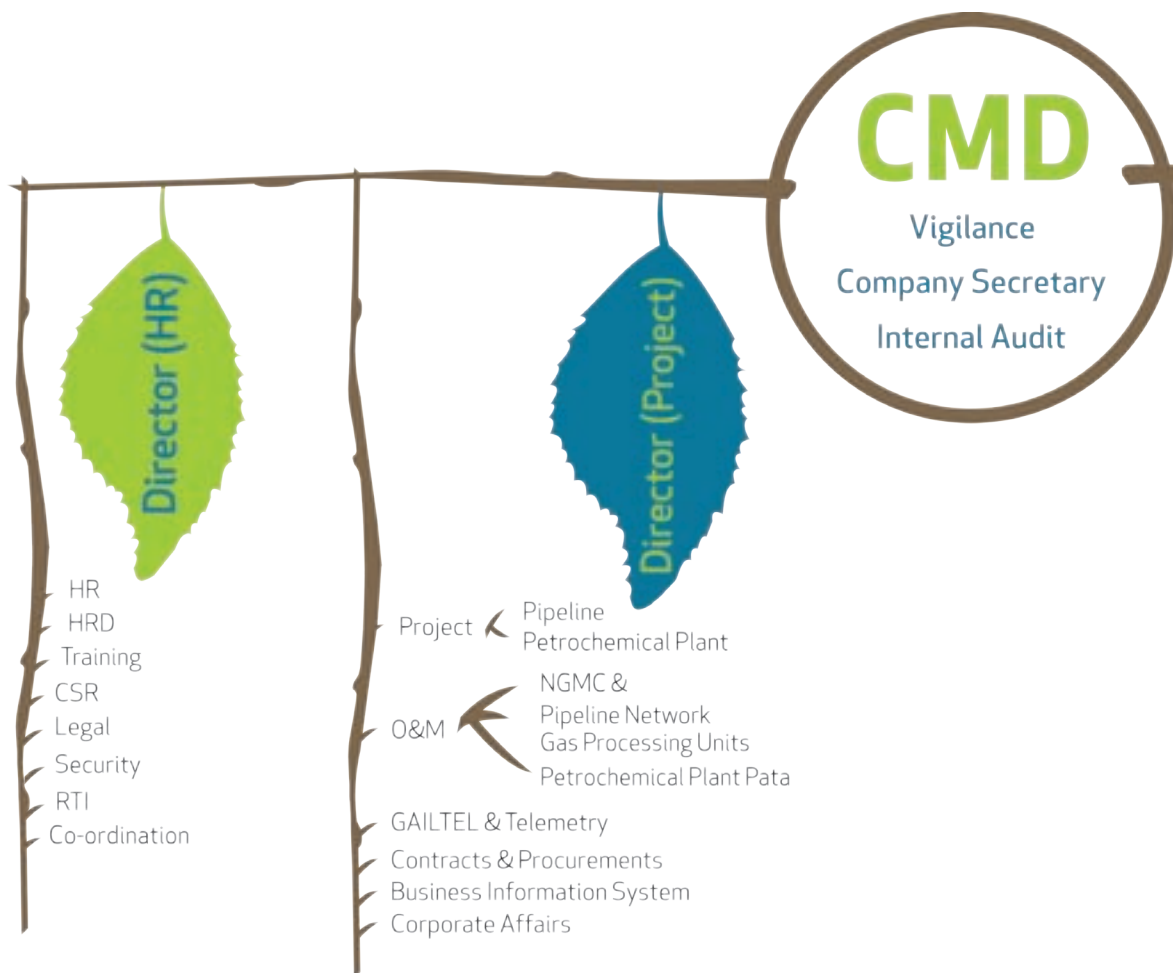
-  **11th ICSI National Award for Excellence in Corporate Governance, 2011**
-  **Corporate Governance Award 2012** by Indian Chamber of Commerce
-  **Commendation certificate from SCOPE for Corporate Governance in 2011**
-  **Platt's Global Energy Award, 2011** for "World's No. 1 Company in downstream operations"
-  GAIL's Jamnagar- Loni and Vizag - Secunderabad LPG pipeline unit won the first and second **National Award for Excellence in Cost Management 2011** respectively under the category of Public Sector Service Unit.
-  **MOU Excellence Award for Best performing CPSE in Petroleum Sector consecutively for second year for the year 2009-10.**
-  **International Safety Award from British Safety Council, United Kingdom for Gas Processing Unit and Natural Gas Compressor Station** - Vagodhia; Gas Processing Unit- Gandhar; Jamnagar - Loni LPG pipeline; Regional Natural Gas Pipeline Network, National Capital Region, Delhi and Agra.
-  **Shrestha Suraksha Puraskar for Gas Processing Unit and Suraksha Puraskar for Natural Gas Compressor Station, Vijaipur from National Safety Council, Mumbai**
-  **Certificate of Appreciation from Gujarat Safety Council, Vadodara** for GAIL- Gandhar, Vadodara and Vaghodia units
-  **Golden Peacock Occupational Health and Safety Award 2011 for GAIL Khera** from Indian Institute of Directors, New Delhi.
-  **Safety Innovation Award from Institution of Engineers, New Delhi for Gas Processing Unit and Natural Gas Compressor Station** at Vijaipur and Vaghodia; Gas Processing Unit, Lakwa; Natural Gas Compressor Station, Khera; Regional Natural Gas Pipeline Network, Mumbai; LPG Booster Station, Abu Road and Mansarampora.
-  GAIL, Usar bagged the Confederation of Indian Industry (CII)- Shohrab Godrej Business Centre (GBC) **Environment Best Practices Award for 2012 for "Most Innovative Project of the Year category"**
-  **GTI has received the prestigious Golden Peacock Quality Award for Training System and 'GreenTech Gold HR Award for Outstanding Achievement in Training Excellence' for the year 2011.**

Corporate Governance

Good governance practices serve as the building block of corporate integrity and also its long-term sustainability. In many ways, this foundation makes an organisation resilient and at the same time protects and shelters it from probable threats. By being aware of risks and changing circumstances and through proper oversight and execution of established governance processes at GAIL, it would be easier for us to give a desirable shape to the future.



FUNCTIONAL STRUCTURE



BOARD STRUCTURE

Sub-Committees of the Board

Audit Committee

Mahesh Shah (Chairman)
R.M. Sethi
Arun Agarwal

Business Development and Marketing Committee

R.M. Sethi (Chairman) P.K. Jain
Prabhat Singh Dr. Neeraj Mittal
S. Venkatraman Arun Agarwal

Corporate Social Responsibility Committee

CMD (Chairman)
S.L. Raina
Sudhir Bhargava
Mahesh Shah

Employee Disciplinary Committee

Dr. Vinayshil Gautam (Chairman)
Two Functional Directors (to be nominated by CMD on case - to - case basis)

Empowered C & P Committee

CMD (Chairman) and all the Functional Directors

Ethics Committee

Dr. Vinayshil Gautam (Chairman)
S. Venkatraman
Arun Agarwal

H.R. Committee

CMD (Chairman)
All the Functional Directors
Mahesh Shah
Dr. Vinayshil Gautam

HSE Committee

Arun Agarwal (Chairman)
R.D. Goyal
S. Venkatraman

Project Appraisal Committee

CMD (Chairman) Dr. Vinayshil Gautam
P.K. Jain Arun agarwal
Dr. Neeraj Mittal Concerned Functional Director

Remuneration Committee

Dr. Vinayshil Gautam (Chairman)
S.L. Raina
P.K. Jain
Mahesh Shah
Arun Agarwal

Shareholders/ Investors Grievance Committee

Mahesh Shah (Chairman)
S.L. Raina
Prabhat Singh

Share Transfer Committee

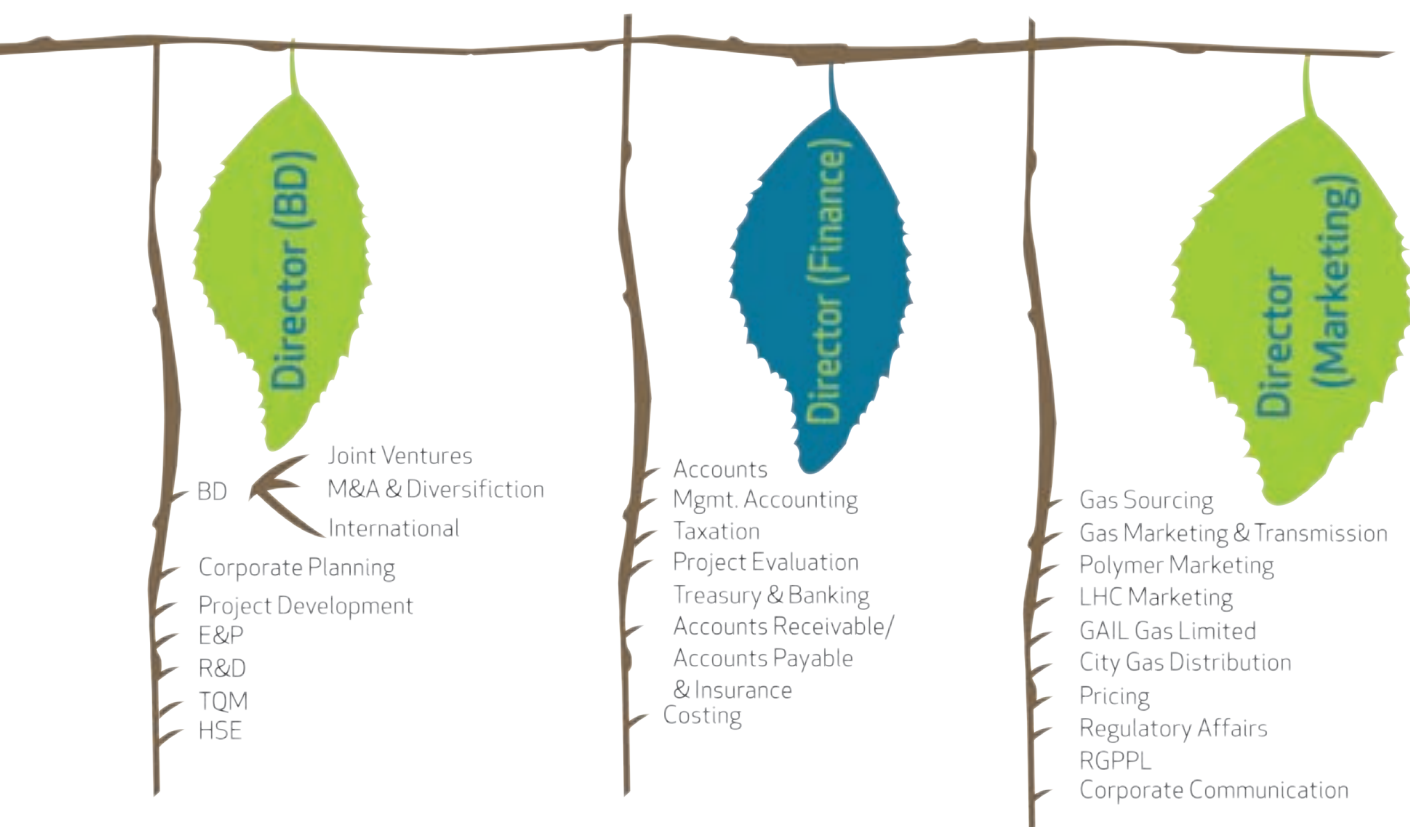
Executive Director (Finance)/Head of Finance
Company Secretary/
Senior Most Official in Company Secretariat

Stakeholders' Grievance Redressal Committee

Arun Agarwal (Chairman)
P.K. Jain
Concerned Functional
Director not involved w.e.t. subject disputes.

Sustainable Development Committee

Arun Agarwal (Chairman)
R.D. Goyal
S.L. Raina
Prabhat Singh
S. Venkatraman
P.K. Jain



Functional Directors

B.C. Tripathi
R.D. Goyal
S.L. Raina
Prabhat Singh
S. Venkatraman
P.K. Jain

Govt. Nominee Directors

Sudhir Bhargava
Dr. Neeraj Mittal

Independent Directors

Mahesh Shah
R.M. Sethi
Dr. Vinayshil Gautam
Arun Agarwal
Shyamala Gopinath
R. P. Singh
Dr. A. K. Khandelwal



Our corporate governance philosophy is founded on principles of maintaining highest levels of transparency, accountability and equity in all facets of our operations and in our engagement with all stakeholders. We constantly improvise our systems and processes to ensure relevance and effectiveness in line with changing business scenarios. The founding principles of our corporate governance framework are as follows:

- ✕ Proactive flow of information to the members of the Board and its committees to enable effective discharge of fiduciary duties
- ✕ Compliance to all applicable laws, rules and regulations
- ✕ Ethical business conduct by the Board, Management and employees
- ✕ Well developed systems for internal controls on all operations, risk management and financial reporting
- ✕ Strategic supervision by the Board of Directors of approximate composition, size, varied experience and commitment to discharge their responsibilities
- ✕ Timely and accurate disclosure of all material operational and financial information to various stakeholders

Our Board is responsible for defining company policies and overseeing their implementation.

GAIL being a Public Sector Enterprise, the Board is appointed directly by the President of India, through the Ministry of Petroleum and Natural Gas (MoPNG). As on 31st March 2012, there were 16 Directors on the Board comprising of six whole time directors including Chairman and Managing Director, two part time Directors (Government Nominees) and eight part time Independent Directors. We remain compliant to corporate governance standards such as Clause 49 of the Listing Agreement and DPE guidelines on Corporate Governance that are applicable to us. Through this report, we meet the requirements of clause 55, introduced by SEBI on 13 August 2012.

A number of sub committees have been constituted under the Board of Directors to oversee ongoing implementation of our vision, strategy and business plans, take corrective measures whenever required and protect the interest of all our stakeholders. Some of these include Audit committee, Business Development and Marketing Committee, Corporate Social Responsibility Committee, Employee Disciplinary committee, Empowered C & P Committee, Ethics Committee, HR Committee, HSE Committee, Project Appraisal Committee, Remuneration Committee, Shareholder/Investor Grievance Committee, Share Transfer Committee, Stakeholders' Grievance Redressal Committee and Sustainable Development Committee.



Corporate Governance award ceremony



Launch of GAIL's first Sustainability Report by Secretary of MoPNG and CMD of GAIL

RISK MANAGEMENT

A robust risk management framework supports GAIL's business strategy and operations. This framework is constantly updated for new and emerging risks emanating from business expansions and interests. An exercise was conducted in this year to review key business areas and risks along with testing of internal controls framework in the current business context. The Board along with the Audit Committee oversees the effectiveness and performance of risk management across our operations. All abnormalities and exceptions are reported to Chairman and Managing Director. Sustainability elements form an integral part of our risk assessment exercise wherein we analyze each business element not only from a perspective of "impact on business" but also for "impact on natural environment, social and cultural heritage and key business stakeholders". The section on "Material issues" further elaborates on the key sustainability risks and challenges for GAIL along with a detailed description of our response and action on them.

ETHICS AND TRANSPARENCY

We strive to adhere to highest standards of ethics and transparency in all transactions across the

organization. We have also implemented a Whistle Blower Policy to empower our stakeholders to prudently report on any instance of corruption or mis-use of office that they come across. The policy adequately protects our stakeholders against victimization and provides them access to the Audit Committee, the highest authority to investigate such matters. The Audit Committee comprises solely of Independent Directors to ensure highest degree of independence. This is a practice beyond statutory requirements.

We have adopted several initiatives including leading practices towards increasing transparency in our business processes and dealings. Two separate sub-committees to the Board: Shareholder/Investor Grievance Redressal Committee and Stakeholder Grievance Redressal Committee have been constituted to directly engage and investigate into grievances, disseminate information and resolve disputes amicably. This has helped to further strengthen stakeholder confidence in our business processes. In addition to this the Ethics Committee at the Board level also ensures a uniform implementation of our Code of Conduct on business ethics. We have also created a Code of Conduct specifically for the Board of Directors to ensure avoidance of conflict of interest. Further,



abstaining on issues related to conflict of interest has been included as a performance parameter in the Corporate Governance section of this year's MoU. All our business operations are regularly monitored through internal vigilance setup and external agencies for risks related to corruptions.

In times of a fast changing business environment, we acknowledge the necessity to be abreast of the latest trends in corporate governance. Our Directors are nominated to attend conferences on corporate governance conducted by DPE and SCOPE at regular intervals to access information on latest developments and how those can be implemented at GAIL. We have been a signatory to Transparency International's Integrity Pact from past six years. Under this pact, on a voluntary basis, we have subjected our practices to external scrutiny such as appointment of Independent External Monitors or obtaining a compliance certificate from a practicing Company Secretary. Steps have been taken to increase transparency between business functions and divisions at GAIL. This year we introduced Internal Memorandum of Understanding (IMoU) to be signed by different business units driving them towards better performance management and accountability to goals set under the MoU.

GOVERNING SUSTAINABILITY AT GAIL

On account of the wide-spread outreach of sustainability, everyone at GAIL has a role to play in how it is propagated across our operations, while the Senior Management has a special focus on monitoring our performance. In order to establish a common understanding of terms, standards and goals; we have created a sustainability policy that will act as a fundamental building block of sustainability at GAIL. This policy was approved by our Board of Directors on 11 May 2012 and integrates our vision and aspirations on economic, environment and social bottom lines.

Measuring the effectiveness of a sustainability policy requires systems and processes to capture information and performance, under the able supervision of the policy makers. In order to create a mechanism towards governing sustainability, we have defined a structure that spans across various critical functions to effectively manage the organizational complexities - a Sustainable Development Board Sub-Committee (SDBC) chaired by Shri Arun Agarwal (Independent Director) and supported by Director - Projects and Director - Business Development. This committee has been instrumental in driving sustainability across GAIL's operations. Based on

the overarching functions of this committee, we have recently included other functional Directors viz. Director - Finance, Director - Marketing and Director - HR as its members.

A Sustainable Development Steering Committee (SDSC) headed by Director (Business Development) has also been constituted to provide impetus and direction to achieve sustainability goals, targets and monitor on-ground implementation of projects. We have recently broad-based the SDSC so that core concept of sustainability transcends throughout the organization culture. In addition, we are also in the process of forming multi-disciplinary Sustainability committees at all sites of GAIL.

The SDSC will also create common standards, methods, management systems and collaborative initiatives along with assessment tools and techniques to promote sustainability at GAIL. From the SDSC the sustainability governance structure further spreads to various operational units with well-defined roles and responsibilities for each level. Executive Directors at business entity level drive the agenda to appropriately identify opportunities and develop meaningful and impact oriented projects. Site aspect owners and coordinators help in aggregating essential information from the sites and also contributing towards implementing and seamless management information systems to track progress on the projects.

As a responsible corporate citizen, GAIL has gone beyond the mandatory requirements of the Guidelines on SD by DPE. To give further give momentum to our efforts to ingrain sustainability in GAIL, we have set clear targets through SD Aspirations 2020 in aspects of management of our GHG Emissions, Water Consumption, Energy efficiency and Training / Awareness on Sustainability.

GAIL is one of those few organizations where the core sustainability team is a part of the Corporate Planning group. The idea is to facilitate assessment of our impacts and the subsequent value generated for our stakeholders by embedding aspects of sustainability in long-term strategy and day-to-day business decision making. As a proactive organisation, our aim is to ensure that the returns outweigh the cost and the time invested to attain the returns. The principal responsibilities of the core sustainability team include supporting activities of SDBC and SDSC, working on new sustainability initiatives, training of employees on aspects of sustainability and development of GAIL's sustainability report.

Sustainable Development Board Committee

Chair Person
Independent Director
Shri Arun Agrawal



Sustainable Development Steering Committee

Chair Person
Director BD



Meeting of Sustainable Development Committee of GAIL



Engaging with our Stakeholders

A structured stakeholder engagement enables alignment of business objectives with societal needs and expectations, thereby ensuring long-term sustainability and enhancement of stakeholder value. Our robust stakeholder engagement process helps us to understand and act on the needs and expectations of the stakeholders. It also helps us to compete in an increasingly complex and ever-changing business environment, while at the same time bringing about a positive systemic change towards sustainable development.



Understanding stakeholder concerns and issues is the primary step towards formulating a sustainability strategy. This year, we focused on engaging with all major stakeholder groups of GAIL. For employees, suppliers, customers and Communities/NGOs, we conducted the engagement through structured questionnaires, direct interviews and online engagement, in addition to workshops at various sites. We assessed the perception of our stakeholders on our sustainability initiatives, level of awareness, degree of involvement, brand recall relative to competitors, concerns with existing governance structure and customer satisfaction amongst other parameters. The stakeholder engagement and perception survey conducted by GAIL across its operations has helped us in distinctly identifying our areas of strength and weaknesses. We remain committed to use this intellect in designing our structured stakeholder programs in the future. The expectations of the Government (our majority shareholder) was captured through the Memorandum of Understanding (MoU), signed by GAIL with Ministry of Petroleum and Natural Gas (MoPNG), wherein both the financial and non-financial targets were set and the same are also hosted on GAIL website (http://gailonline.com/final_site/mou-mopng.html).

The MoU is reviewed by MoPNG on a quarterly basis and end of the year evaluation is done by an independent task force appointed by the Government.

GAIL's employees emphasized energy conservation as an area of improvement and expressed that introducing sustainability specific KRAs could drive employee involvement in sustainability initiatives. While customers expressed a lack of awareness on GAIL's sustainability initiatives, suppliers rated GAIL as a more responsible company relative to its competitors. Despite appreciating our well designed social responsibility programs, NGO's expressed the need for us to improve our administrative systems and further streamline the social responsibility agenda at the corporate level. These inferences from the stakeholder engagement exercise have been elaborated throughout the report in respective sections.

RESULTS OF THE ENGAGEMENT

Employees: During awareness and engagement workshops conducted at various GAIL sites and online engagement of employees, the following feedback was received:-



Stakeholder Engagement: Sustainable Development Workshop



Shaping the Future



Press Conference by Board of Directors in New Delhi

RESULTS OF THE ENGAGEMENT

Employees' Perception about GAIL		Key strengths of GAIL according to employees		Employee awareness on sustainability through....	
Employee welfare focused company	15%	Market oriented remuneration	9%	Information sharing through emails	21%
Customer focused company	15%	Excellent employee welfare measures	8%	Intranet	19%
Environmentally conscious company	14%	Adequate learning and development	8%	Sustainability Report	17%
Socially responsible company	14%	Efficient Human resource	8%	Awareness session	17%
Strong and respected brand	14%				

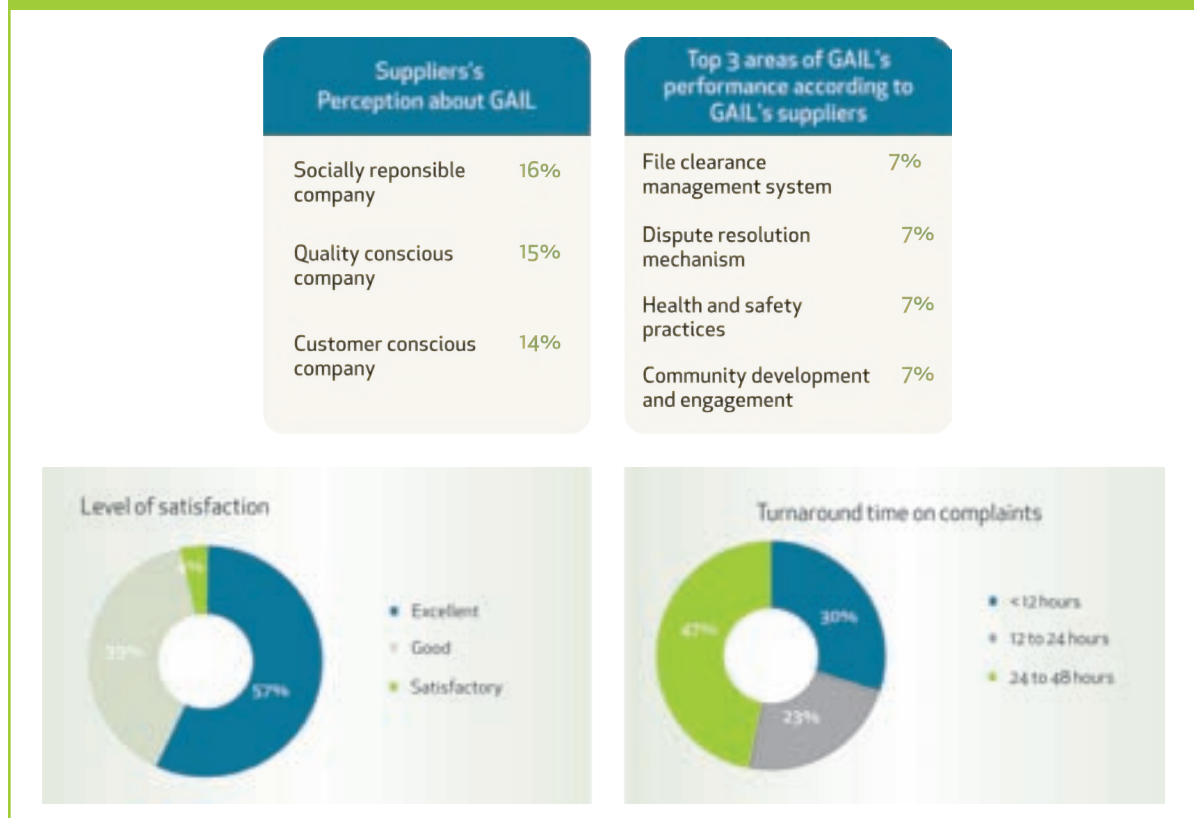
Top 3 areas of improvement for GAIL according to employees		Employees can contribute on sustainability through....	
Energy conservation	23%	Conservation of energy	23%
Water conservation	8%	Reduce and recycle materials	21%
Employee welfare	8%	Responsible travel	19%
		Increase employee awareness	18%



Customers: the feedback received through stakeholder engagement workshops conducted at various sites of GAIL

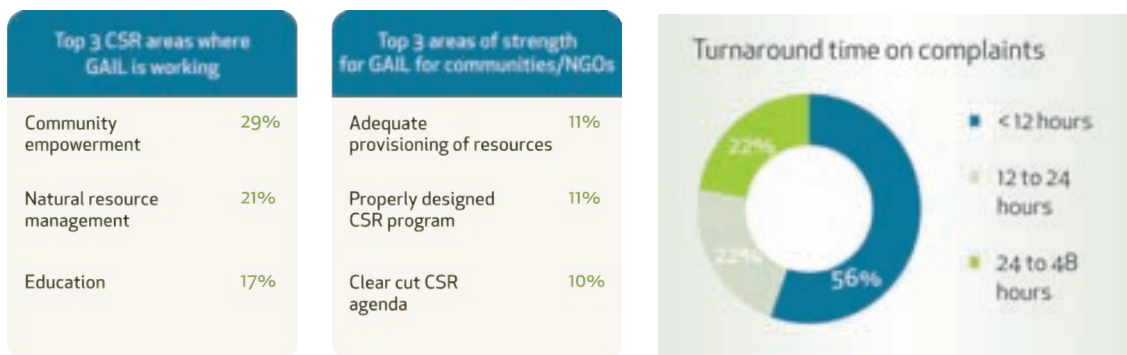


Suppliers: the feedback received through stakeholder engagement workshops conducted at various sites of GAIL





Communities/NGOs: the feedback received through stakeholder engagement workshops conducted at various sites of GAIL



OUR ENGAGEMENT GOALS WITH A BROADER SET OF STAKEHOLDERS ALONG WITH THE FREQUENCY AND MODE OF ENGAGEMENT HAVE BEEN DESCRIBED IN THE TABLE GIVEN BELOW:

Main goals of the engagement	Frequency of engagement	Method of engagement
<div>Customers</div> <ul style="list-style-type: none"> To understand their satisfaction levels To address operational concerns To get feedback on new product development 	Annual, Quarterly	Annual Customer Meet, Zonal Customer Meet
<div>Employees</div> <ul style="list-style-type: none"> Communication on GAIL's business goals, values and principles Action planning on major projects Implementation of best practices Facilitating learning and developing Track key performance indicators and action plans Understand and address concerns Idea generation, sharing and learning 	Annual, Quarterly, Monthly, Daily	Satisfaction surveys, Grievance Redressal, Suggestion schemes, CMD open house, Various committees, GAIL Day celebration, Emails, Journals, Meetings with employee associations and unions;
<div>Government & Regulators</div> <ul style="list-style-type: none"> Relationship building Performance appraisal through MoUs Submission of progress reports Discussions on major investment plans 	Annual, Monthly,	MoUs, QPR,
<div>Industry Associations</div> <ul style="list-style-type: none"> Share performance data Inform on keys decisions and projects Participate in conferences and seminars Engage in public policy advocacy 	Need-based	Seminars, Conferences, Industry Expo, Interviews,

CONTINUE...

	Main goals of the engagement	Frequency of engagement	Method of engagement
Investors	<ul style="list-style-type: none"> Financial performance Share broad future strategies Get feedback and address concerns Seek approval from shareholders on major decisions 	Annual, Quarterly,	Annual General Meeting, Quarterly Performance Updates, Investor Meets,
Media	<ul style="list-style-type: none"> Relationship building Appraising on performance highlights and low lights Point-of-view on major sectoral developments 	Need-based	Press Meets, Interviews,
Communities	<ul style="list-style-type: none"> 1. Engaging with communities for conducting need assessment and executing community development projects 2. Understanding and addressing their concerns on critical incidents 	Need-based	Meetings and direct interaction
NGOs	<ul style="list-style-type: none"> Executing community development projects Understanding and addressing their concerns on critical incidents 	Need-based	Project Meetings, Annual Reviews,
Partners	<ul style="list-style-type: none"> Discussions on major investment plans Sharing of performance data Facilitate decision-making on major issues 	Need-based	Need-based meetings,
Suppliers	<ul style="list-style-type: none"> Communicate operational decisions Seek their performance data / information Understand and address their concerns 	Annual, Quarterly, Monthly, Daily	Supplier Meets, Access to empowered C&P committee,

Our engagement with our stakeholders both at the corporate as well as the sites has lead into determination of sustainability challenges or "Material issues" for GAIL. The materiality determination process forms an integral part of our stakeholder engagement surveys. The next section further describes the material issues that were identified as a part of this process and how GAIL is progressively working on each of these areas.



Joint Secretary, MoPNG visit at GAIL Pata

Determining Material Issues



Identification of material issues is one of the most critical steps towards shaping a sustainable future. Material issues are those issues that have the ability to hamper the decision of an organisation's stakeholders. At GAIL, we conduct the materiality assessment exercise on an annual basis to identify what is important to our stakeholders and subsequently disclose own performance against those.



LNG Ship

The stakeholder engagement exercise, followed by a comprehensive data analysis gave us a holistic picture of critical concerns, aspirations and expectations of our stakeholders, which subsequently helped us to determine the material issues. This year's engagement helped us establish the fact that the issues material to our stakeholders haven't changed since last year. Following is our progress on those material issues in this year:

✧ GAS SOURCING:

India is increasingly focusing on natural gas, as the fuel of choice, ascertained by its growing demand and importance stemming from its environmental and economic benefits. Securing adequate gas supplies to align with the escalating gas demand is of primary importance to GAIL. We are scouting for upstream

acquisitions and overseas opportunities to supplement gas sourcing initiatives on spot and long term basis. To ensure an uninterrupted supply of gas, we continue to increase our footprint in LNG and natural gas trading in the international markets. A step in this direction was our acquisition of a 20% interest in Carrizo's Eagle Ford Shale acreage in 2011, recognizing the future potential of shale gas in India. The strategic rationale behind this transaction was to acquire technical know-how in the shale gas business through secondment of E&P officials in the joint venture equipping us to prepare for future shale gas bidding rounds in India, thereby giving us a competitive advantage. The deal makes GAIL the first public sector enterprise in India to enter highly competitive US shale gas sector. During this year, our subsidiary GAIL Global (Singapore) Pte Ltd. opened its office in Singapore to initiate trading activities in LNG and petrochemical commodities. We also signed a 20-year sales and purchase agreement with Sabine Pass Liquefaction LLC, a unit of Cheniere Energy partners, for supply of 3.5 million tonnes/year of LNG. With the support of the government of India, we are pursuing the import of gas through the proposed national TAPI pipeline originating in Turkmenistan, passing through Afghanistan and Pakistan to India. We have also executed a gas sales purchase agreement with Turkmengaz for 38 MMSCMD for 30 years supply in May 2012. Other relevant information is also provided in the Investors section of the report.

✧ BUSINESS GROWTH:

We constantly look at diversifying our business portfolio and exploring new avenues to fuel business growth. Our petrochemicals business contributes significantly to our profits and to strengthen our market position in this segment, we are doubling the capacity of our petrochemical manufacturing facilities at Pata to 900,000 TPA of polymers. Responding to the increased emphasis laid on capacity expansion in the power sector in India's 12th five year plan, we are exploring opportunities in gas based power plants. In an attempt towards narrowing the demand and supply gap existing for natural gas resources, we are exploring setting up of an LNG import



GAIL Cheniere Deal Signing over Video Conferencing



facility in the east coast of India. We are also actively investing in solar power and have been selected by NTPC Vidyut Vyapar Nigam Limited (NVVNL) under Jawaharlal Nehru National Solar Mission (JNNSM) for setting up solar PV project of 5 MW in Rajasthan. A 4.5 MW captive wind power plant was commissioned in Gujarat in 2010 followed by another 15 MW captive wind energy project. Further, 100 MW wind energy projects for commercial sale in the state of Tamil Nadu and Karnataka are being set up at a cost of INR 600 crore. We are also exploring possibility of setting up a coal gasification plant and coal based fertilizer and ammonium nitrate complex at Talcher, Orissa.

To boost our business growth, this year, we significantly increased our investment in research and development activities. This also helped us to meet the DPE's mandate to spend atleast 1% of PAT on R&D 2012-13. To oversee the R&D activities we have constituted a Research Advisory Council in GAIL. Some of our research projects include development of novel nano composites for hydrogen storage and development of solid oxide fuel cell, amongst others. We joined the Natural gas STAR program under the aegis of Global Methane Initiative (GMI) in August 2011 by signing an MoU with the USEPA. We also signed a MoU with M/s. UzbekCoal of Uzbekistan for cooperation in Underground Coal Gasification in 2011. Other related information is also provided in the Investors section of the report.

✧ CUSTOMER SATISFACTION:

We have strived to improve our processes, systems and functional areas to augment customer satisfaction. In 2011, we launched an Integrated Gas Management System (GMS), implemented



GAIL Marketing Associates in the Interiors of South India

on the SAP platform. The GMS integrates all the shippers, suppliers, customers and transporters of gas to provide better coordination and transparency in the gas transportation business. This system facilitates online invoicing which can be downloaded by customers, leading to superior customer service and faster realization. This aids in better planning and utilization of gas supply by customers. The GAIL Polymer Technology Centre (GPTC) is a platform where customers can gain technical solutions and insights to address their queries and access state-of-art plastic testing facilities for raw materials, additives and end products. An online bidding portal has also been initiated, through which our existing customers can bid for supply of spot RLNG. Based on the price quoted by the customer and operational feasibility, gas is nominated by O&M through the online system. Subsequent to the nomination of gas, online sales and purchase notice is generated which is automatically mailed to the customers. This system has been developed to realize better prices of spot gas and reduce overall process time for customers. These initiatives contributed to a customer satisfaction index of 89% in FY 11-12. For further details, please refer to the Customer section of the report.

✧ SAFETY AND SECURITY:

Health and safety of employees and external stakeholders are embedded in the core organizational values of GAIL. We maintain the highest standards of safety and the same is reflected in our HSE index of 99.05%. Regular training on HSE aspects to employees is an integral part of our corporate HSE policy. In line with our policy, we organized a two-day workshop on occupational health risks and ways of mitigating them. The workshop was conducted for all business heads, fire and safety heads, and HR representatives from sites. To ensure compliance with statutory rules and regulations we also conduct regular safety audits and medical health checkups. During this year, we conducted 27 external, seven internal safety audits and conducted medical examination of all employees at the work centres. Further, we have created a corporate occupational health committee that meets every quarter to monitor and improve occupational health of employees. Further, Security is given high priority and all our operating locations have state-of-art



Engaging with Security Personnel

security systems & trained security staff in place to avoid and handle any external or internal threat. For further details, please refer to the Employees section of the report.

✧ CLIMATE CHANGE:

To address climate change, we have taken several measures to reduce our energy consumption and also to lower GHG emissions. This year, at Gandhar, liquid hydrocarbon vapours recovered by the installation of vapour recovery compressors helped us to save 200 MT of LPG, thereby reducing 202 MT of CO₂ emissions and generating additional revenue of INR 63 lakh. Further, retrofitting of RG heater with PLC burner management system and installation of LPG condenser trim cooler at Gandhar to handle the vapour load and pressure of the LPG column resulted in cumulative savings of INR 20.6 lakhs per annum. These projects have the potential to recover 1,600 MT of LPG per annum during summer, resulting in to savings of another INR 80 lakhs. We tied up with natural gas STAR program under the aegis of Global

Methane Initiative (GMI) on 29 August 2011, by signing a MoU with the USEPA. This will help us reduce GHG emissions in the Vijaipur plant. At Vaghodia, the fire protection system for the LPG control room was replaced from Halon 1301 to Novec™ 1230, reducing ozone depleting potential and global warming potential of 10 and 6,900 to 0 and <1 respectively. Another program is being implemented at Vaghodia to set up heat recovery steam generation (HRSG) to recover waste heat of gas turbine compressor exhaust. Preliminary estimations indicate a reduction of 80,589 tonnes of CO₂-e., if the same energy is assumed to be produced by natural gas for steam generation. All these initiatives amply showcase our commitment towards reducing our carbon footprint across the value chain.

✧ SKILLED MANPOWER AVAILABILITY:

The hydrocarbon sector is very dynamic and has witnessed rapid technological development, thus creating the need to hire and also retain people with specialized skills and adequate knowledge. We



recruit from India's best academic institutions and conduct a stringent competitive test to give fair and transparent opportunities to talent across the country. We work together with our employees to help them achieve their development goals along with the set business objectives. We train our employees in our high quality training facilities supported by the GAIL Training Institute (GTI). During this year, the GTI organized 177 programs cumulatively comprising over 14,079 mandays of training for our employees. As part of the learning and development (L&D) initiatives, Senior Management Development Centre (SMDC) has been introduced in GAIL to identify high potential executives, assess development needs of senior executives and find suitable incumbents for challenging assignments and leadership roles. To address the developmental gaps identified through SMDC exercise, Individual Developmental Plans

(IDPs) comprising suggested readings, e-learning courses, films and customized training programs have been formulated for selected employees. Through the GTI, we have launched 'e-Gyan parwah', an e-learning initiative for senior executives in association with the Harvard Management Mentor along with customized executive development programs through IIM Calcutta and IIM Bangalore. GTI also organizes programs to create awareness on sustainable development across all work centres. As a result of the comprehensive training and L&D programs, we continue to see a rise in value added per employee, which shows constantly improving productivity and performance of our employees. Having undertaking the above initiatives and many others, the GTI achieved a high training efficacy score of 91.76% in FY 11-12. For further details, please refer to the Employees section of the report.



Strategy to Shape the Future

Sustainability is not just 'another thing to do', but is an overarching concept that focuses on balancing the three bottom-lines efficiently. True sustainability should be integrated into all operations of business - from policy and management through to on-ground activities such as purchasing, production and distribution. Sustainability is often approached in an ad-hoc way mostly by adopting random initiatives. This is a good start, but to create a better future, a coordinated process that integrates sustainability in to the business strategy is absolutely essential.



As part of our 2020 business strategy, we plan to give a significant thrust on diversification into high value creating businesses such as gas based power plants and renewable energy. Gas based power projects are being explored at various locations and business models for setting up such projects are under consideration. On renewable energy front, we plan to set up 500 MW wind power capacity in the next 3-4 years and over 300 MW solar based power generation capacity in a phased manner. Such projects will contribute to a lower carbon footprint and sustainable growth. Technology will be an important focus area to tap potential future opportunities. In this regard, we plan to focus on emerging areas such as hydrogen as alternative fuel, fuel cells, methane to polymers etc.

SUSTAINABLE DEVELOPMENT ASPIRATIONS 2020

To structure our sustainability agenda, we have identified a few priority areas that command our immediate attention, in line with the requirements of the SD guidelines published by the DPE for CPSEs. These sustainability aspirations were drafted after an intensive consultation with internal and external stakeholders concerned with on-ground implementation and were subsequently approved by the Management. The aspirations include areas where we would provide maximum thrust and achieve well-defined tangible targets. To begin with, we have selected aspects of GHG emissions reduction, energy efficiency, water management and awareness on sustainability. Going forward, we will create aspirations for other aspects of sustainability as well.

Sustainability Focus Area	Aspiration 2020	Action Plan
Reduction in GHG emissions intensity (Scope 1 and Scope 2)	33% reduction in GHG emission intensity (Total GHG emission/ Gross sale) in comparison to the baseline year (FY 2010-11)	<ul style="list-style-type: none"> Process optimizations Adoption of ISO 14064 GHG management systems Reduction in fugitive emissions and venting of Green House Gases in our operations Afforestation to sequester GHG emissions from our operations
Energy efficiency	5% reduction in specific energy consumption in comparison to the baseline year (FY 2010-11)	<ul style="list-style-type: none"> Adoption of Integrated Energy Management Systems Incubation of Internal energy audit groups at corporate and site level Focused energy audits Adoption of energy efficient technologies Enhanced adoption of renewable energy Reduction of flare and flare gas recovery
Fresh and Waste Water	45% reduction in water consumption intensity (Total water consumption/ Gross sales) in comparison to the baseline year (FY 2010-11) 5% increase in wastewater recycling from the baseline year (FY 2010-11)	<ul style="list-style-type: none"> Establish a robust water accounting systems at all operational units Increased focus on utilizing treated waste water to meet plant process requirements Impetus on Rain water harvesting at all sites Robust water audits to establish improvement opportunities and minimize losses
Awareness on sustainability	100% of our employees will have awareness on sustainability	<ul style="list-style-type: none"> Organization wide Sustainability training need identification program Sustainability training calendars for executive and non-executive employees Train the trainer programs on SD Mandatory sustainability modules for new joiners during induction



ग्लोबल बैङ्क analysts Meet



Investors : Creating Wealth

The investors provide us with the requisite capital with a basic expectation of getting back appropriate returns. It is through this capital that we will realise our growth plans and move towards a sustainable future. We feel that it is our utmost responsibility to respect the sentiments of our investors and ensure a steady and assured return on investment to them.



GAIL being a Central Public Sector Enterprise (CPSE) is accountable to the Government of India which is our major shareholder. Guided by our Vision statement, we truly believe in ensuring sound value creation and building trust by upholding high level of transparency for all our stakeholders through the way we conduct our business. We are committed to ensure long-term profitability of our businesses and contribute to the wealth of our shareholders and investors. We have come a long way from being known as a "Natural Gas transmission company" to now pursuing a vision of securing access to energy for our future generations. To achieve this, we are increasing our presence across the hydrocarbon value chain and are also focusing on "Gas sourcing" and "Robust business growth" for long-term sustenance. We have clearly identified focus areas for new future investments as part of our business strategy to achieve economic sustainability including:

- ✕ Increasing our Natural Gas pipeline network across India
- ✕ Significantly enhancing petrochemical production and marketing capacity
- ✕ Improving gas sourcing through LNG imports and cross border pipeline networks
- ✕ Strengthening our foothold in E&P operations and acquiring hydrocarbon assets

INVESTOR MANAGEMENT AND ENGAGEMENT

The relationship with domestic and Foreign investors is of significant importance for us. We have a dedicated Shareholder/ Investor Grievance Committee chaired by an Independent Director and comprising of three full-time Directors to look into related matters of concern and address them through a well-defined resolution mechanism. The Company Secretary acts as a Compliance Officer to look into protecting the interest of the investors. A Board level Audit Committee has also been set up to keep a check on internal control systems, transparent reporting and disclosure to external investor groups and other stakeholders. In addition to all these mechanisms, our stakeholders can make use of GAIL's 'Whistle Blower Policy' to anonymously report on incidents of corruption or misuse of office.

We regularly organize analyst meets for our investors. This year, we organized three analyst meets out of which one was held in Mumbai and was presided by our C&MD. We also participated in a number of investor conferences and meets to strengthen communication and interaction with the financial community. We transparently disclose all information related to our business performance and growth plans that may be

considered relevant by our investors, in our corporate website.

BUSINESS GROWTH AND SOURCING OF NATURAL GAS

GAIL has been constantly building its E&P portfolio with an objective to strengthen upstream linkages to the core natural gas transmission business. We plan to strengthen our position in the upstream hydrocarbon Exploration and Production (E&P) through strong domestic gas tie-ups with operators of NELP blocks and equity stakes in global hydrocarbon assets. Our total investment in developing E&P operations has more than doubled in this year in comparison to the last year. We have also acquired new expertise and resources through tie-ups in emerging areas such as shale gas. We successfully concluded acquisition of 20% interest in Carrizo Oil & Gas Inc. Eagle Ford Shale acreage in the USA through our recently incorporated subsidiary, GAIL Global (USA) Inc. Besides this, we have signed sale and purchase agreement with Sabine Pass Liquefaction LLC to supply LNG amounting to 3.5 million tons per year. Apart from acquisition, we have also set an overseas investment arm in Singapore as a wholly owned subsidiary scouting for LNG and petrochemical trading. In mid-stream operations, GAIL is a market leader in transmission of Natural gas with about 9,500 km of pipeline network and has a market share of 74% in natural gas volume. During the year, GAIL embarked on a pipeline network augmentation for laying another 7,500 km of pipeline at an investment of about INR 30,000 crore in the 12th Plan period, out of which 2,500 kms have been completed so far. The major upcoming gas pipelines projects include Dhabol-Bangalore-Mangalore, Kochi-Kootanad-Bangalore and Surat-Paradeep pipelines. We also plan to invest in increasing the re-gasification capacity through expansion of LNG terminals and Floating Storage Re-gasification units to handle higher capacities and establish an international LNG trading desk to ensure a sustained LNG supply. On the downstream side we are expanding our petrochemical production and marketing capacities significantly. The capacity of existing plant in Uttar Pradesh is being doubled to 8,10,000 MTPA. Expansion of city gas distribution across a number of cities and towns in India continues to be an area of growth for GAIL through its wholly owned subsidiary GAIL Gas Limited. We are also implementing a grassroots petrochemical project through our subsidiary Brahmaputra Cracker and Polymer Limited, in Assam, which is the largest investment for an individual project in North East region of India.

DIVERSIFICATION INTO CLEAN ENERGY

We plan to diversify further into other businesses such as renewable energy and gas-based power generation. Government of India (GoI) has taken several pro-active steps to address the challenge of climate change as a national issue by developing the National Action Plan on Climate Change (NAPCC) in 2008 and more recently announcing to voluntarily reduce India's carbon emission intensity (GHG emitted per unit of GDP) by 20-25% by 2020 over the emission intensity of 2005. There has been a significant National thrust on moving towards renewable forms of energy, and at GAIL we have developed our own action plan to traverse towards higher renewable energy contribution to National grid and in own operations. We are successfully moving from being captive producer to a commercial producer after commissioning around 100 MW of wind energy project last year. This year we have set up 14.7 MW wind energy project for captive usage in Gujarat and 98.75 MW for commercial usage in the state of Tamil Nadu and Karnataka. During FY 2011-12 an investment of INR 674 crore was made in wind energy projects. Further this year, we have also entered the government scheme – Jawaharlal Nehru National Solar Mission (JNNSM) for generating solar energy by installing a 5 MW solar plant in Rajasthan. Some of our research and development projects are aimed at developing technical interventions for capture and commercial use of landfill gas.

INDIRECT ECONOMIC IMPACTS

Since inception, our focus has been to not only create value for our shareholders but also become a key contributor in the growth of nation and society in which we operate. The initiatives that we have taken towards empowerment of society are discussed in detail in the communities section under our CSR approach. We have contributed to national development and well-being through



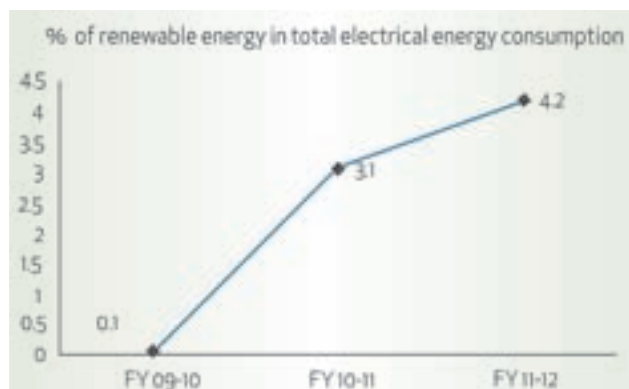
GAIL's Wind Power Installation

- ✘ Providing access to cleaner energy alternative through our gas pipeline networks to various sectors of Indian economy.
- ✘ Development of high grade steel industry in India.
- ✘ Substituting road transportation of LPG
- ✘ Reducing vehicular emissions in cities by offering cleaner fuel in the form of CNG thereby replacing Diesel and motor spirit.
- ✘ Reducing GHG emissions from flaring.

The details of these have been discussed in our Sustainability Report FY 10-11, *Value Beyond Business* in the section of GAIL-Revisiting the Journey

ACHIEVING OPERATIONAL EXCELLENCE

- ✘ The concept of 'excellence' is well-integrated into our way of working. We follow a top-down bottom-up approach, first to nurture our employee capabilities to think innovatively and then to identify, develop and pursue opportunities that reduce our operational footprint and costs. We have adopted a robust approach on TQM that focuses on developing small yet effective quality control circles at each of our operating units. A TQM group has been set up at the corporate level to centrally co-ordinate all quality and performance improvement initiatives across GAIL's





operations. Several measures have been undertaken to enhance employee awareness and capabilities to deliver on quality projects and inculcate a culture of continuous quality improvement. In addition to quality circles, suggestion schemes have also been introduced to encourage innovation and creativity amongst employees. The program is a reward scheme for individuals who can come up with performance improvement ideas in their areas of work. An annual award for the most effective suggestion is presented with a reward of INR 1,00,000 by our C&MD.

- ✂ Energy conservation and improvement in energy efficiency have been one of the top operational improvement areas for GAIL. Under our SD Aspirations 2020, we have committed to reduce our specific energy consumption by 5% by 2020 in comparison to 2010 baseline. We plan to achieve

this by developing an organization-wide integrated energy management system and strengthening our energy audit procedures apart from other technical interventions. In this year, we engaged an external agency for conducting an energy audit in our Pata unit and are currently working on implementing the initiatives identified during the audit. One of the several initiatives includes implementation of a logic for auto stoppage of empty blender blowers in the LLDPE plant at Pata, resulting in a savings of INR 12.50 lacs. We plan to conduct similar energy audits in the other plants in the coming year. Through our focused efforts, during the year, we conserved 1.17 million GJ of energy across our operations. The overall specific energy consumption trends and efficiencies achieved are presented in the table below:

	FY 2009-10	2010-11	2011-12
Specific Energy Consumption GJ/MT of LHC & PC product	13.1	14.0	14.3

Significant investments have been planned for undertaking energy efficiency initiatives in the next financial year to further improve our energy efficiencies. Some of the planned projects include:

- ✂ Automation of burner management system in hot oil heater at LPG plant in Vaghodia at an investment of INR 85 lacs with a potential saving of 0.612 MMSCM of fuel gas per year equivalent to INR 61 lacs. This is our first Sustainability MoU Project to be completed, way ahead of its MoU target date of 30th November, 2012.
- ✂ Utilization of low temperatures generated due to pressure reduction of RLNG being supplied to South Gujarat pipeline to cool feed gas at GPU Vaghodia at an investment of INR 110 lacs resulting in additional 1,285 MTPA of LPG equivalent to INR 186 lacs.
- ✂ Setting up of Heat Recovery Generation System (HRGS) to recover waste heat of Gas Turbine Compressor (GTC) exhaust at Vaghodia leading to an additional superheated steam generation of 44,635 MWH/ annum at an estimated cost of INR 55 crore.
- ✂ Stopping of seal air fans at Pata that are used for sealing of the gate of FD fan resulting in an annual saving of INR 13.26 lacs.
- ✂ Automation of the currently manual AC system at Pata with an expected yearly saving of INR 14.15 lacs.
- ✂ Installation of a 3000 m³/ hr capacity mist cooling system at Pata to meet the additional cooling requirements at an investment of INR 12.40 crore with an annual benefit of INR 4.40 crore.
- ✂ Implementation of automatic blowdown system in

HRSG-2 of GPU plant in Pata resulting in an annual saving of INR 18.00 lacs.

Energy conservation at Gandhar

We took up a project to recover LPG vapour during statutory safety inspection of LPG moulded bullets at GPU Gandhar. As a standard practice, LPG liquid from the bullet was pumped out to the maximum possible extent and the left over hydrocarbons were being flared out. A vapor recovery system was introduced that lead to recovery of hydrocarbons until the pressure reduced to 1.0 – 1.5 kg/cm²g. This resulted in saving around 200 MT of LPG, equivalent to additional revenue of INR 63,00,000.

In another significant initiative at GPU Gandhar, LPG condenser trim cooler was installed, which facilitated in stoppage of all motor driven LPG condenser air cooler fans. This will lead to a saving electrical energy worth INR 14,00,000 and LPG recovery of about 1,600 MT, equivalent to an additional revenue of INR 80,00,000. Amongst some of the cross operation initiatives, we undertook an exercise to replace conventional lighting systems HPMV/ T8/ GLS with more energy efficient options such as Metal Halide/ T5/ CFLs.

Retrofitting of RG heater with PLC based burner management system at Gandhar

The RG heater at Gandhar was equipped with a continuous pilot with four natural draft gas fired burners for supplying heat to regeneration gas in the range of 280°C to 320°C (as per operational requirement), used for removing moisture in the

Feed Gas Dryer to ensure moisture free gas in the feed gas chiller and avoiding hydrate formation inside the chiller and other low temperature zones. The RG operation required manual operations which were also a concern regarding the safety of the personnel. Apart from this there were several other limitations in terms of operational control and the energy efficiency.

To counter these limitations a Burner Management System (BMS) was installed in the existing burner system. This helped in complete elimination of manual intervention and improved energy efficiency considerably. The significant benefits achieved include increasing efficiency of RG heater and subsequent reduction in GHG, NOx and SOx emissions.

Energy conservation project at Vaghodia

The LPG plant at Vaghodia is based on oil system which re-boils hydrocarbon liquid in the distillation columns during the fraction process, for recovery of LPG. The hot oil supplied in these re-boilers was being heated in the heat oil heater. A new system was introduced to change the furnace from natural draft to force draft with a control system to ensure an appropriate air-fuel, thereby eliminating the excess air and sensible heat. This process change resulted in improved combustion efficiency and a 20% reduction in the fuel gas consumption and energy saving of 42,69,767 KWH per annum.

GAIL'S MOU PERFORMANCE

The Memorandum of Understanding is a negotiated document between the Government and the Management of a Central Public Sector Enterprise specifying clearly the objectives of the agreement and the obligations of both the parties. The main purpose of the MoU system is to ensure a level playing field to the public sector enterprises vis-à-vis the private corporate sector.

The MoU system was introduced in India in 1986 as a result of the recommendations of the Arjun Sengupta Committee Report (1984). The Committee laid emphasis on medium term contract between the Government and the CPSEs and recommended a five-year agreement that may be reviewed annually. Since the CPSEs have been set up as a part of the national / central plan, the Committee favored MoU especially in CPSEs operating in the core sectors of steel, power, petroleum, fertilizer and petro-chemicals. The MoU consists of mutually agreed targets on financial (50%) and non-financial parameters (50%). The financial parameters include Gross Sales, Turnover, Gross Margin, Net Profit and Net Worth. The non-financial parameters include performance under Corporate Social Responsibility, Research & Development, Sustainable Development, Human Resource Management and Corporate Governance.



CMD, GAIL & Secretary, MoPNG Signing MoU



GAIL'S TARGETS AND PERFORMANCE IN SD ASPECTS FOR 2011-12

Criteria	Unit	Excellent Performance Target	Actual Performance
Training on "Risk Management"	No. of Persons	40	163
No. of Mandays Lost (As a Percentage of the Mandays Available)	%	0	0
R&D Expenditure as % of previous year PAT	%	>=1%	1.13%
Health, Safety & Environment Index	%	98.0	99.05
Review of Risk Management Framework by Board	Date	29.02.12	28.02.12
Submission of Corporate Governance Report to DPE / Stock Exchanges	Nos.	4 (1 report per quarter)	4 (reports)
Formulation of Whistle Blower Policy	Date	30.09.11	29.09.11
Specialized Coaching for IIT/Engineering Entrance Exam for children of underprivileged section (Project - GAIL UTKARSH)	No of Children	100	100
Vocational Skill Training for gainful employment to Youth of Underprivileged Rural/Semi-Rural Families (Project - SWAVALAMBH)	No of Youth	500	509
Mainstreaming out of school slum children to Govt. schools through Non-Formal Education (Project - PADHO AUR BADHO)	No of Slum Children	3,000	4,071
Providing adequate primary medical facilities for the poor people in the rural areas through mobile health care vans.(Project - REVOLUTIONALIZING RURAL MEDICARE)	No of Poor Persons	30,000	50,000
CSR Expenditure as % of previous year PAT	%	0.85%	1.52%
Development of Sustainability Report of GAIL (India) Ltd. based on GRI G3 Guidelines	Date	29.02.12	29.02.12
Wind Power Project	Milestones	10 (Commissioning by 31.03.12)	10 (Commissioning on 09.01.12)
Rain Water Harvesting of all Technical & Administrative Buildings at GAIL Pata	Nos.	9 (Buildings)	10 Buildings
Installation of Solar Lights in villages within proximity of major GAIL Installations	Nos.	1,000	1,000
Preparation of 'Green House Gas Accounting Report' for one installation of GAIL (India) Ltd.	Date	29.02.12	07.02.12
SD Expenditure as % of previous year PAT	%	0.10%	2.30%

GAIL'S TARGETS IN SD ASPECTS FOR 2012-13

Criteria	Unit	Excellent Performance Target (Weightage in MoU)
R&D Expenditure as 1 % of previous year PAT	%	2.5
Project on CO2 utilisation	Milestones	0.5
Specialized Coaching for IIT/Engineering Entrance Exam for children of underprivileged section (Project - GAIL UTKARSH)	No. of Children	0.5
Setting up of Non-formal education (NFE) centres for mainstreaming out of school slum children to Govt. schools (Project - PADHO AUR BADHO)	No. of NFE centres	1
Job Linked Vocational Skill training to youth of under privileged rural/semi-rural families (Project - GAIL - IL&FS SKILL SCHOOLS)	No. of youth	1
Medical outreach programme for the local villagers in the rural areas adjoining major GAIL work centres through mobile health care vans.	No. of Persons covered	1
Total Sanitation campaign in 5 villages covering individual houses	No. of sanitation units	0.5
CSR Expenditure as % of previous year PAT	%	1
Publication of SD performance Report	Date	0.5
No. of meetings of Board Level SD Sub Committee	Nos.	0.5
Implementaion of Burner Management System in Hot Oil Heater of GPU Vaghodia	Date	0.5
Usage of Treated Sewage wastewater for Vivekanand Sports Complex and horticulture purposes at GAIL , Pata	No. of Milestones achieved on or before 31.03.13	0.5
Preparation of 'Green House Gas Accounting Report' for installations of GAIL (India) Ltd.	Nos.	0.5
Dharohar : Conservation of Native plant species at GPU Usar	No. of Milestones achieved on or before 31.01.13	0.5
Training of Employees on SD Aspects	Manhours	0.5
External Evaluation of Reports	Nos.	0.5
SD Expenditure (Rs. 50 lacs plus 0.1% of previous year PAT exceeding Rs. 100 crore)	%	1
Health, Safety & Environment Index	%	2

COMPLIANCE TO REGULATORY REQUIREMENTS

While pursuing business excellence goals we ensure that all our operations are in compliance to the national and international regulations applicable on us. This year we had one instance where a show cause notice was served by the local pollution control board for exceeding LPG transmission limit at our Jamnagar unit. An immediate corrective action was initiated by the management and an application was presented to the Pollution Control Board to subsequently revise the permissible limits.



Communities : fostering social capital

Fostering a social capital will help in satisfying the social needs and substantially improve the overall quality of life of the local communities. We have initiated several social responsibility programs in order to strengthen local economy, increase employment and employability, encourage local prosperity, reduce environmental impact, support community groups and empower them. Keeping the community happy and satisfied ensures our social license to operate.





The local communities we operate in, play a pivotal role in our success by providing access to much coveted natural resources, manpower and other means of support towards our operations. Engaging with them to alleviate their concerns and to empower them to drive their own development is a vital element of our work. At GAIL, our approach is to understand measure and monitor the broader potential of the environmental and social impacts from our operations. Our community programs are identified through a comprehensive process of need identification and assessment at the grass root level, covering a wide spectrum of developmental activities structured under seven 'thrust areas' - Community Development, Drinking Water & Sanitation, Health, Infrastructure, Skill Development, Literacy Enhancement/Education and Environment Protection. We believe that by addressing the concerns of our communities across these areas we can be instrumental in their holistic development. On the other hand we make conscious efforts to minimize any environmental externalities occurring as a result of our operations, follow environmental standards that go beyond compliance and protect/restore the natural environment.

Our major initiatives towards the betterment of the community and ensuring a healthy life for them are driven through environmental and social goals under our sustainable development policy. Our CSR policy encompasses the company's philosophy of delineating its responsibility as a corporate citizen and lays down the guidelines and mechanism for undertaking socially useful programs for welfare and

development of the community at large. We further plan to dovetail our CSR activities in a manner that they facilitate fulfillment of the National Plan Goals and objectives, as well as the Millennium Development Goals. As a signatory to United Nations Global Compact, we align our CSR objectives and programs to the ten universally accepted principles of UNGC, with a special focus on principles pertaining to environmental protection. Our environmental mission includes optimizing energy, material and water consumption, mitigating impacts on climate change and air emissions, ensuring sensitivity towards biodiversity and managing environmentally sound operations.

MANAGING IMPACT ON THE SOCIETY

For achieving its CSR objectives through implementation of CSR programs, we continue to allocate 2% of previous year's Profit after Tax (PAT), as the annual CSR budget. As a part of the due diligence to undertake meaningful projects, a cross-functional committee comprising Heads of various functions was constituted at the corporate level in 2010. A CSR sub-committee was also constituted at the Board level to enhance governance of our social performance in 2010. Further, CSR parameters and performance indices are included in the MoU signed between GAIL and MoPNG. Our CSR approach has been discussed in detail in our last year's Sustainability Report FY 10-11, Value Beyond Business, in the section- Contributing to Community Development.



A comprehensive system involving a standardized agreement signed with executing partner and well defined project milestones and timelines, is in place to ensure selection and execution of credible and realistic programmes with sustainable impacts bringing efficacy to the process and self-sufficiencies among the beneficiaries. From the year 2011-12, an annual assessment of the flagship programmes, to evaluate the positive impacts of the programmes and the shortcomings traced, is also being undertaken. This 'Innovation in Process' of CSR Project-implementation is an acknowledged achievement of the Company and the CSR team is striving to further hone the system and processes, through professional guidance from reputed institutes like Tata Institute of Social Sciences and other third parties.

MANAGING IMPACT ON THE ENVIRONMENT

GAIL has instituted two core sub committees to the Board of Directors- the HSE committee and Sustainable Development committee that are at the helm of decision making process for all initiatives related to sound environmental management. All steady-state plant operations of GAIL are certified under ISO14001 environmental management systems. We have launched our sustainable development policy and SD aspirations 2020 that clearly indicate our direction and focus areas. Sustainable Development is also part of our GAIL's MoU targets with MoPNG, Government of India, primarily comprising of projects on "environmental excellence". Both HSE and SD committee have a periodic review of the progress that we make against the set performance targets and initiatives. The proposed project activities on environmental excellence are percolated to each of

our manufacturing sites through IMoUs and driven through site level teams chosen based on project specific expertise and competency.

COMMUNITY DEVELOPMENT

Our operations are mostly situated around remote dwellings that lack basic utilities and infrastructure. Following the 'Project Based approach' as envisaged by the DPE as also in the GAIL's CSR policy, CSR Programmes have been implemented, primarily in and around the rural areas adjoining major GAIL work centres/installations. Cognizant of this fact, we have extended our support towards construction and renovation of public utilities/buildings and provision of basic health and educational infrastructure to improve living conditions in various villages adjoining our operational units. We focus on villages that have witnessed low economic progress in the past many years and conduct livelihood programs for families in these villages, particularly small and marginal farmers, to educate them on the current market trends and possible rural business models that can boost their income levels and enhance their standard of living. We also work with other oil and gas PSUs towards provision of LPG connections to BPL families under Rajiv Gandhi Gramin LPG Vitruk Yojana. A case to reckon with was at Khandasar, a small hamlet in the district of Shahjahanpur, 175 kms from Lucknow. We analysed that the region was in dire need for roads, proper drainage, sanitation and illumination. While holistic development of the region was desirable, we focused on the critical needs and prioritized tasks accordingly. We constructed roads and boundary walls for ponds, installed solar lights, and provided clean drinking water through handpumps and borewells, to address the infrastructural needs of the village.





Anhad Gram Community Friendly Initiative



CASE STUDY

Need Identification study

In FY 11-12, GAIL commissioned a study to identify the needs of the people living in the vicinity of its plants and installations including Pata, Vijaipur, Jhabua, Khera, Hazira, Rajahmundry and Agartala. The primary aim of the study was to plan CSR interventions of GAIL for FY 12-13 in its operational areas. The report prepared by the external agency assessed needs across all of the above operational units by covering various aspects such as socio economic profiles, educational status, livelihood sources, water availability, sanitary conditions, credit availability, etc. The need identification exercise helped us arrive at focused intervention areas across our facilities to ensure maximum impact through careful planning and deliberation on pressing needs of communities neighboring each of our units. The following intervention areas were identified:

- ✕ Pata and Vijaipur: Provision of solar lights, support in self-employment initiatives and watershed management
- ✕ Jhabua: Provision of toilets at school, training on healthy habits, watershed management
- ✕ Khera: Provision of community toilets and watershed management
- ✕ Hazira: Vocational training
- ✕ Agartala: Promotion of animal husbandry and provision of potable drinking water
- ✕ Rajahmundry: Vocational training and provision of toilets

CASE STUDY

Anhad Gram Village Development Program in Jhabua

Project Anhad Gram, which means village without boundaries, aims at addressing core issues of livelihood, environment and water management. Community Friendly Movement (CFM) is the implementing agency for the project. It is conceived as a sustainable model that promotes village based enterprise to keep urban migration in check and ensure all round development of the villages covered, through creation of employment opportunities. The specific interventions planned under various projects include the following:

- *Sulndhan - Biomass briquetting to provide cleaner fuel for household use: Under this program, smokeless briquettes are created through pyrolysis process. Agro and forest waste is used as fuel instead of conventional fuels like coal, wood and cow dung pallets. This helps protect the community members from illnesses due to smoke inhalation.*
- *Pashudhan - Training and development of animal husbandry essentially under poultry and goatry: With 160 beneficiaries under 16 SHGs, the goatry project imparts modern techniques in rearing and feeding, access to equipment and green fodder. It has contributed to improved breeding among the present livestock. The poultry project benefits 42 SHGs, working towards the preservation and propagation of the native breed – Kadaknath.*
- *Jai Mrida - Improvement of water table to provide for sustainable and organic farming: The project is supporting ongoing training of over 350 beneficiaries under 30 SHGs to prepare for organic certification under APEDA, to create direct market linkages, and to access and utilize modern farming equipment, biofertilizers and community based irrigation systems. The program also facilitates training and usage of vermin composting, vermin wash, and azolla units to improve farm productivity and soil health.*
- *Post implementation the development model will encompass the following:*
- *Energy conservation due to use of alternate power and fuel sources from biomass and agricultural waste like cob, wild bushes and grass.*

- Better farm produce due to water conservation and water harvesting techniques
- Improvement in crop yield through seeds and organic fertilizers
- Forward linkages of crops (cash/farm) by introducing food processing and vacuum packing techniques to reach out to further markets
- Currently Project Anhad Gram covers 10 villages and 88 SHGs. We plan to extend the project to 15 more villages and 150 SHGs in FY 12-13.



DRINKING WATER AND SANITATION

Realizing the rising importance of access to clean drinking water in India, we have undertaken several programs to improve water infrastructure and availability around our operational units. Providing basic water infrastructure including bore-wells, tube-wells, hand-pumps, overhead tanks, and water storage facilities is a step in this direction.

Hygiene practices also continue to be a problem in India and to address this issue we have undertaken projects to improve local hygiene and sanitation practices by construction of nallas and improvement in drainage system at different rural areas where we are present. We have also extended our resources to develop sanitation system including installation of tube wells, pipelines, submersible pumps, sanitary lines, etc.

SOME OF THE MAJOR INITIATIVES INCLUDE THE FOLLOWING:

- ✂ A long term project in collaboration with Sulabh Sanitation Mission Foundation, for the holistic development of selected villages of Guna and Auraiya in the field of sanitation, with sensitization being a significant aspect of the project.
- ✂ We have also constructed public toilets and sewerage drains to provide hygienic conditions for villagers while educating them on the need for sanitation and hygiene.
- ✂ To improve the water infrastructure, we are revamping the existing water distribution system of 32 villages in Mandi Govindgarh.
- ✂ Till date we have installed 500 water tanks in the villages of Ajmer to address the problem of drinking water scarcity in the region.



CASE STUDY

Improving sanitation and hygiene practices at the village of Devrai Ka Purwa

During our need assessment survey we discovered that the village Devrai ka purwa, situated in Auraiya, UP, suffered from poor hygiene practices and lacked proper infrastructure necessary for sanitary conditions. Due to a large number of dysfunctional toilets, open defecation had become a common practice making the area vulnerable to intestinal diseases and contaminating the surroundings especially during the monsoon season. Moreover, neither solid waste nor liquid waste was properly disposed off. Both the Panchayat Bhawan and the Anganwadi situated in the village campus lacked proper sanitary facilities, whereby hand pumps were in a dilapidated condition and toilets were broken and unusable. Due to this problem, the dropout rate of students, especially girls was relatively high in the area.

The objective of the project was to improve sanitation services & hygiene practices of the village by addressing the issues of health, education, agriculture, and livelihood. To fulfill this objective we undertook the following tasks:

- 25 families were mobilized to construct a compost pit to dispose organic waste and 16 families were motivated to construct individual household toilets.
- Anganwadi toilet was restored and maintained for regular use by children.
- The village paths and drainage pipelines were cleaned by facilitating community participation.
- Regular workshops and group meetings with school children helped them adopt hygienic practices such as hand washing with soap, cleaning plates after mid-day meals etc.
- Interaction with parents on the issue of girl education helped lower the dropout rate of girls in schools.
- The villagers were made aware of various government schemes at their disposal, which they were previously ignorant of.
- The community was sensitized towards maintaining and exploring existing infrastructure

HEALTH

Most rural communities around GAIL's operational units are grappling with the problem of inadequate healthcare facilities. In response to this growing concern, we had started mobile healthcare vehicles to provide basic medical facilities in remote areas of Pata in Uttar Pradesh and Vijaipur in Madhya Pradesh. Taking this initiative forward, we entered into a strategic alliance with M/s Wockhardt Foundation to provide medical outreach services as its four major workcentres of Pata, Vijaipur, Jhabua, and Khera, extending health care support to 2,25,000 needy patients in FY 11-12.

We also helped set up telemedicine centres at various district headquarters adjoining our operational units. These centres are linked to major medical institutes and research centres and are used for both training and treatment. We conduct health camps covering ailments such as cancer, thalassemia, T.B. detection, etc. In the area of mobile connectivity, we have supported various projects by providing ambulances, mobile health outreach programs and distribution of medicines. As part of our routine healthcare programs



in neighboring communities, we have initiated several health care projects such as reconstructive surgery for leprosy patients, eye care cataract surgeries with IOL implants, T.B. eradication programs, malaria camps with treatment and free medicines, family planning etc. GAIL's own hospitals and dispensaries in its townships also extend medical treatment to the local villagers.

INFRASTRUCTURE

Infrastructure development is one of the core focus areas in our CSR policy. Most of the infrastructure work has been carried out in the field of health and education with a desirable potential for long term impact. Further, construction of village roads, culverts, community toilets, community centres and approach roads have also enhanced the quality of living and adequately contributed to the sustainable development of villages around our installations. We continue to construct check dams and water catchment areas in villages neighboring our plant at Vijaipur. The program has bolstered agriculture and pisciculture by facilitating reuse of water and more than 30 farmers of beneficiary villages are using this water for farming purposes and animal husbandry. Prior to this program, villagers had to migrate to earn a livelihood during non-monsoon seasons. However the construction of check dams and percolation tanks enables villagers to sow two to three crops a year and maintain a larger number of animals, improving their standard of living without the need for migration.

Initiatives undertaken by GAIL to improve educational infrastructure in FY 11-12:

- ✂ Construction of school buildings for deaf and dumb children at Tumkur, in the state of Karnataka
- ✂ Setting up smart class rooms in government higher secondary school at Kochi in Kerala

- ✂ Reconstruction of government primary school building at TaktuMajra in Rajpura Tehsil of Punjab state

Initiatives undertaken by GAIL to improve health infrastructure in FY 11-12:

- ✂ Construction of high dependency unit at J.K. Mother and Child Hospital at Kota, Rajasthan
- ✂ Development of a new neurosurgery ICU and O.T complex at MBS hospitals and government medical college at Kota, Rajasthan
- ✂ Construction of medical wards in government hospital at Bundi, Rajasthan
- ✂ Provision of sonography units in community health centres at Anta and Chhabra in the state of Rajasthan
- ✂ Provision of two ambulances to district hospital and 60 nefsek pumps for anti-malaria campaign to urban malaria control department at Moradabad in Uttar Pradesh
- ✂ Provision of ambulance to Akhil Bhartiya Bir Bahadur Singh Jan Seva Sansthan (NGO) at Lucknow

Initiatives undertaken by GAIL to improve road infrastructure and water management systems in FY 11-12:

- ✂ Construction of village roads in Mulavukad Pancha, Kerala
- ✂ Premix carpeting of road (~3 kms) at village Badhauchhi Kalan in Fatehgarh Sahib district in the state of Punjab
- ✂ Revamping of the existing water distribution system of 32 villages in Mandi Govindgarh in Fatehgarh Sahib district in the state of Punjab





CASE STUDY

Water conservation by construction of micro dams at Khera

Villagers near our Khera (Ujjain) plant had been struggling due to inadequate water available for drinking and irrigation purposes. They also lacked knowledge about the latest agricultural technologies that could help them conserve water and address the problem of water shortage. To educate villagers on water conservation methods and to develop water related infrastructure, a water conservation project was implemented at Khera, which involved construction of ponds, digging of wells, recharging of wells, micro check dams, etc. The project also included training villagers on ground water recharging, construction of check dam and digging of wells. Awareness was created amongst nearby villagers on water conservation techniques and utilization of minimal water for cultivation using modern agriculture techniques.

SKILL DEVELOPMENT

As quoted by India's Planning Commission, "skill building is instrumental in improving the effectiveness and contribution of labor to overall production, pushing the production possibility frontier outward and taking growth rate of the economy to a higher trajectory. By empowering the individual, it improves his/her social acceptance." However rising unemployment and gross disparities in unemployment rates between urban and rural population continue to threaten India's development story. Our endeavor is to improve employability and contribute to economic growth by imparting relevant industry skills to unemployed youth, creating greater opportunities of livelihood and facilitating socio-economic sustenance. Swavalambh is our flagship program in this direction, initiated in partnership with IL&FS skill school in 2010. The targeted beneficiaries of the program include school dropouts, undergraduate students with low marks, academically less oriented women and other disadvantaged groups. The candidates are trained in retail and facility management, and are provided basic computer skills over a span of six to eight weeks. The course equips the candidates to bridge the preexisting skill gap and better serve the demand of service sectors. Driven by the positive impact of Swavalambh, GAIL has replicated this model in Tandur in the Rangareddy district of Andhra Pradesh and Sagbara district of Gujarat, by opening similar schools in these areas.

Lending its support to MoRD's Swarna Jayanti Gram Swarozgar Yojana (SGSY) to promote employment in rural India, GAIL established the GAIL- AROH Skill resource training center. The program, executed under a PPP model with the MoRD, aims at providing non-formal education to school drop-outs aiding in employment of around 7,000 youths in the areas of UP, Rajasthan and Haryana in a span of two years. Around 3,500 BPL youth have adopted the SGSY scheme and benefited from the program, till date. Another project implemented under AROH called 'Project Garima' trains mothers who attend non formal education centres, in skills like cutting, tailoring, embroidery, and handicraft making. The project assists them in developing market linkages, thereby boosting their family income and ensuring greater enrollment of their children in skill development programs. We also promote the empowerment of differently-abled and physically challenged people by providing them specialized motor vehicles, medical aids, equipments and infrastructural support.

CASE STUDY

Establishment of Blanket Weaving Training and Manufacturing Unit at Pata

Engagement surveys with villagers at Pata yielded a pressing need to create employment opportunities in the region. During these interactions it was discovered that a few women carried out carpet weaving at their homes under the banner "Kuteer Udhyog". However limited availability of raw material and consequent low business volumes were key concerns in ensuring the sustainability of their business. Moreover these women were contracted on piece rate basis, receiving minimal wages, while the raw material suppliers who picked up the finished carpets pocketed large margins.

To address this problem we decided to leverage the skill of these women to meet the demand of one of our initiatives which involves distribution of blankets to poor villagers near our operational units. So far we had been procuring blankets from Kanpur. However, our engagement survey informed us

that we could tap into the local talent of these women and manufacture these blankets in-house and buy them from local markets, thereby creating an employment opportunity for the villagers. The local community would benefit from cheaper products while the women weavers would benefit from higher volumes and margins. To kickstart this project, we collaborated with a NGO CVPS and a survey was conducted to study the market potential of establishing a manufacturing unit. Based on the response, the first unit was established in Phaphund with 5 looms in November 2011 with two trainers providing blanket weaving training to 15 women trainees for 10 months. A project coordinator was appointed to supervise the project including raw material procurement, selection of trainees, registration of their SHG, product market linkages, reporting, coordination etc.

The project has benefited 15 women who have been trained in blanket weaving and have already produced more than 200 blankets. The profit generated from this project will be reinvested and deposited in SHG's account as rolling fund to ensure its sustainability. The project has received a warm response from other nearby villages and will be replicated in the villages of Kanho and Khanpur in FY 12-13.

EDUCATION

In April 2012, the Ministry of Human Resource Development declared that despite doubling fund allocation under Right to Education (RTE), one third of the states and union territories have seen an increase in the dropout rate in primary education, including progressive states of Tamil Nadu and Gujarat. The reasons for this are poor quality of education and abject poverty. Alleviating this problem, GAIL's initiative "Padho aur Badho" in collaboration with NGO AROH, aims at providing education to children residing in urban slums in Delhi. Many of these children earn their living as ragpickers and other menial jobs. The initiative aims at rehabilitating these children and giving them basic education through non-formal training to bring them to the mainstream. More than 11,000 students have benefitted in the last 2 years from GAIL's education related programs.

We have continued our efforts to increase the impact and enhance the coverage of our two flagship

programs - 'GAIL Utkarsh' and 'E-Shiksha'. The programs, focused on IIT-JEE coaching and computer literacy respectively, develop capabilities and prepare students for a brighter future. We continue to enhance the educational infrastructure in the vicinity of our facilities through construction of class rooms, laboratories, libraries, hostels, smart classes, toilets and drinking water facilities in government schools in rural India. These support activities have improved the attendance of students in schools, contributing to their creativity and independence. We have also collaborated with other oil sector PSEs for setting up of an Institute of Petroleum Technology in Assam.

"E-Shiksha"

One of the most important interventions by GAIL in the field of education has been the E-Shiksha program wherein we have set up computer labs in self-sustained power-equipped mobile vehicles with qualified instructors and teaching aids. The program enables students to accomplish their computer related school curriculum through the mobile computer aided lab and makes computer education accessible to government schools in remote areas. After school hours, the mobile computer vehicles are also available to the villagers of Pata and Vijaipur, for adults to take up courses in typing and basic computer literacy. The program has significantly augmented awareness on computers and technology in nearby villages. Moreover a completion certificate awarded by our NGO partner to successful candidates, for courses registered with the Ministry of HRD, lends credibility and has helped many candidates get employment with local contractors as clerks or book keepers.





Shaping the Future

"GAIL Utkarsh"

Under this program, GAIL offers scholarships along with CSR to students living in economically backward sections for coaching required for engineering entrance examinations. Typically, coaching classes for engineering entrances are very expensive in India and often unaffordable and inaccessible by a large section of our society. We designed this program to ensure that well deserving students in backward areas are not denied the opportunity to study at prestigious institutions like IITs and NITs, due to mere lack of resources and tools to prepare for these exams. Keeping this in mind, the scholarship provided by us covers tutorials, food and lodging expenses aimed at mentoring and preparing students for these competitive exams. This program has generated a hope in the state of U.P. & M.P. where we have major business operations. In 2009, when the program started only 122 students showed interest from different communities in joining the program. In 2011-12 more than 4000 students showed interest and appeared in the written test.

We also impart special education training to neglected disabled children, in collaboration with our implementing partners. This is done through provision of computer based visual speech training equipments, audio visual projectors, computers with special software for the visually challenged, and hearing aids.

COMMUNITY ENVIRONMENTAL PROGRAMS

We have been proactively partnering with local bodies around its operations with an aim to protect and conserve the common environmental resources that are necessary for sustenance of local communities. Some of the initiatives we have taken in this regard include:



✧ SOLAR LIGHTING:

We have initiated two pilot projects near our petrochemical complex in Pata for installation of solar lights and illuminating villages with solar lanterns in collaboration with TERI's Lighting a Billion Lives Initiative. The overwhelming response by the community has led us to replicate this project in a tribal village near our plant at Vijaipur. Up till 2011, we have distributed more than 1,000 solar lights in rural areas experiencing acute electricity shortage. To source solar lights, we



have tied up with experts in solar products like Tata BP Solar and CEL. Some initiatives undertaken to promote solar lighting in FY 11-12 include:

- ✧ Provision of solar lights to villages in Moradabad district
- ✧ Provision and installation of solar street lights at Jallah village in Fatehgarh Sahib district
- ✧ Provision of solar lights to villagers in Davangere
- ✧ Provision and installation of solar lights in villages of Laxmipur First and Gun Gun Kota in Gorakhpur district

✧ WATER MANAGEMENT:

Our initiatives in rain water harvesting have resulted in an increase in the water level in many villages and have facilitated increased irrigation and cultivation of crops. Increased water availability has enabled adoption of agro farming and inter-cropping practices. Several other water conservation initiatives such as recharging of ground water aquifers and construction of check dams have been aptly supported by GAIL, serving the twin purpose of environmental protection and infrastructure development.

✧ WILDLIFE PRESERVATION:

We have been lending support to Mobile Veterinary Services (MVS) units in the North-East through provision of vehicles for Save the Tiger Project in Malenad-Mysore Tiger conservation area, along

with construction of a Field Research Centre at Melinahuluwathi, Bhadra Wild Reserve (implemented through Centre for Wildlife Studies, Bangalore) and support to the Mobile Veterinary Service units running in the wildlife sanctuaries of Manas National Park, through Wildlife Trust of India.

✕ OTHER INITIATIVES:

GAIL has also worked towards developing a gas-based crematorium in New Delhi, installation of bio-gas plants for poor slum-dwellers and development of environment parks for thousands of slum dwellers.

Right-of-Way and Resettlement & Rehabilitation

We follow stringent design and management standards during laying of pipelines. Our pipelines comply with international design standards such as ASME, API, DIN, ISO and National standards like OISD. All pipeline projects undergo a detailed Environmental Impact Assessment and requisite clearances are taken from Ministry of Environment and Forests at planning stages itself. While planning pipeline routes, we analyze options that have lower impact on ecology and environment. Areas such as those that is ecologically sensitive, geographically unstable, with lesser obstacles- railroads and highways. All contractors involved in pipeline laying operations are mandated to limit activities only within the approved Right-of-way. We adhere to Indian regulation on Resettlement and Rehabilitation; however we have not envisaged any R&R within our projects and operations this year.

ENVIRONMENTAL PERFORMANCE OF OUR OWNED OPERATIONS

MANAGING WASTE

We consciously measure and monitor our products' environmental impact at all stages, from the extraction of raw materials to end-of-life. Waste management is a critical aspect of our operations and we have taken several steps to handle and dispose- off waste more efficiently by adopting various recycling, recovery and

reclamation initiatives. The most significant waste products generated from our operations include used oil, lube oil and oily sludge. We have appointed CBCP authorized waste handlers to process and dispose-off waste products ensuring minimum impact on the environment. We continue to recycle slop oil and spent alumina, two of the major waste materials from our petrochemicals complex in Pata. Recycling these products reduces material costs as well as the amount of waste going into the landfills. It also lowers the cost of transporting waste to the landfill.

CASE STUDY

Disposal of E-waste at GTI

A proposal for induction of new methodology directing safe disposal of e-waste has been initiated at our GTI campus. The following initiatives have been implemented in this regard:

- Proper collection and storage of e-waste arising out of consumables such as printer cartridges, toners and batteries
- Timely collection of all used batteries by service providers
- Efforts to introduce a reverse supply chain of e-waste
- Educating OEMs on the need to collect e-waste from their respective sites
- Creating awareness among users to ensure proper collection at source and timely return of e-waste
- Issuing new consumables only after collection of used cartridges/toners from users



The project will yield the following benefits over a period of time:

- *Environmental Protection: Safe disposal and recycling e waste will help in reducing carbon emissions.*
- *Protection from Health hazards: Unsafe disposal of toner ink could lead to acute health hazards such as irritation, redness and swelling of skin. In case of prolonged inhalation, it creates irritation of the respiratory tract. The International Agency of Research on Cancer (IARC) has classified carbon black as a carcinogenic material which is used in toner powder. Safe disposal will therefore reduce the potentially adverse health impact attributed to improper disposal of e-waste.*
- *Storage space utilization: Effective disposal of e waste will also contribute to optimal usage of storage space in our offices.*
- *Compliance with government's e-waste policy: This initiative will also help us become compliant the 'E-waste Management and Handling rule, 2011' mandated by the Government of India.*

MANAGING OUR IMPACT ON BIODIVERSITY

We are mindful of the fact that most of our operations, particularly the pipelines, edge around areas of high biodiversity value and we make a conscious efforts to preserve these areas in their natural form, regularly assessing and managing any impending risks to the flora and fauna. As a foundation to our biodiversity management strategy, all our operations and projects are preceded by stringent procedures of environmental impact assessments, and corrective measures are planned and undertaken at the earliest possible stages itself. Although none of our core operations are close to protected or reserved biodiversity areas as defined under National norms, as a procedure, GAIL mandates all its OIC's to provide a declaration on clearance of their individual locations on presence / emergence of biodiversity hotspots.

We have initiated biodiversity management activities across our work centres in Usar, Pata and Samakhiali. For instance, at Pata we corrected the high alkalinity in soil through extensive soil treatment and restored the soil balance, thereby contributing to an increased green cover in the area. At the Samakhiali unit, situated in the barren lands of Kutch district, the hot weather combined with saline soil precludes healthy vegetation growth. To boost vegetation growth in the area, our employees made a resolution to plant around 10,000 saplings in 2009 and 7,500 saplings in 2011. Within the periphery of our control, green belt area spans over 17.2 million square meters, which is approximately 41% of our total land holdings - much beyond regulatory requirements.

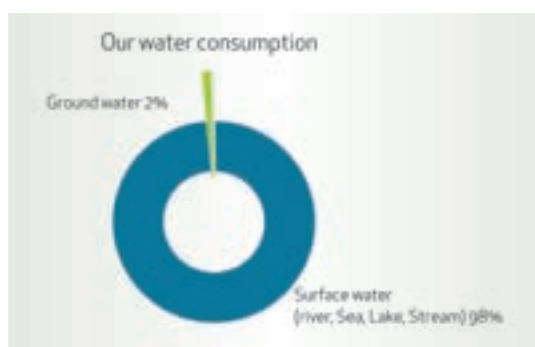
CASE STUDY

Conservation of Native Plant Species at GPU, Usar (Maharashtra)

Project Dharohar is a step towards partaking in the "National Mission for Preservation of Ecological Balance and Maintenance of Bio-diversity". The project looks at exploring native plants conservation landscaping in Usar, to reduce pollution and minimize negative impact on the environment from our operations. The plant located in Alibaug in the Western Ghats, with its available land and other resources intends to conserve these treasures for our coming future generations. We plan to conduct knowledge disseminations and capacity building for this project by 31 January 2013.

MANAGING WATER RESOURCES

With increasing water deficit in the country and constantly declining water tables, it has become paramount to conserve critical water resources. Freshwater accounts for a meager 2.5% of global water resources, of which only a third is accessible for human consumption. We have taken several steps to optimize our water consumption and also to assist nearby communities to gain easy access to water resources. During the year, 99% of water was sourced from surface water bodies. We continue to explore opportunities to harvest rain water to substitute surface and ground water consumption at our facilities. In 2010, rainwater harvesting was carried out in a land depression formed due to excavation of soil for construction purpose at the Gandhar unit. Satellite imagery and contouring was used to prepare a scheme to divert the run-off water effectively into the pond. The rainwater harvesting pond thus created was used to collect over 6,000 m³ of rainwater during the monsoon season. To ensure the sustainability of our water conservation initiatives in nearby villages, we continue to organize awareness sessions for villagers on conventional methods of rainwater harvesting near Usar unit, and also provided them with technical assistance to conduct water quality monitoring in the villages.



Even though majority of our units do not yield significant wastewater streams, we make a conscious effort to discharge treated waste water in a responsible manner. Emphasis is laid on maximizing the recycling of treated water within our own operations, thus impacting our overall water footprint positively. During the year, out of 2.25 million m³ of wastewater generated, 1.33 million m³ was disposed outside our operational boundaries and 0.87 million m³ of water was recycled / reused back in to the system. At one of our locations, the waste water is discharged outside battery limit. The average values of the following parameter for the month of May 2011 & Jan 2012 are:

- ✂ TSS- 68.6 mg/l
- ✂ BOD- 16.26 mg/l
- ✂ COD- 228.9 mg/l
- ✂ Sulphide- 0.72 mg/l
- ✂ Oil & grease- <10 mg/l
- ✂ Phenolics- 0.019 mg/l
- ✂ pH- 7.36

This year, we initiated one of our major water stewardship programs at Vivekananda Sporting Complex in Pata, where treated sewage water would be reused for horticulture and maintenance activities, reducing fresh water consumption by more than 50%. Some of the other projects initiated in the year include:

- ✂ **Project Jaldhara, watershed management at Vijaipur (Madhya Pradesh):** The project involves activities like water balance & audit through accomplishment of various studies such as geophysical, ground water and hydrological studies to explore watershed management potential in the area.
- ✂ **Capacity enhancement of water harvesting reservoir at Gandhar (Gujarat):** The facility's sole water source is from a local body, GIDC. We have implemented rainwater harvesting initiatives that will help conserve fresh water and use it for activities such as horticulture, greenbelt development and to supplement fire water in the months following the monsoon season.



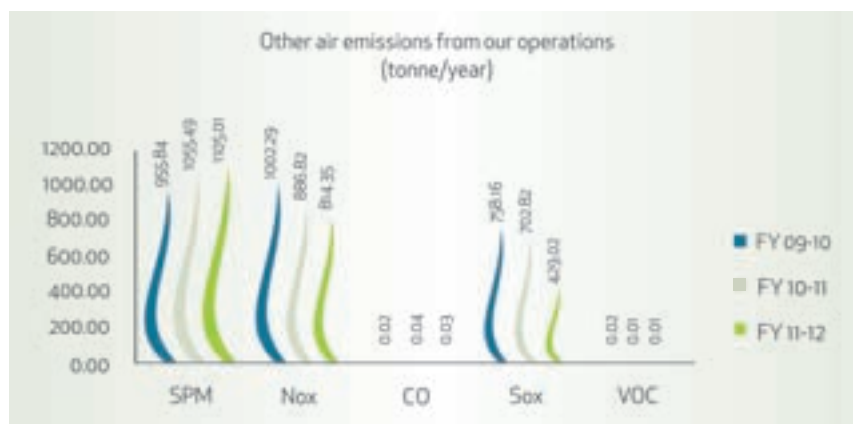
- ✂ **Zero rain water discharge at Samakhiali (Gujarat):** Our plant is located in the arid Kutch district where ground water remains a prime source. At present, there are no facilities to transfer rainwater from storm water drains in the plant to recharge the reservoirs. Having identified this need, we are in the process of developing adequate infrastructure to enable transfer of rain water collected through storm water drains to recharge three underground reservoirs.
- ✂ **Rainwater harvesting at RT- Loni and RT- Madanpur (NCR):** The NCR region experiences heavy rainfall during the monsoon season and recognizing this, we have taken up rain water harvesting in various locations in the terminal to replenish ground water.
- ✂ **Project Behti Dhara - piped canal project at Vijaipur (Madhya Pradesh):** The project intends to ensure sustained water availability by construction of a piped canal from Gopi Sagar Dam to the plant. Currently, the open canal is in a poor condition, with seepage, water run-offs and thefts amounting to significant water loss. The project will ensure water availability for GAIL's upcoming C2/C3 project. It will also generate additional revenue for the state of Madhya Pradesh by realizing the value of water lost in the open canal, without over burdening the dam reservoir.

Under our SD aspirations 2020 we have committed to reduce our water consumption intensity by 45% and increase our wastewater recycling by 5% by 2020 in comparison to 2010 baseline. The overall water consumption intensity & waste water recycled as % of waste water generated are presented in the table below:

	FY 2009-10	2010-11	2011-12
Water Consumption Intensity (m ³)/Crore)	505.2	419.7	344.9
Waste Water Recycled (% of WW generated)	43%	45%	39%

REDUCING AIR EMISSIONS

Air emissions are one of the most important environmental challenges associated with Oil and Gas industry. We are well-aware of this fact and have taken several effective measures to abate air emissions arising from our operations. We have implemented flaring systems at all major locations to prevent the discharge of hydrocarbons directly into the atmosphere. All boiler and furnace stacks are equipped with on-line analyzers for continual monitoring of emission levels. Across all facilities, we strictly ensure that air emissions are controlled below the stipulated regulatory requirements. We succeeded in reducing our SO_x emissions by 38.95% over the last year, while the SPM emissions increased by 4.69%. We stringently follow the national regulations on the phase out of ozone depleting substances. Our operations involve the use of R-24 and R-134a, primarily for chilling and air conditioning. Due care is taken through a stringent maintenance process to prevent unwanted leakages of these gases directly into the atmosphere.



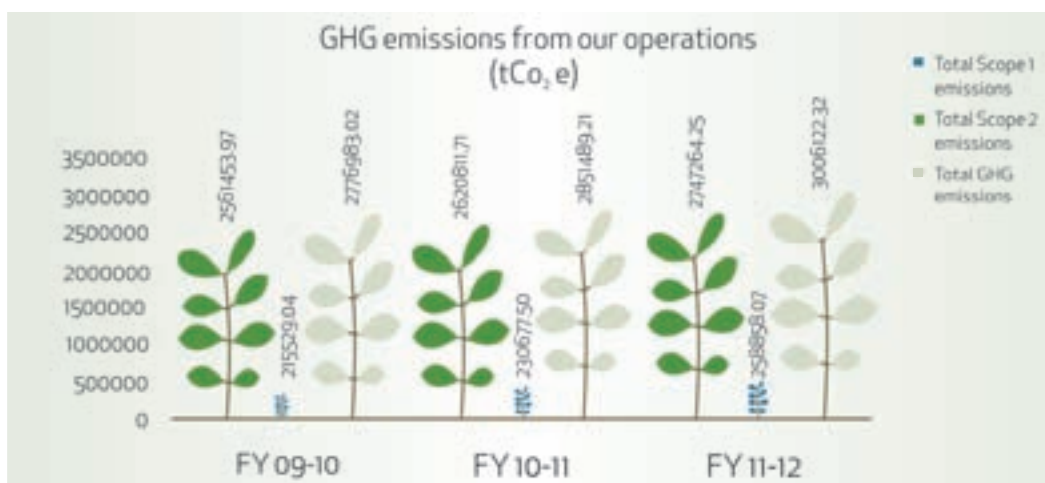
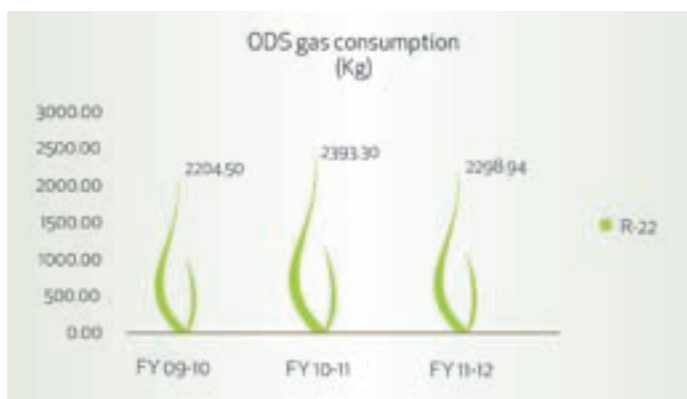
We have adopted several initiatives to account for GHG gases emanating from our operations. GAIL has taken a lead amongst public sector enterprises to define a target of reducing GHG emission intensity (total GHG emissions/ gross sales) by 33% till 2020 over the 2010-11 baseline. We are currently mapping our Scope 1 and Scope 2 emissions and part of Scope 3 emissions related to employee commuting

and business travel. During the year, scope 1 emissions increased to 2.75 million tons of CO₂e, while Scope 2 emissions increased to 0.26 million tons of CO₂e in comparison to the previous year. Our move towards a lower carbon growth in the future will be driven through a number of target initiatives such as process optimization, energy audits, adoption of ISO 14064 GHG management systems, tapping opportunities for alternate use of CO₂ emission directly released in atmosphere, afforestation and use of modern IT infrastructure. Some of the initiatives adopted in the year to reduce GHG emissions include:

✧ At Gandhar, liquid hydrocarbon vapours were recovered by the installation of vapor recovery compressors that helped to reduce 202 MT of CO₂ emissions.

✧ At Vaghodia, the fire protection system for the LPG control room was replaced from Halon 1301 to Novec™ 1230. The phased out fire suppressant material (Halon) had ozone depleting potential and global warming potential of 10 and 6,900 respectively. In comparison, the new fire suppressant material, Novec™ 1230, has ozone depleting potential and global warming potential of 0 and <1 respectively.

✧ Setting up of heat recovery steam generation to recover waste heat of gas turbine compressor at Vaghodia. It was estimated that a saving of 80,589 tonnes of CO₂e would be achieved if the same energy is assumed to be produced by natural gas for steam generation. The project will produce 60 MT/Hr of super heated steam equivalent to 44,635 MWH/annum of energy.



CASE STUDY

Fugitive Methane Emission Measurement Initiatives under the Global Methane Initiative of US EPA

GAIL has initiated the identification and implementation of methane emissions reduction through a pilot project at Vijaipur. The project will help us reduce the GHG footprint of the operations through reduction in GHG emissions, minimize product losses and improve overall operational efficiency and safety. Going forward the initiative will be scaled up to involve the following major milestones:

- ✧ Adoption of low emission technologies like vapour recovery systems,
- ✧ Low emission packing/ seals in compressors, pumps and valves.
- ✧ Flare gas reduction and utilization as PNG/ CNG
- ✧ Adoption of technology for identification of fugitive emissions like Infrared/ Thermal imaging and Leak detection systems

Under our SD Aspiration 2020, we have committed to reduce our GHG emission intensity (Scope-I & Scope-II) by 33% in comparison to 2010 baseline. The overall GHG emission intensity is presented in the table below:

	FY 2009-10	2010-11	2011-12
GHG Intensity (tCO ₂ e /Crore)	109.4	86.7	73.6



Customers: addressing customer needs

Addressing customer needs is a non-negotiable activity. Every customer has a certain degree of functional expectation from our operations. When we deliver value and benefits to the customers beyond their expectation we create a set of loyal customers. With market de-regularization on the anvil, it is very important for us to retain these customers as it is directly linked to our financial performance and eventually creating a sustainable future for all.

It is our constant effort to always be the first choice of our customers. While there has been a global movement amongst industries to slowly graduate towards products and services that minimize impacts on environment and societal resources, we have been a part of this since inception. GAIL is the leader in India in Natural Gas logistics, a cleaner fuel in comparison to conventional options such as coal or crude oil. Over the last 10 years we have established a firm footing in City Gas Distribution (CGD) to ensure energy access even to the marginalized section of consumers. At present our CNG network is functional in seven states of India having 105 mother stations, 187 online stations, 87 daughter boosters and seven daughter stations with a total of 386 CNG retail outlets catering to approximately 6,00,000 vehicles; while the PNG network is functional in 16 cities across 8 states.

We believe that plastics and plastic products are environmental friendly substitutes to other products across various applications. Plastics can be recycled back into the system, thereby reducing the need to extract virgin natural resources. We have partnered with Indian Centre for Plastic in the Environment (ICPE) on educating and building awareness of consumers on the benefits of plastic products and the need to – create a secure plastic waste management system and maximize recycling of plastic waste back into the system. We continue to keep track of our customer satisfaction index across our businesses and hone ways and means to engage and work closely with our customers towards addressing any areas of concern.

CUSTOMER MANAGEMENT AND ENGAGEMENT

The Business Development & Marketing Committee holds prime responsibility to make strategic decisions that help us address the demand of our consumers. Critical decisions such as developing policies, rules and regulations relating to marketing of Natural Gas, LPG, polymers and other products are under taken by this committee. In addition to this, the stakeholder grievance committee is also responsible for resolving the concerns raised by our customers.

We are always focused on how well we serve our customers and evaluation of Customer Satisfaction Index (CSI) is a key element of our IMoU target. Every year, we conduct business-wide customer satisfaction survey to gauge their satisfaction



Engaging with Customers

levels across a number of well-defined parameters such as product quality, usability of product, technical support, delivery of material, packaging, service quality, customer concerns and suggestions for improvement. This year we enhanced our efforts to increase engagement with a variety of our customers on sustainability issues. Being at a fairly nascent stage, this year we focused on understanding customer perceptions and awareness on sustainability. While customers believe that GAIL performs well on customer centred parameters such as quality and delivery, their awareness about GAIL's business responsibility approach and initiatives was low. Energy conservation and increased focus on social responsibility were seen by customers as two prime areas of improvement.

We are using the power of technology and research for the addressing fast changing customer needs, enhancing product and service quality and providing sustainable options for the future. Making "customers' ease" as the focal point, we have now implemented 100% online banking. The customers are intimated about the new products and price through SMS and an online link is provided to capture customer grievances or complaints in respective business areas. Customer satisfaction levels are calculated for each business segment on a quarterly basis based on customer feedback received through an online system and third party meetings. Our marketing network consists of Petrochemical Marketing Group (PMG) at Corporate Office, Marketing Services Group (MSG) at GAIL Pata, 12 Marketing offices and strategically located stockist centers to ensure that customer needs are met on time. Customer feedback is taken as a response to a set of questionnaires



through the involvement of Corporate Marketing department, TQM department, external consultants and our marketing personnel. The overall CSI for FY 2011-12 improved to 89.44 from 88.55 last year.

GAS MANAGEMENT SYSTEM (GMS)

We operate India's largest gas transmission networks with over 9500 kilometres of high pressure natural gas trunk pipelines; LPG transportation pipeline of over 2038 kilometers including the world's longest exclusive LPG pipeline of 1250 kilometres; seven gas processing facilities with total LHC product of about 1.44 million MT which mainly included 1.124 million MT of LPG, 0.146 million MT of Propane and 0.146 million MT of SBP solvent and Naptha; and gas-based petrochemicals complex with an installed capacity of 4,10,000 TPA of Polyethylene (HDPE and LLDPE). To maintain this wide network, we have developed an enterprise-wide Gas Management System (GMS) integrated with SAP, covering our entire natural gas pipeline network of around 9,700 kilometres.

Under the GMS, the entire order-to-cash cycle has been automated and is available on real time basis from upstream gas supply, gas transportation to billing, payment and final receipt of payments. This system helps in monitoring vital aspects of the pipeline network on a real time basis including information regarding network utilization, gas sales, volume transferred, revenue generation and price variations.

The system thus ensures higher transparency and objectivity, besides improving efficiency through central aggregation of all information and data. Information is made available to customers directly through the GMS portal facility, thus empowering them to better plan and utilize the gas supply. This also ensures our commitment towards improved customer service and satisfaction.

MEETING AFFORDABLE ENERGY NEEDS

In order to make hydrocarbon products affordable to domestic consumers, GAIL along with other Oil and Gas Public Sector Enterprises is sharing the under-recoveries on petroleum products. This is governed by the directive of Government of India. The under-recoveries are given as discount to Oil Marketing Companies (OMCs). Since the year 2003-04, the under-recoveries have aggregated to an amount of INR 13,8330 Million. During this year, GAIL has provided INR 3,1830 Million on account of sharing these under-recoveries.

WORKING WITH CUSTOMERS

To effectively solve customers' problems and give them tailor made solutions, we have initiated a technical wing which links the customers directly to the plant. GAIL Polymer Technology Centre (GPTC), located at Noida, serves as a platform where customers can gain technical solutions and insights that help address their queries linked directly to the



Sharing Sustainability Initiatives during Felicitation Ceremony of All India Top Customers & Consignment Stockists

plant and provide them with plastic testing facilities for raw materials, additives and end-products. GPTC aims at providing various services, including technical, to our valued customers to maintain their satisfaction and loyalty. We undertake complete responsibility to guide our customers through our services and offerings to develop, promote, and inform them about the new products and applications.

CASE STUDY

Customer Engagement

Recently, a meet of Natural Gas customers' of Tripura was organized by Kolkata Zonal Office at Agartala. The main agenda of the session was to engage and interact with customers on current initiatives structured for them and future plans such as e-banking, e-ledger, e-invoicing, CSI and Customer Account Management System. They were made aware on the roles and responsibility of GAIL, O&M Agartala to ensure uninterrupted supply of gas to all the customers and to expedite resolution of customer queries and problems. A detailed presentation was made on GAIL's overall activities and new initiatives, with special focus on gas availability and supply scenario in Tripura region and customer services planned in the future. The engagement was concluded with a session to understand customer suggestions and feedback to address critical issues. Such meets are organized regularly in order to educate and create awareness amongst the customers on the usage, planning and handling of our products.

PRODUCT RESPONSIBILITY

We are committed towards developing safe, environment friendly and economical products. We are an ISO 9000 certified company and pursue this vision through an organization wide Total Quality Management (TQM) system. Our approach embeds a comprehensive look into the life cycle impacts of our products in terms of safety and environmental impacts and to seek technologically and commercially viable solutions to mitigate them. On the petrochemical side G-LEX (brand name for HDPE) and G-LENE (brand name for HDPE and LLDPE) are our major products.

While plastics have been traditionally considered as environmental pollutants, we perceive them as eco-friendly due to their high recyclability. Plastics reduce the burden of environmental resources that would be used to create alternatives for similar

applications. However, we understand the challenge associated with end-of-life management and handling of plastics. Through our various communication channels, we have initiated a campaign to raise awareness on plastics and propagate the key message: "Say Yes to Plastics, Say No to its Misuse". In order to take this responsibility forward, we have partnered with ICPE to conduct further research and analysis on this matter. For more information please visit- http://gail.nic.in/final_site/index.html

Natural Gas, our prime product, is a cleaner alternative to polluting fossil fuels such as coal and crude oil. However, handling and transportation of natural gas presents an enormous safety challenge. We have developed adequate systems to ensure that the benefits of this essential fuel reach the society without compromising on safe use.

RESEARCH AND DEVELOPMENT

We continue to have a strong focus on developing new products and processes to address the ever-changing customer needs, through our research and development initiatives. The projects undertaken in this year include:

- ✂ Detailed feasibility and project report prepared on the basis of experimental wells for recovery of Land Fill Gas (LFG) from municipal solid waste
- ✂ Bench scale study on continuous phase operation for conversion of plastic waste/ low polymer wax to value added products





- ✂ Development of nano-composite materials for hydrogen storage
- ✂ Assessment of coal seams at Barmer for Underground Coal Gasification (UCG)
- ✂ Development of light weight composite cylinders for CNG storage for better economics and safety for consumers.

R&D is also a part of the MoU between GAIL and Ministry of Petroleum and Natural Gas, Government of India. This is based on the R&D guidelines for CPSEs, published by Department of Public Enterprises. In FY 2011-12, the total expenditure towards R&D projects

stood at INR 40.31 Crores. Going forward in FY 2012-13, we plan to invest on projects in business areas like pipeline transportation, LNG, energy efficiency and CO₂ utilization. A pilot scale project is planned for conversion of plastic waste to hydrocarbons. We also plan to conduct testing of Solid Oxide Fuel Cell (500 Watts capacity) being indigenously developed under the New Millennium India Technology Leadership Initiative (NMITLI) of CSIR. In order to address the concerns relating climate change and its related impacts, we are conducting research towards development of a catalyst for conversion, storage and reutilization of CO₂.

CASE STUDY

Conversion of landfill gas to CNG

GAIL has collaborated with the Municipal Corporation of Delhi to extract landfill gas at Ghazipur landfill site for conversion to CNG. A CNG station running on landfill gas will be the first of its kind in the world. Not only will the project generate a cleaner fuel but it will help combat global warming by significantly capturing methane which would have otherwise been released into the atmosphere. This project has been appreciated by the Platts Global Energy Awards Committee for commitment towards harnessing all sources of energy.

CASE STUDY

Conversion of waste plastics into fuel

We have conducted bench scale tests to assess the potential of converting waste plastic into fuel, and these tests have given encouraging results. We plan to conduct the pilot scale studies in the next phase. R&D efforts are underway to develop new polymer grades to better suit customer requirements

CASE STUDY

SAY YES TO PLASTIC, SAY NO TO ITS MISUSE!!

Plastic have played an important role in the transforming the quality of human life, impacting activities ranging from clothing to shelter, transportation to communication and entertainment to health care. On account of properties, such as lightweight, high strength and ease of processing, plastics meet a large share of the materials needs of man at a comparatively lesser cost and causing lesser environmental implications, if managed appropriately across life cycle.

Plastics are employed in myriad applications where they actually conserve natural resources. About 40-45 percent of plastic is used in plastic packaging alone. For example, aseptic packaging of food in barrier packaging films save refrigeration cost and thereby capital and energy. If we compare plastic packaging with paper – one ton of plastic packaging saves 8-10 trees, generates 60 percent less green-house emission and consumes 40 percent less energy. Edible oils and milk packaged in flexible packages eliminate the use of energy-intensive tin and glass containers. Use of plastic bags has reduced the weight of a milk bottle from 450 gms to 2.5 gms. Rigid HDPE barrels used for bulk chemical storage eliminate resource-intensive and expensive steel drums. Apart from conserving natural resources, use of plastics in such applications saves transportation fuel as plastics are substantially lighter than tin, glass or steel. From advanced polymeric membranes to PET bottles, plastics also play an important role in producing and storing potable water in a safe and cost-effective manner. About 400 plastic chairs replacing that of wood means saving 8-10 trees, while plastic pipes in agriculture increases crop yield by 20-40 percent. You can also visit http://gail.nic.in/final_site/Plastics_for_you.html for more information.

The fact that plastics are made from hydrocarbons derived from petroleum has raised questions concerning its sustainability. However, the real issue is with waste management. Regulating littering habit, repeating use of plastic waste, facilitating door to door collection, installing waste collection boxes and encouraging alternate disposal methods like energy recovery and reuse will help to considerably reduce the negative impact of plastics in the environment. Further, the eco-friendliness of plastics becomes apparent when the total "life cycle" is evaluated against an analysis of raw materials, energy, effluents, and methods of disposal of a material from its origin to its final disposal.



Products made from GAIL Polymers

Suppliers : Building partnerships

Our supply chain is a complex system of organizations, people, technology and resources that helps us in transforming natural resources into finished product(s) and finally delivering from supplier to customer. Our aim is to build symbiotic partnerships with our suppliers in order to ensure steady production in our plants and ensure their well-being as well. A dedicated supply chain will help us realise our growth plan at a faster rate, thereby accelerating our efforts towards shaping the future sustainably.



We develop products that create value for our customers by relying on our vendors, contractors and other business partners who support our operations by delivering high quality raw materials and services that are vital for our operations. Supply chains are highly prone to business misconduct and hence we take complete responsibility to promote effective vigilance amongst our vendors and employees to ensure ethical and transparent business transactions. We have created a supplier procurement policy that enlists the roles and responsibilities of both our employees and our suppliers. This is ably supported by an internal magazine "Jagrook" which provides information on vigilance for everyone.

SUPPLIER MANAGEMENT AND ENGAGEMENT SYSTEM

To attain the highest levels of transparency and accountability with our suppliers across operations, we have created a Board level Audit Committee comprising of three Independent Directors, four full-time Directors and the Company Secretary to ensure transparency in all aspects of business. To maintain and go beyond compliance we have ensured that all awarded tenders include clauses related to child and forced labour.

In this year, we organized a total of four vendor meets and regular business review meetings to address the key concerns of vendors. We have also conducted sustainability workshops for our vendors to create awareness on sustainability and promote GAIL's initiatives. We have encouraged vendors to inculcate sustainability in their day-to-day business so as to focus on producing environment friendly products. To further engage with our vendors, we conducted a vendor sustainability survey. The survey indicated that 60% of suppliers were satisfied while dealing with GAIL, 80% of suppliers were aware of our sustainability initiatives and about 50% of suppliers confirmed turnaround time of their complaints by GAIL was between 24-48 hours. The further details of engagement are given in section of engaging with our stakeholders.

We are conscious about the rapid industrial development of our country and are committed towards developing a sound local supplier base. It is our responsibility to guard their business interest so as to facilitate economic development in the areas where we operate. We have increased our procurement from local suppliers by 37% from last year amounting to INR 6,793.49 Crore in this year. We also support the local suppliers by giving them preference for conducting basic jobs across operations.

GAIL has appointed Independent External Monitors (IEM) of high repute to lend transparency to our procurement procedures. IEMs strengthen vigilance in contract and procurement procedures by providing a transparent way for vendors to put forth their grievances and get them redressed in an effective manner. While we have taken stringent measures to curb corruption and promote transparency in our operations, there were seven cases of corruption reported during the year. Necessary action was taken by the vigilance department, based on the outcome of their investigation.

We have signed an integrity pact with Transparency International and have adopted several initiatives like the bill watch system, file movement system, reverse auction and tender monitoring system to ensure high level of satisfaction amongst vendors during their association with GAIL. Our day-to-day business deals with the number of domestic and international bidders / contractors / vendors. The integrity pact is a tool developed by TI to ensure all activities and transactions between company and their suppliers are handled in fair and transparent manner. The integrity pact is also mandatorily signed by vendors / suppliers having high value contracts that are above INR 1 crore.

We have deployed a bill watch system - a web based bill tracking system that increases transparency for our vendors enabling them to track their payment and further enhancing their trust on us. This has resulted in the timely payments of bill and a reduction of time required for processing the bills from eight days to six days. To further strengthen and improve efficiency of this system, we have incorporated this system in SAP to provide warning message in case of duplicate bills, notification of next billing date for GAIL supervisors and helped in bringing tender consistent of the same job across different locations.

To expedite the decision making at GAIL, we have implemented a file movement system. This is an e-monitoring tool which tracks and pinpoints the reasons and the location where a particular file has been held up in the system. The top management oversees the process and monitors the files that are pending. To further strengthen the process, a system of tracking the file continuously marked to an employee (5 times or more) has been introduced. In case hindrance by any employee was caused due to unnecessary delay / indecisiveness, Management will take action against that particular employee. This year there was one instance where the finance officer delayed decisions by sending repeated queries and ambiguous notes. The concerned officer



(Right) Director Projects Awarding Appreciation Certificate on the Occasion of Vendor Meet

was counseled on quicker and efficient decision making. Due to this close monitoring of the files pending or in a transit for more than 90 days in FMS have reduced from 503 days to 42 days which is about 92% reduction from 2008 levels.

Reverse auction is a live process that ensures transparent and competitive pricing provided by vendors. GAIL has made it mandatory to conduct reverse auction for all procurements valuing more than INR 50 Crores. This year we have already conducted 14 such auctions which resulted in significant savings in procurement cost over the estimated costs. To enhance further transparency in the procurement process, we have also developed a robust tender monitoring system which provides complete information on procurement cycle involving requisition, tendering, ordering, execution, payment, completion and closure available in a single click.

SUPPLY CHAIN MANAGEMENT (SCM)

This year we introduced a Supply Chain Management system managed by Contract & Procurement department. This pilot project was launched at Vijaipur and Pata site and will be subsequently replicated across other locations post successful implementation. This system is responsible for complete handling of the tendering process and

handling of materials till it reaches the site. It comprises of a team from various disciplines like electrical, mechanical, instrumentation, chemical and petrochemical expansion project which ensures in expediting the work by vendors and sub-vendors at all stages of manufacturing, logistics monitoring and port clearances.

TRANSPORTATION SAFETY TRAINING AT VIJAIPUR

The Fire & Safety Department of Vijaipur conducts training programme along with issuance of certificate to tanker drivers carrying hazardous chemicals on safe driving during transportation of hazardous chemicals by road tankers. The training programme lasts for one day and includes class room session, screening of safety film, field training, live fire-fighting by various types of extinguishers and reset of tanker PSV model. A total of 11 no. of certificates have been issued during FY11-12 to tanker drivers by the Vijaipur F&S department. Similar safety training is also imparted to villagers, people residing in habitats near pipelines, contract employees and security personnel. Till date more than 2,500 persons have been covered under such trainings.



Employees : Agents of change

We call our employees as our agents of change, principally because of a charged and enthusiastic workforce that goes beyond their call-of-duty in order to realise GAIL's ambitious growth plans. Most of our sustainability performance today and the activities that we have planned for the future depend totally on how well our people can manage them. It is our constant endeavour to ensure high levels of employee satisfaction.





Underpinning our long-term success is the ability of our leadership to foresee, understand and meet the changing needs of our employees. We have created a rewarding workplace for our people by valuing their contribution, augmenting personal development, fostering equal opportunities, and rewarding good performance. We firmly believe that only engaged employees will go beyond the call of duty and walk that extra mile to help us realize our dreams. Our HR policies, systems and processes have been customized to achieve high employee engagement levels and give them the freedom to innovate and realize their full potential. At the same time due importance is given to protect the rights of all employees including safety and health at workplace, grievance redressal, freedom of association, transparency in communication and action, uniform code of conduct and equitable treatment.

The talent management strategies undertaken by HR are divided into the following areas:

✧ RECRUITMENT AND INDUCTION:

The contextual factors taken into consideration while planning for the talent requirement include detailed inputs from all the business process owners to chart out existing as well as future business requirements; standard manning exercise for entire organization; attrition trends; succession planning; and human resource requirements emerging from business strategy formulated as part of 'Strategy 2020'.

✧ TALENT ACQUISITION:

Talent acquisition is carried out at various levels such as campus recruitment, open recruitment, lateral

hiring in critical areas, engagement of experts/ advisors, secondments etc. in line with the HR plan. To tap into the top talent, premier technology institutes like IITs, BITS Pilani and NITs and premier business schools like IIMs, IIFT, TERI are targeted for campus recruitment. Experienced talent pool is targeted for mid and senior level positions for lateral hiring, especially for E&P and other new business operations.

✧ DEVELOPMENT OF TALENT:

To boost employee morale and expedite their growth, a higher growth trajectory is assigned to outstanding employees at an early stage of their career. Our entry into new businesses like city gas distribution, exploration and production and operations with the new forms of organization structures in terms of joint ventures, have boosted career opportunities for executives at all levels. In the joint ventures formed by GAIL, senior executives are provided an opportunity to take up leadership positions. Cross-functional assignments and rotation is encouraged to break the monotony of work and to facilitate all round development of our employees.

✧ RETENTION OF TALENT:

Some of the noteworthy initiatives adopted by GAIL to boost employee retention include freedom of expression of thoughts and ideas through a number of communication channels like suggestion scheme; long service and women employee awards, and attractive perks and benefits. The overall success of our HR policies is evidenced by our low attrition rates.



GAIL Day Celebration

EMPLOYEE MANAGEMENT AND ENGAGEMENT SYSTEMS

Our comprehensive Human Resource (HR) policy covers all essential areas ranging from employee development to grievance redressal. The Director (HR) holds the prime responsibility for adequate implementation of HR policies and procedures consistently throughout the organization. The Human Resource Department (HRD) at GAIL has taken proactive measures to facilitate the business segments in successful implementation of our Human Resource strategy. Lean workforce, young and highly qualified manpower, cross-functional expertise, learning organization, free and open communication process and accessible senior leadership are our core HR strengths. Our HR service delivery model comprises Corporate HR and unit level departments. These cater to services like compensation and benefits design, HR policy formulation, recruitment, performance management system, etc. Various other services such as outsourcing, shared services, use of technology, and internal consulting are also provided by the HRD. Technology in sync with HR function has increased demand for better service delivery from our internal service providers. GAIL being one of the first Public Sector companies to implement SAP ERP Human Capital Management (HCM) application, including SAP Employee Self-Service (ESS) application, has moved towards higher levels of automation in HR processes and paperless transactions. The performance management system in the company has also been made totally online in order to increase efficiency, transparency and reliability of the process.

PERFORMANCE MANAGEMENT SYSTEM

The overall strategic goals of the company are cascaded down to employees through a mechanism called Internal MoU (IMoU). The IMoUs specify goals and targets for the executives at the beginning of the assessment year. To continually motivate employees and drive them towards excellence, a new Performance Related Payment (PRP) incentives scheme has been introduced. Performance based payment have been specifically designed to improve the productivity of our employees and the same is reflected through an indicator- value added per employee.



EMPLOYEE ENGAGEMENT SYSTEM

Employee engagement surveys carried out by GAIL, act as a tool to gauge the pulse of the organization. They are implemented with the sole aim to assess the employee satisfaction level and how we can help enhance the overall employee experience. As part of this exercise, feedback is solicited on all facets of people practices from all employees. To make the process interactive and participative, responses are sought not only through online questionnaires but also through focused group discussions with randomly chosen sample of employees at various levels. Analysis of the last engagement survey undertaken by M/s Aon Hewitt Pvt. Ltd. revealed that we fall in the Best Employer/ High Performance Zone, reflecting a highly motivated and committed workforce. The exercise, apart from indicating engagement levels of the employees, also highlighted the areas that drive engagement levels.

We also surveyed our employees to better comprehend their level of awareness and frequency of participation in sustainability initiatives, the efficiency of grievance redressal forums, their awareness on social and environmental agenda of GAIL and their perception about the top areas of improvement for GAIL in the sustainability arena. Our analysis yielded the following results:

- ✕ Awareness amongst employees on the social and environmental agenda of GAIL is on a lower side and can be further improved.
- ✕ The degree and frequency of employee participation in GAIL's sustainability initiatives is perceived to be on the lower side by most employees.
- ✕ Introduction of sustainability specific KRAs both at department and individual level could help improve employee involvement on sustainability.



EMPLOYEE LEARNING AND DEVELOPMENT

We perceive employee training as an essential tool to develop adequate competency amongst our employees and develop leaders who can lead us in the future. Trainings are identified through an elaborate need assessment process and the training needs are captured electronically as it is an integral part of our electronic Performance Management System (ePMS).

We offer various training programs related to the gas value chain, through our "GAIL Training Institute" (GTI) at Noida and Jaipur. The programs offered by GTI are designed to enhance the existing knowledge base and skills, and facilitate effective use of latest technology. In FY 2011-12, the GTI organized 177 training programs through which it imparted 14,079 mandays of learning to the employees. We also nominate employees for external training programs on contemporary subjects, in addition to in-house training. GTI also launched the 'e-Gyan parwah', an e-learning initiative for senior executives through the Harvard Management Mentor covering 44 e-learning modules to support key developmental areas. Further, we have also collaborated with IIM Calcutta and IIM Bangalore to offer customized executive development programs. In order to inculcate the importance of sustainable development in employees, GTI has organized programs to create awareness about sustainable development and sustainability reporting for all business segments. In this regard, specific trainings on waste water treatment, water management, air pollution control and environment legislation have been conducted. A workshop on capacity building for sustainability reporting was also organized in September at GAIL's Noida office. To create a culture of learning in the organization, business quizzes are conducted in both Hindi and English. GTI also confers the "GAIL Women Employees award" to motivate women employees and recognize their contribution. The above initiatives have been instrumental in GTI achieving a high training efficacy score of 91.76% in FY 11-12. Some of the initiatives taken up by GAIL in the area of learning and development include:

- ✂ The concept of mentoring - This has been institutionalized for GAIL's newly joined Executive Trainees (ETs) wherein the middle/senior level cadre mentor the newly joined ETs.
- ✂ GTI's collaboration with American Society of

Mechanical Engineers (ASME) for imparting ASME certified training to both GAIL executives and executives from external organizations.

- ✂ Courses in the field of city gas/CNG, Natural Gas/LPG pipeline operation and maintenance, petrochemical, O&M, and fire and safety for participants from external organizations such as IOCL, BPCL, RGPL, BCPL, IGL, MNGL, Adani Gas Ltd., Siti energy, Sabarmati Gas, UP Fire Service departments, OPal, Honda scooters and motorcycles, etc.
- ✂ As a knowledge sharing initiative, a 'Seminar on Operation, Maintenance, and Safety & Energy Management' was organized by GTI wherein more than 75 papers were presented.
- ✂ A knowledge sharing portal created in GAIL's intranet provides a platform to employees to interact with subject matter experts in their relevant areas. Guest lectures by eminent personalities are organized to widen employee perspective by exposure to latest developments in GAIL's business areas.

Under our SD Aspiration 2020 we have committed to create awareness on Sustainability among 100% of our employees by 2020. As on 31st January 2013, we have trained 30.28% of our employees on various aspect of sustainability.

LEADERSHIP DEVELOPMENT

Leadership development is an inherent aspect of our learning and development initiatives. We invest heavily in preparing our senior executives for future leadership positions through our Senior Management Development Centre (SMDC). The centre helps us to assess the future potential of our senior executives and accordingly identify developmental areas for each of them. Based on the developmental needs identified, Individual Development Plans (IDPs) are created for each of the participants, comprising of suggested readings, e-learning modules, movies and customized learning programs. These programs are organized through various institutions of repute such as IIMs, ISB, MDI, FMS and IIFT. Senior management executives are also nominated in the training programs, workshops and conferences organized by prestigious international institutes such as RIPA, London Business School, Harvard Business school, Kellogg School of Management, etc. The aim of our leadership program is to facilitate internal upward mobility in the organization by utilizing the outcome of SMDC as an input to guide us in the advancement of our senior executives.

EMPLOYEE RETENTION STRATEGY

We endeavor to provide a good work life balance to our employees to achieve higher retention and lower employee turnover. Some of the salient features of our retention strategy include:

- ✂ **Attractive compensation and benefit package:** GAIL offers attractive compensation package to its employees. We provide several other benefits such as subsidized loans in form of house building advance, conveyance advance, furnishing advance, and computer/laptop advance. Higher qualification incentive is offered to motivate employees to attain higher qualification relevant to their function. GAIL is also among the first PSUs to provide a two year child care paid leave to female employees. Under our defined benefit plans we made a contribution of INR 51.50 crore towards Superannuation Benefit Fund Trust and INR 29.53 crore to Provident Fund Trust. Apart from these GAIL provides other benefit plans to employees that include Gratuity, Post-Retirement Medical Benefits, Earned Leave Benefits, Terminal Benefits, Half Pay Leave and Long Service Award.
- ✂ **Social security mechanism:** GAIL makes a provision for 30% of Basic pay and Dearness allowance of monthly salary as Superannuation benefits which includes Contributory Provident Fund (CPF), Gratuity, Pension and Post Superannuation medical benefits.
- ✂ **Rewards and recognition:** Since rewards and recognitions are key to improving employees' motivational levels, institutionalized mechanisms exist in GAIL to ensure that employees are adequately recognized for their contributions. These include the following:
 - **Women Awards:** GAIL's women employees award has been instituted to motivate the women employees by highlighting their share in GAIL's success. The award carries a cash prize of INR 1,00,000
 - **Suggestion Scheme:** To create a participative work culture and driving innovation GAIL initiated "suggestion scheme" under which employees can directly submit their suggestions through the GAIL intranet
 - **Long Service Awards:** In order to reward the employees for long association with GAIL.

We also use social and sports events as a means to

create platforms for employee interactions. We encourage them to participate in sporting events such as Inter Regional Sports Meet (IRSM) and Petroleum Sports Promotion Board (PSPB) where they compete with employees from other PSUs. We also organize many community events such as GAIL day and Diwali celebrations where employees and their families can socialize with each other. Further, GAIL townships built with facilities such as sports club, gym, swimming pool, library, etc. are aimed at improving the quality of life of our employees and their family members even in remote locations where our facilities are situated.

HUMAN RIGHTS

At GAIL, we always prioritize and uphold human rights across all our operations. We made a global commitment to support human rights by becoming a signatory to UNGC principles in May 2011. Our policies are suitably designed and fully informed by human right principles, the Constitution of India and labour laws. We have a grievance redressal system in place to address issues raised by all our stakeholders. We support the Government of India's efforts in development of minorities and economically underprivileged sections of the society. In FY 11-12, 16.8% of our employees belonged to SC category, 6.6% to ST category, 17.9% to OBC category, 7.22% to minorities, and 2.2% to physically challenged categories. The workforce comprised 222 women employees as on 31st March 2012. We have been working towards improving gender diversity across our work centers and safeguard the interest of all employees, particularly the minorities in our workforce. However due to the nature of industry and geographic areas where we are placed, ensuring a higher proportion of women workforce is difficult. We are addressing this challenge through a number of women empowerment and education projects in adjoining communities to our plants. We have also introduced gender mainstreaming, inclusiveness and affirmative programs. Under gender mainstreaming, we cover programs related to women employees. A women cell has been established to look after the developmental needs of women employees. The cell focuses on reaching out to the women workforce, initiate discussions and adequately address their concerns including discrimination and sexual harassment at workplace. We remain committed to equal rights for all gender and the same is reflective in our compensation policy for employees. We ensure



minimum wage requirements in accordance to the applicable norms in each state where we operate. For the welfare of weaker and backward sections of the society, we run a special recruitment drive, in addition to the normal recruitment exercise, through open and campus recruitment.

Our Code of Conduct embeds the principles of protection of Human Rights. All our work contracts and agreements are embedded with clauses to uphold human rights. All employees when inducted are trained on our code of conduct to develop their understanding on these aspects. This is also complemented through annual refresher training for employees. Awareness is also built through a number of other training conducted by the GAIL Training Institute (GTI). In FY 2011-12, GTI disseminated 14,376 man hours of training on aspects topics such as Right to Information, Labour Laws, Occupational Health and Safety, Reservation policy, Industrial disputes, work life balance amongst others. We follow a non-tolerance approach on Child or forced labour in any of our operations. Human Resource and Industrial relation personnel at sites are entrusted with the responsibility to help in early detection and remediation of any such potential risk emanating from either our employees or contractual labour.

Collective Bargaining, an important worker right is upheld at GAIL across all our operations through recognition and promotion of worker unions, officer's association and women forums. We have taken several initiatives such as regular interaction with employee collectives, coordination with labour authorities, settlement of industrial disputes, recording and analysis of work center level issues and long term settlement with Unions. GAIL Officers Association (GOA), GAIL Employees Association (GEA) and GAIL Karamchari Sangh (GKS) and GAIL SC ST Employees Welfare Association (GSEWA) are the four major collectives in GAIL.

HEALTH AND SAFETY AT OUR OPERATIONS

GAIL attaches utmost importance to HSE indicators across its plants, pipeline systems, work centers, and also in its nearby communities. All our sites are certified under integrated management systems that include OHSAS 18001- Occupational Health and Safety Management Systems. HSE parameters are an essential element of the annual assessment of all



Observation of National Safety Day at GAIL Installation

plants. Our Corporate HSE policy accords the highest importance to the following HSE objectives:

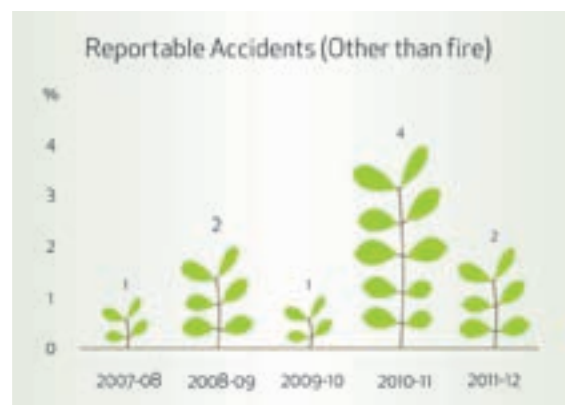
- ✘ Establish and implement an HSE management system comparable to the best in the industry
- ✘ Design, construct, operate and maintain its facilities as per the best practices available to ensure safety of all stakeholders, plants, projects and surroundings
- ✘ Promote eco friendly activities
- ✘ Comply with all statutory rules and regulations on safety, occupational health, environmental responsibility, and go beyond in setting internal targets
- ✘ Delegate power to employees at all levels to implement company's HSE policy
- ✘ Set tangible and measurable targets for monitoring the performance of HSE
- ✘ Provide structured training to all employees for HSE best practices
- ✘ Communicate policy to all employees and external stakeholders
- ✘ Continuously review the policy's relevance with respect to business development and for continual improvement of HSE management systems.

HSE PERFORMANCE TRENDS



We measure our HSE performance through the HSE index, which is prepared based on the monthly HSE compliance report on 13 measurable parameters- HSE leadership and commitment, HSE training, incident reporting, investigation and analysis, employee perception, control defeat/ reliability of critical systems and devices, process safety information, operation and maintenance, emergency planning and response, compliance audit, occupational health, environmental management, inspection and maintenance, risk analysis and management.

Annual targets are set for each operating units and cumulative GAIL operations. This year we achieved an HSE index score of 99.05% in comparison to HSE index scope of 98.92 in FY 2010-11. In FY 11-12 we won 32 national and international awards in the area of health, safety and environment which testifies our commitment towards HSE issues. Through stringent HSE measures and companywide campaigning, we managed to reduce our reportable accidents and incidents of fire/leakage from GAIL sites in FY 11-12.





SAFETY TRAININGS AND AUDITS

We conduct "critical safety campaigns" to strengthen the safety culture at GAIL and generate awareness among all with regard to various safety aspects and keep them abreast with the latest industry wide practices.

Month	Topic For Critical Safety Campaign
April 2011	House Keeping: Place for Everything and Everything in its place
May 2011	Enhancing safety by proper selection & use of appropriate ppes
June 2011	Safety in Handling Lifting Tools, Tackles, their upkeep & Maintenance Practices
July 2011	Safety during vessel & confined space entry
August 2011	Safety during gas venting operations
September 2011	Safe disposal of hazardous waste materials
October 2011	Safety during cutting, welding & grinding
November 2011	Safety during calibration of PSV
December 2011	Job risk assessment & risk mitigation measures
January 2012	House Keeping: Place for Everything and Everything in its place
February 2012	Safety to Prevent Slips, Trips and Falls
March 2012	Safety during electrical Isolation and importance of electrical work permit

To ensure compliance to statutory rules and regulations, implementation of safe work practices, and continual improvement in safety management systems, the installations are being regularly audited by external and experienced in-house auditors. During FY 11-12, 27 external safety audits, seven internal audits and seven surprise safety checks were undertaken in accordance to T4S regulations through a PNGRB authorized agency.



OCCUPATIONAL HEALTH

We have a corporate Occupational Health Committee supported by 6 local level Occupational Health Committees that meet every quarter for continuous monitoring and improvement of the occupational health of the employees. In FY 11-12, all employees at the work centers were medically examined. In November 2011, we introduced a work place policy on HIV/AIDS prevention and control. The policy is aimed at preventing transmission of HIV infection amongst employees and their families, protecting rights of those who are infected, providing access to available treatment, protecting employees from stigma and discrimination associated with HIV/AIDS thereby preserving their dignity and equity, and

Security Sensitization Training at GAIL Hazira

ensuring safe migration and mobility with access to information services on HIV/AIDS. We also conduct periodic stress management programs, yoga classes and lectures on various health related topics as part of the fitness programs offered across the organization. All our townships are well equipped with hospitals and clinics for the service of our employees and their families. Corporate Medical Department has the prime mandate to disseminate information and advisory on important health issues. A monthly email in this regard is send to GAIL employees across all locations to educate and share measures to prevent, diagnose and cure ailments.



Security Sensitization Workshop

SECURITY OF OUR OPERATIONS

Most of our assets are of national significance. Hence the security of our installations and pipelines is of utmost importance. Any incident related to these assets is bound to have social, environmental and economic ramifications. As these installations and pipelines face threats of protests, sabotage and even potential terror attacks, we continue to invest heavily in securing them through technological and human interventions. GAIL's security team along with the Central Industrial Security Force (CISF) personnel and Ex-Servicemen recruited through the Directorate General Resettlement (DGR), Department of Ex-Servicemen (Ministry of Defence), Government of India, ensure the security of all our installations and pipelines. We have a security workforce of 4300 personnel comprising of 800 from CISF and 3500 personnel through DGR. CISF, which is directly under the Ministry of home affairs, has a laid down procedure for imparting training during the entire service at its various training centres on all aspects of industrial safety including human rights and gender sensitization. The security personnel's from DGR, though trained in service, are provided with continuous training to improve their skills. This year we trained 394 (1st quarter of FY 2011), 408 (2nd

quarter of FY 2011), 435 (3rd quarter of FY 2011), and 463 (4th quarter of FY 2011) security personnel on various aspects of industrial security, emergency situation, patrolling & security measures, etc. We also follow the norms laid down by the OISD for maintaining the technical and safety standards of all our installations and pipelines. Going forward we plan to further develop the comprehensive training module for our security personnel by creating awareness on aspects of human rights covering various applicable national and international human rights norms. Our aim is to ensure that we respect and uphold people's rights; avoid discrimination on the basis of race, religion, caste, creed, gender, language, or colour; do not encourage arbitrary interference with any person's privacy; prevent any inhuman or degrading treatment and have strict guidelines of use of force or firearms.

To propagate a culture of security and safety and to propagate a culture of safety and security amongst our employees, we publish monthly internal magazine "Rakshak" covering a host of security topics that may impact an organization like ours. Additionally, we take opportunity to celebrate Safety Awareness Week with all employees at GAIL every year.



Our Sustainability Performance

OUR ENVIRONMENTAL PERFORMANCE

Material Consumption				
		Fy 2009-10	Fy 2010-11'	Fy 2011-12
NG processed	MMSCM	14,601.13	14,849.11	15,119.53
NG used for making product	MMSCM	1,123.45	1,060.21	1,136.57
NG sent back to pipeline	MMSCM	13,121.74	13,342.26	13,418.95
Other material	MT	8,862.85	10,399.56	9903.36
Packaging material	MT	2,128.00	2,112.00	2,249.00
Energy Consumption				
Direct Energy	GJ	37,435,788.89	38,266,388.21	38,998,299.32
Indirect Energy	GJ	971,397.52	1,039,694.31	1,166,517.48
Renewable Energy	GJ	546.36	31,749.65	49,568.61
Energy from NG / LPG flaring	GJ	393,925.78	380,325.80	342,375.86
Energy from NG / LPG venting	GJ	101,464.27	117,815.78	137,044.06
Total energy saved	GJ	-	672,231.73	1,174,889.03
Emissions				
Total Scope 1 emissions	tCO2e	2,561,453.97	2,620,811.71	2,747,264.25
Total Scope 2 emissions	tCO2e	215,529.04	230,677.50	258,858.07
Water				
Water consumption	m ³	12819257.09	13812275.82	14077699.01
Waste water generated	m ³	1298864.40	1629378.27	2,255,184.53
Waste water discharged out of unit	m ³	710,547	854,256.62	1,331,330.45
Water recycled	m ³	562291.03	736895.45	868490.41
Hazardous waste generation				
Used oil / used lube oil / slop oil	Litres	275,248.81	342,952.89	641360.27
Used batteries	Nos.	225.00	610.00	138.00
Used batteries	MT	8.97	2.94	10.18
Basket filter waste	MT	2.82	3.52	84.48
ETP Sludge	MT	-	-	6.00
Tar / Tar ash	MT	3.35	34.70	12.47
Oily sludge	MT	300.00	282.00	343.43
Empty drums	Nos.	213.00	220.00	8,694.00
E-waste	MT	35.20	45.19	312.25
Bio-medical waste	MT	0.15	0.23	0.21
Non-Hazardous waste generation				
Used consumables	MT	0.48	0.56	-
Used bag filters	Nos.	1,090.00	869.00	982.00
Empty barrels	Nos.	419.00	257.00	253.00
Metal scrap	MT	264.73	385.18	631.74
Plastic scrap	MT	15.78	17.18	46.80

CONTINUE...



Wooden scrap	MT	12.60	0.70	235.74
Spent Alumina	MT	1,168.51	1,221.73	1,151.70
Silica Gel	MT	24.01	45.51	45.01
Cellulose Sludge	MT	0.28	0.14	0.16
Canteen waste	MT	10.60	11.20	12.57
Molecular Sieve	MT	-	100.00	0.43
Ceramic Material	Nos.	116.00	-	-
Aluminum Scrap	MT	1.05	0.36	0.74
Miscellaneous Waste	MT	-	13.81	24.88
Air Emissions				
SPM	tons / annum	955.84	1,055.49	1,105.01
NOx	tons / annum	1,002.29	886.82	814.35
CO	tons / annum	0.02	0.04	0.03
SOx	tons / annum	758.16	702.82	429.02
VOC	tons / annum	0.02	0.01	0.01
ODS gas consumption				
R-22	Kg	2,204.50	2,393.30	2,298.94
Total environment protection investment and expenditure type				
Show cause notices received	Nos.	-	-	1.00
Environmental Fines	INR crore	-	-	-
Environmental expenditure	INR crore	3.73	5.89	6.35

OUR SOCIAL PERFORMANCE

Workforce breakdown - Grade				
		Fy 2009-10	Fy 2010-11	Fy 2011-12
Senior Management	Nos	164	192	208
Middle Management	Nos	1,237	1,275	1,317
Junior Management	Nos	1,291	1,429	1,502
Non-management workers	Nos	1,002	973	911
Total security staff	manhours worked	6,033,619	6,031,595	5234020
Contractual labour	manhours worked	10,135,904	10,952,133	19,636,958
Workforce breakdown - Gender				
Males	Nos	3,495	3,652	3,715
Females	Nos	199	217	222
Attrition rate				
Males	%	0.69	0.49	0.69
Females	%	0.50	0.92	-
Health and safety committee				
Management representatives	Nos.	292	314	324
Non-Management representatives	Nos.	163	233	235
Health and safety - Employees				
Near miss cases	Nos.	160	169	148

CONTINUE...



Minor injuries	Nos.	5	2	-
Reportable injuries – Male	Nos.	-	2	-
Reportable injuries – Female	Nos.	-	-	-
Lost days due to reportable injuries – Male	Nos.	-	115	-
Lost days due to reportable injuries – Female	Nos.	-	-	-
Fatalities – Male	Nos.	-	1	-
Fatalities – Female	Nos.	-	-	-
First aid cases	Nos.	8	20	17
Manhours worked	manhours	6,280,243	6,355,332	6,147,211
LTIFR (per million manhours worked)		-	0.31	-
Severity rate (per million manhours worked)		-	18.10	-
Fatality rate (per million manhours worked)		-	0.16	-
Health and safety - Contract Labour				
Near miss cases	Nos.	170	182	209
Minor injuries	Nos.	12	28	3
Reportable injuries – Male	Nos.	-	1	-
Reportable – Female	Nos.	-	-	-
Lost days due to reportable injuries – Male	Nos.	-	-	-
Lost days due to reportable injuries – Female	Nos.	-	-	-
Fatalities – Male	Nos.	1	2	-
Fatalities – Female	Nos.	-	-	-
First aid cases	Nos.	120	110	73
Manhours worked	manhours	10,135,904	10,952,133	19,636,958
LTIFR (per million manhours worked)		-	0.05	-
Severity rate (per million manhours worked)		-	-	-
Fatality rate (per million manhours worked)		0.06	0.10	-
Training				
Management employees (direct) - Male	manhours	92,691.50	99,218.70	106,057.50

CONTINUE...

Management employees (direct) - Female	manhours	3,960.00	5,974.00	5,445.00
Workmen (Direct employees) - Male	manhours	47,102.10	48,595.75	28,966.00
Workmen (Direct employees) - Female	manhours	1,656.00	1,392.00	1,520.00
Contractual labour - Male	manhours	30,197.00	28,617.50	38,944.50
Contractual labour - Female	manhours	5.00	-	-
Security staff - Male	manhours	22,223.50	48,758.00	35,126.50
Security staff - Female	manhours	20.00	12.00	44.00
Our economic performance				
Economic value generated and distributed				
Revenues	INR crore	24,996.40	32,458.60	40,280.70
Operating cost	INR crore	20,889.10	27,654.40	35,373.40
Employee wages and benefit	INR crore	621.20	752.70	678.00
Payments to providers of capital	INR crore	951.40	951.40	1,103.60
Payments to government	INR crore	3,840.10	4,442.50	5,561.60
Financial assistance from government	INR crore	-	-	-
Local Suppliers				
Total procurement of goods and supplies	INR crore	6,286.00	4,667.00	8,229.83
Total procurement of goods and supplies from local suppliers	INR crore	3,999.00	4,046.00	6,843.29



COMMUNICATION ON NVG- SEE

GAIL being a part of Top 100 companies in India by Market Capitalization, is required to report on National Voluntary Guidelines on Social, Environmental and Economic Responsibilities of Business (NVG-SEE) published by Ministry of Corporate Affairs, Government of India. While all business responsibility principles covered under NVG-SEE have been discussed under different sections of our sustainability report, the section below correlates binds and links our communication against those principles:

	Principles	Description
Principle 1	Businesses should conduct and govern themselves with Ethics, Transparency and Accountability	Ensuring fair, ethical and transparent business practices remains at the top of our agenda. It is deeply ingrained in our business code of conduct and the prime responsibility to ensure its implementation is taken up by our Board of Directors. Abiding by this philosophy we became signatories to Transparency International's Integrity Pact six years ago. A number of Board Committees and sub committees such as Ethics Committee, Shareholder and Stakeholder Grievance Committee headed by the Directors have been instituted to look into matters of ethics, transparency and accountability.
Principle 2	Business should provide goods and services that are safe and contribute to sustainability throughout their life cycle	All our gas processing and petrochemical plant and LPG pipeline systems and Natural Gas Compressor Stations under operation are ISO 9001, ISO 14001 and OHSAS 18001 certified. We are achieving its vision through a Total Quality Management (TQM) approach. This system ensures bringing about commercially and technologically viable solutions and devise plans towards mitigating any risk associated with the life cycle impacts of their products in terms of environment and safety. GAIL is the leader in India in Natural Gas logistics, a cleaner fuel in comparison to conventional options such as coal or crude oil. We continue to propagate and raise awareness on safe handling of natural gas. At the same time we have tied up with ICPE to educate consumers on plastics as an eco-friendly product if managed properly at the end of life.
Principle 3	Business should promote the well-being of all employees	To understand and promote the wellbeing of all employees, a variety of policies, systems and processes have been executed to give adequate opportunities to employees to realize their full potential, at the same time protecting their interests by bringing about transparency in communication and action. Some talent management strategies have been undertaken by the HR management such as recruitment and induction; talent acquisition; development and retention of talent. A comprehensive HR policy has been laid out covering all essential areas from employee development to employee grievance redressal.

CONTINUE...

	Principles	Description
Principle 4	Business should respect the interest of, and be responsive towards all stakeholders, especially those who are disadvantaged, vulnerable and marginalized`	GAIL is a signatory to United Nations Global Compact (UNGC) principles and remains committed to work towards the betterment of weaker sections of the society. We support the Government of India's efforts on development of minorities and economically underprivileged sections of the society. Most of our operations are situated in remote regions that generally have poor access to a number of resources that impact daily lives. Our CSR approach integrates and addresses a number of these important challenges of the society.
Principle 5	Business should respect and promote Human Rights	GAIL pays utmost attention to prioritize and uphold human rights, in accordance to ILO principles and National regulations, within our operations and sphere of influence. Protection of Human Rights is embedded in our Code of Conduct that is applicable on all our employees. A number of committees such as the Ethics Committee and the HR committee ensure its seamless implementation. We have adopted systems and interventions such as grievance redressal and Whistle Blower policy to immediately bring any non-compliance into the attention of management and result in an appropriate action.
Principle 6	Business should respect, protect and make efforts to restore the environment	This year we introduced our Sustainable Development Policy that integrates a responsible and conservative approach towards our environment. We make conscious efforts to minimize any environmental externalities occurring as a result of our operations, follow environmental standards that go beyond compliance and protect/ restore the natural environment. Their environmental mission includes optimizing energy, material and water consumption, mitigating impacts on climate change and air emissions, ensuring sensitivity towards biodiversity and managing environmentally sound operations. All our operations are certified under ISO 14001 environmental management systems. At the same time we have developed certain community programs such as those on water stewardship and adoption of renewable energy by communities. This has ensured sharing of our knowledge base for larger benefit of communities and the environment.

CONTINUE...



	Principles	Description
Principle 7	Business, when engaged in influencing public and regulatory policy, should do in a responsible manner	We are signatory to number of global agenda's and initiatives such as Transparency International's Integrity Pact, United Nation's Global Compact that promote the adoption of sustainability principles by businesses. We adhere to oil and gas sector's Sustainability reporting standards that include GRI's Oil and Gas Sector Supplement and IPIECA's guidelines. As a Public Sector Enterprise we also contribute to fulfilment of our National agenda on Millennium Development Goals. We continue to work with MoP&NG, DGH, PNGRB, OISD, PCRA, MoEF, PPAC, PCB & CPCB, PESO and industry associations like FICCI, CII, International Gas Union, Petrofed, World Energy Council, TERI, on various issues in the energy sector. We initiated our association with US EPA for Global Methane Initiative to work on the challenge of fugitive emission in Natural Gas transportation. Along with this we also plan to continue our contribution towards policy development through industry associations and task forces of various Ministries.
Principle 8	Business should support inclusive growth and equitable development	GAIL has operations at remote locations with limited access to basic amenities and resources. We have a comprehensive CSR approach that is based on inclusive and equitable development and empowerment of such communities. Our focus is towards seven thrust areas which include community development, drinking water and sanitation, health, infrastructure, skill development, literacy enhancement and environment protection. All our CSR activities are governed by the CSR sub-committee at the top and funded through 2% of our profit-after-tax.
Principle 9	Businesses should engage with and provide value to their customers and consumers in a responsible manner	Customer care and value creation is an integral part of our business vision. It is a result of our persistent endeavour that our customer satisfaction has constantly improved. We have devised customer "State-Of-Art" customer management systems that address material customer challenges. Our Gas Management Systems is an example in this line. We have been expanding our City Gas Distribution business to cater to the needs of common man requiring access to cost effective and clean energy source. We have partnered with ICPE to raise consumer awareness the advantages of using plastic products and the importance of its secure recycling.



INDEPENDENT ASSURANCE STATEMENT



GAIL (India) Ltd. has commissioned Emergent Ventures India Private Ltd. to undertake an independent assurance of its Corporate Sustainability Report for the year 2011-12. The assurance process has been conducted in accordance with AA1000AS (2008). The assurance principles of Inclusivity, Materiality and Responsiveness, as outlined in AA1000AS (2008), and GRI 2006 (GRI G3.1) guidelines have been used as criteria against which to evaluate the Report.

The intended users of this assurance statement are the readers of GAIL's Sustainable Development Report 2011-12. The management of GAIL is responsible for engagement with stakeholders, identification of material issues and the collection and presentation of the information contained in the report. In performing the assurance activities, EVI's responsibility is to the management of GAIL only and in accordance with the terms of reference agreed with the company. We do not therefore accept or assume any responsibility to a third party for decisions, whether investment or otherwise, based on this assurance statement.

SCOPE OF ASSURANCE

EVI has been engaged to provide Type 2 Moderate level of assurance as set out in AA1000AS (2008). The scope of the assurance includes the following:

1. Evaluate the adherence to the AA1000AS (2008) principles of inclusivity, materiality and responsiveness and the principles of Global Reporting Initiative G3.1 Guidelines (Oil & Gas Sector Supplement).
2. Evaluation of the reliability of specified sustainability performance information for the period April 2011 to March 2012.

OUR APPROACH

The assurance process was planned and carried out in December 2012 – January 2013. Our conclusions are based on a review of processes & practices for identification and collation of relevant information, report content and performance data, which included a review of the stakeholder engagement and materiality determination process followed by GAIL. Relevant documentation, our observations with respect to process and systems in place and interaction with respective departments engaging with different stakeholders have formed the basis of our assurance on the principles of Inclusivity, Materiality and Responsiveness required for assurance under AA1000AS (2008).

We undertook the following key steps:

1. **Site Visits:** The EVI team visited a representative set of GAIL's facilities comprising of four gas processing plants (Pata, Vijaiapur, Vaghodia, Gandhar), one petrochemical plant (Pata), two gas compressor stations (Vaghodia, Vijaiapur) and one LPG pumping station (Mansarampur) to evaluate the source of data as well and interview data owners. We also made visits to the Corporate Head Quarters in New Delhi.
2. **Interviews:** In addition to interviewing data owners at the sites we visited, we also interviewed a representative set of people from the senior management to understand the process of stakeholder engagement and materiality determination at GAIL. Processes and systems for engagement with selected stakeholders were reviewed. We also interviewed sample stakeholders on-site to cross-check the robustness of GAIL's stakeholder engagement process.
3. **Data Accuracy Checks:** The information disclosed under different indicators in the report was verified by way of collection and corroborating it with the source of the information. We have relied on a sample of various documents and sources like internal SAP system, invoices, work orders, reports submitted to regulatory bodies, utility bills, inter departmental communication etc. as well as on-site inspection and observations. In certain places where we had to rely on company's internal documentation we have tried cross verification from two different sources in order to minimize the chances of oversight.

The verification of company's financial performance or information provided in the economic section in the report was derived directly from the audited annual report publicly available on GAIL's official website (www.gailonline.com).

LIMITATIONS AND EXCLUSIONS

1. Scope of assurance is limited to the boundary defined in the report and the period of 1st April 2011 to 31st March 2012.
2. Assurance is subject to no physical verification of things like inventory of material consumed, waste generated, emissions and effluents etc. Assurance relied on the documentation maintained by the company or provided to the company by another third party.
3. The scope of assurance does not cover the statements in the report that describe companies approach, strategy, aim, expectation, aspiration or beliefs or intentions.





Shaping the Future



CONCLUSION

Based on our review we have come to the following conclusions:

In our opinion, GAIL's second sustainability report gives an appropriate representation of the sustainable development initiatives undertaken in the company. GAIL has built processes that allow them to identify the material aspects for the company, collect performance data for majority of its facilities and report the information in adherence to the principles of GRI G3.1 guidelines (Oil & Gas Sector Supplement).

Our observation on the adherence of the three principles under AA1000APS (2008) is as follows:

Inclusivity: We have not come across any material evidence that would lead us to conclude that GAIL has not applied the principle of inclusivity in engaging with its stakeholders. Different departments engage regularly with their relevant stakeholders through multiple engagement channels. However, GAIL needs to continue to build the capacity of its stakeholders on sustainability topics to improve the outcomes of their engagement.

Materiality: GAIL has followed a structured process of materiality determination. The company has incorporated viewpoints of external stakeholders in this year's report. Based on our scope of work and the activities undertaken for the purpose like site visits, interactions and observations, we have not come across any material aspect of sustainability performance that has been excluded from the report.

Responsiveness: Based on our observation, interviews and documentation we believe that GAIL has applied the principle of responsiveness with respect to its stakeholders. The work is delegated to appropriate departments who engage, collect views and identify material issues of respective stakeholders and then devise action plans to address those issues. We have not come across any material evidence that would lead us to believe that responsiveness principle is not being applied in dealing with the stakeholders. However, as management on sustainability within the organization matures, it is recommended that depth of response increases and progress highlighted in successive reports.

GRI G3.1 Guidelines (Oil & Gas Sector Supplement)

Based on the information in the report and the independent assurance sought from us we have found that the company meets the requirement of A+ level of reporting as specified by GRI G3.1 guidelines.

Observations and Recommendations

Without affecting our overall conclusions on the sustainability report, we would like to bring to notice the following observations and recommendations for the report:

- GAIL has expanded its stakeholder engagement process. As GAIL matures its sustainability initiatives a greater cross-section of external stakeholder viewpoints need to be incorporated into the report.
- GAIL should further strengthen system(s) for data capturing and managing information. Attention needs to be given to the social performance indicators to increase reliability of reported information.

For Emergent Ventures India Private Ltd.

Ashutosh Pandey
President
Emergent ventures India Private Ltd.
Gurgaon, 15th of January, 2013



Glossary

AIEEE	All India Engineering Entrance Examination
API	American Petroleum Institute
ASME	American Society of Mechanical Engineers
BPCL	Bharat Petroleum Corporation Limited
BOG	Boiled Off-Gas
BCPL	Brahmaputra Cracker & Polymer Limited
BD	Business Development
CA	Corporate Affairs
CC	Corporate Communication
CS	Carbon Steel
CSI	Customer Satisfaction Index
CP	Corporate Planning
CPCB	Central Pollution Control Board
CPSE	Central Public Sector Enterprise
CVC	Central Vigilance Commission
CMD	Chairman and Managing Director
CFC	Chloro-fluoro Carbons
CGD	City Gas Distribution
CBM	Coal Bed Methane
CRZ	Coastal Regulation Zone
CAGR	Compounded Annual Growth Rate
CNG	Compressed Natural Gas
CII	Confederation of Indian Industry
CSR	Corporate Social Responsibility
CST	Company Secretariat
DVPL	Dahej-Vijaipur Pipe Line
DGM	Deputy-General Manager
DGH	Directorate-General of Hydrocarbons
DIN	Dutch Institute for Normung
EVI	Emergent Ventures India Private Limited
EPA	Environmental Protection Agency
ED	Executive Director
E&P	Exploration and Production

CONTINUE...



FICCI	Federation of Indian Chambers of Commerce and Industry
FY	Financial Year
GTI	GAIL Training Institute
GPU	Gas Processing Unit
GREP	Gas Rehabilitation and Expansion Project
GM	General Manager
GJ	Giga-Joule
GRI	Global Reporting Initiative
GHG	Green-house Gas
GSPC	Gujarat State Petroleum Corporation
HVJ	Hazira-Vijaipur-Jagdishpur
HSE	Health, Safety and Environment
HSEMS	Health, safety and environment management system
HRSG	Heat recovery steam Generator
HDPE	High Density Poly-Ethylene
HR	Human Resources
HRD	Human Resources Development
IEM	Independent External Monitors
IIT-JEE	Indian Institute of Technology – Joint Entrance Examination
INR	Indian National Rupee
ISTD	Indian Society of Training and Development
ISRO	Indian Space Research Organization
IGL	Indraprastha Gas Limited
IT	Information Technology
ILFS	Infrastructure Leasing and Financial Services
IMS	Integrated Management System
ISO	International Organization for Standardization
IPIECA	International Petroleum Industry Environmental Conservation Association
JLPL	Jamnagar Loni Pipe Line
JNNSM	Jawaharlal Nehru National Solar Mission
JV	Joint Ventures
Km	Kilo-meters
KG	Krishna-Godavari
LPG	Liquefied Petroleum Gas



LHC	Liquid Hydro Carbon
LLDPE	Linear Low Density Poly-Ethylene
LP	Low Polymer
MDP	Management Development Programs
MoU	Memorandum of Understanding
MT	Metric Tons
MMSCMD	Million Metric Standard Cubic Meter per Day
MoEF	Ministry of Environment and Forests
MoP&NG	Ministry of Petroleum and Natural Gas
MoRD	Ministry of Rural Development
MFO	Mixed Fuel Oil
NCR	National Capital Region
NH	National Highways
NIT	National Institute of Technology
NG	Natural Gas
NELP	New Exploration Licensing Policy
NGO	Non-Government Organizations
NoC	No objection Certificate
NRL	Numaligarh Refinery Limited
OHSAS	Occupational Health and Safety Assessment Series
OIC	Officer-in-Charge
ONGC	Oil and Natural Gas Corporation
OIL	Oil India Limited
OISD	Oil Industry Safety Directorate
OMC	Oil Marketing Companies
O&M	Operation and Maintenance
OFC	Optical Fibre Cable
OBC	Other Backward Classes
NOx	Oxides of nitrogen
SOx	Oxides of Sulphur
ODS	Ozone Depleting Substances
PESO	Petroleum and Explosive Safety Organization
PNGRB	Petroleum and Natural Gas Regulatory Board
PCRA	Petroleum Conservation Research Association
PPAC	Petroleum Planning and Analysis Cell
PNG	Piped Natural Gas
PCB	Pollution Control Board

CONTINUE...



PUC	Pollution Under Control
P & ER	Policy & Employees Relations
PE	Poly-Ethylene
PAT	Profit After Tax
PPP	Public Private Partnership
RGIPT	Rajiv Gandhi Institute of Petroleum Technology
RGPPL	Ratnagiri Gas and Power Private Limited
RLNG	Re-gasified Liquid Natural Gas
R&D	Research and Development
RoU	Right of Use
RTI	Right To Information
SC	Scheduled Castes
ST	Scheduled Tribes
SMDC	Senior Management Development Center
SBP	Special Boiling Point
SH	State Highways
SCADA	Supervisory Control and Data Acquisition
SPM	Suspended Particulate Matter
SD	Sustainable Development
SGSY	Swarna Jayanti Gram Swarozgar Yojana
TISS	Tata Institute of Social Sciences
TERI	The Energy and Resources Institute
TMT	Thousand Metric Tons
tCO ₂ e	Tons of Carbon Dioxide equivalent
TPA	Tons per Annum
TDS	Total Dissolved Solids
TI	Transparency International
TB	Tuberculosis
TAPI	Turkmenistan- Afghanistan- Pakistan- India
UNGC	United Nations Global Compact
US	United States
USD	United States Dollar
UP	Uttar Pradesh
UPTU	Uttar Pradesh Technical University
VHP	Very High Pressure
VSPL	Vizag-Secundrabad Pipe Line

GRI CONTENT INDEX AND UNGC / IPIECA REFERENCE

Indicator Reference	Description	Reported	Response	UNGC Principles link	API/ IPIECA guidelines link
1. Strategy and Analysis					
1.1	Statement from the most senior decision-maker of the organization.	Fully	<ul style="list-style-type: none"> Refer page 7 for message from CMD; Refer page 40 for targets under GAIL sustainability aspirations 2020 		
1.2	Description of key impacts, risks, and opportunities.	Fully	<ul style="list-style-type: none"> Refer page 25 for our risk management approach Refer page 34 for material issues and challenges for GAIL Refer page 25 for information on how we assess impact on stakeholders 		
2. Organizational Profile					
2.1	Name of the organization.	Fully	<ul style="list-style-type: none"> Front Cover 		
2.2	Primary brands, products, and/or services.	Fully	<ul style="list-style-type: none"> Please refer Our business, products and services on page 16-17 		
2.3	Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures. Fully	Fully	<ul style="list-style-type: none"> Please refer Our business, products and services on page 16-17 Page 17, 18, 19 of Annual report 2011-12 		
2.4	Location of organization's headquarters.	Fully	<ul style="list-style-type: none"> Back cover 		
2.5	Number of countries where the organization operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report.	Fully	<ul style="list-style-type: none"> All major operations under GAIL's full control (100% ownership) are based in India. For additional information please refer section on Our business, products and services on page 11 and pages 17, 18, 19 of Annual report 2011-12 Also refer about the report section on page 2 		
2.6	Nature of ownership and legal form.	Fully	<ul style="list-style-type: none"> GAIL is a Central Public Sector Enterprise, listed on BSE, NSE and GDR on LSE 		
2.7	Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries).	Fully	<ul style="list-style-type: none"> Refer section on Our business, products and services on page 16-17 Refer Page 17, 18, 19 of Annual report 2011-12" 		

CONTINUE...



Indicator Reference	Description	Reported	Response	UNGC Principles link	API/ IPIECA guidelines link
2.8	Scale of the reporting organization.	Fully	<ul style="list-style-type: none"> Refer section on Our business, products and services on page 16-17 		
2.9	Significant changes during the reporting period regarding size, structure, or ownership.	Fully	<ul style="list-style-type: none"> There were no significant changes. For changes in the scope of the report refer About the report section on page 2 		
2.10	Awards received in the reporting period.	Fully	<ul style="list-style-type: none"> Refer chapter on Awards and Recognition on page 20 		
3. Report Parameters					
3.1	Reporting period (e.g., fiscal/calendar year) for information provided.	Fully	<ul style="list-style-type: none"> Refer About the report section on page 2 		
3.2	Date of most recent previous report (if any).	Fully	<ul style="list-style-type: none"> This is GAIL's second sustainability report; the first report was released on 29th Feb 2012 		
3.3	Reporting cycle (annual, biennial, etc.)	Fully	<ul style="list-style-type: none"> Annual 		
3.4	Contact point for questions regarding the report or its contents.	Fully	<ul style="list-style-type: none"> all queries can be emailed to: Mr. Santanu Roy (sroy@gail.co.in) and/ or Mr. K K Chatiwal (kk.chatiwal@gail.co.in) 		
3.5	Process for defining report content.	Fully	<ul style="list-style-type: none"> The report content has been defined based on our stakeholder engagement and selection of material issues. We have engaged with all major stakeholder groups of GAIL Refer sections on Shaping the Future on page 5, Refer section Stakeholder engagement on page 28 Refer section on materiality assessment on page 34 		
3.6	Boundary of the report (e.g., countries, divisions, subsidiaries, leased facilities, joint ventures, suppliers). See GRI Boundary Protocol for further guidance.	Fully	<ul style="list-style-type: none"> Refer section on about the report on page 2 		
3.7	State any specific limitations on the scope or boundary of the report (see completeness principle for explanation of scope).	Fully	<ul style="list-style-type: none"> Refer section on about the report on page 2 		

CONTINUE...

Indicator Reference	Description	Reported	Response	UNGC Principles link	API/ IPIECA guidelines link
3.8	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and/or between organizations.	Fully	<ul style="list-style-type: none"> GAIL reports only on operations that are 100% within its control; Refer section on about the report on page 2 		
3.9	Data measurement techniques and the bases of calculations, including assumptions and techniques underlying estimations applied to the compilation of the Indicators and other information in the report. Explain any decisions not to apply, or to substantially diverge from, the GRI Indicator Protocols.	Fully	<ul style="list-style-type: none"> Refer section on about the report on page 2 		
3.10	Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement (e.g., mergers/ acquisitions, change of base years/periods, nature of business, measurement methods).	Fully	<ul style="list-style-type: none"> On account of improvement in data management systems there have been certain changes in the data presented in the report. Where ever relevant the same has been highlighted in the form of footnotes across the report 		
3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report.	Fully	<ul style="list-style-type: none"> Refer section on about the report on page 2 		
3.12	Table identifying the location of the Standard Disclosures in the report.	Fully	<ul style="list-style-type: none"> Refer the GRI Content Index 		
3.13	Policy and current practice with regard to seeking external assurance for the report.	Fully	<ul style="list-style-type: none"> Refer section on about the report on page 2 Refer Assurance Statement on page 89 		
4. Governance, Commitments and Engagement					
4.1	Governance structure of the organization, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organizational oversight.	Fully	<ul style="list-style-type: none"> Refer section on the Building block- Corporate Governance on page 21 		
4.2	Indicate whether the Chair of the highest governance body is also an executive officer.	Fully	<ul style="list-style-type: none"> Our Chairman is also an executive officer 		

CONTINUE...



Indicator Reference	Description	Reported	Response	UNGC Principles link	API/ IPIECA guidelines link
4.3	For organizations that have a unitary board structure, state the number and gender of members of the highest governance body that are independent and/or non-executive members.	Fully	<ul style="list-style-type: none"> Refer page 36 of our Annual Report 2011-12 		
4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body.	Fully	<ul style="list-style-type: none"> Recommendations can be provided to the Shareholder and Stakeholder Grievance committee under the Board of Directors Refer to section on Investors on page 41 and employees on page 73 for information on additional engagement mechanism 		
4.5	Linkage between compensation for members of the highest governance body, senior managers, and executives (including departure arrangements), and the organization's performance (including social and environmental performance).	Fully	<ul style="list-style-type: none"> The remuneration of whole time directors is determined by the President of India, through the Ministry of Petroleum and Natural Gas. The compensation includes performance linked incentive that is based on performance parameters defined under the MoU signed with Government of India 		
4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided.	Fully	<ul style="list-style-type: none"> Refer section on Corporate governance on page 25- sub section on Ethics and Transparency 		
4.7	Process for determining the composition, qualifications, and expertise of the members of the highest governance body and its committees, including any consideration of gender and other indicators of diversity.	Fully	<ul style="list-style-type: none"> Whole time directors are selected by Public Enterprises Selection Board (PESB) and appointed by Ministry of Petroleum and Natural Gas (MoPNG). Part time government nominee Directors are appointed by MoPNG. Independent directors representing the interest of stakeholders are selected by Search Committee and appointed by President of India, acting through MoPNG. 		
4.8	Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation.	Fully	<ul style="list-style-type: none"> Refer GAIL Vision and Mission in the annual report and Sustainability Policy on page 6 of this report 		

CONTINUE...

Indicator Reference	Description	Reported	Response	UNGC Principles link	API/ IPIECA guidelines link
4.9	Procedures of the highest governance body for overseeing the organization's identification and management of economic, environmental, and social performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct, and principles.	Fully	<ul style="list-style-type: none"> Refer Corporate Governance section on page 21 		
4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance.	Fully	<ul style="list-style-type: none"> Refer Page 38 of Annual report 2012 		
4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organization.	Fully	<ul style="list-style-type: none"> Use of precautionary approach is implicit in our risk management framework. Please refer Risk management under Corporate Governance 		
4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses.	Fully	<ul style="list-style-type: none"> Refer to About this report section on page 2 		
4.13	Memberships in associations (such as industry associations) and/or national/international advocacy organizations in which the organization: * Has positions in governance bodies; * Participates in projects or committees; * Provides substantive funding beyond routine membership dues; or * Views membership as strategic.	Fully	<ul style="list-style-type: none"> Please refer Principle no 7 of NVG on page 88 		
4.14	List of stakeholder groups engaged by the organization.	Fully	<ul style="list-style-type: none"> Refer section on stakeholder engagement on page 28 		
4.15	Basis for identification and selection of stakeholders with whom to engage.	Fully	<ul style="list-style-type: none"> Refer section on stakeholder engagement on page 28 		
4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group.	Fully	<ul style="list-style-type: none"> Refer section on stakeholder engagement on page 28 		

CONTINUE...



Indicator Reference	Description	Reported	Response	UNGC Principles link	API/ IPIECA guidelines link
4.17	Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting.	Fully	<ul style="list-style-type: none"> Refer Material issues on page 34 		
Disclosure on Management Approach – EC					
	Economic performance	Fully	<ul style="list-style-type: none"> Refer Investor section on page 41 Refer management discussion and analysis on page 26 of the annual report 		
	Market presence, including local content	Fully	<ul style="list-style-type: none"> Refer Investor Section on page 42 - sub section on Business growth and Sourcing of Natural Gas Refer response to material issues - Gas Sourcing and Business Growth on page 35 		
	Indirect economic impacts	Fully	<ul style="list-style-type: none"> Refer Investor section on page 42- subsection on indirect economic impacts 		
	Reserves	Fully	<ul style="list-style-type: none"> Not applicable 		
Disclosure on Management Approach- EN					
		Fully	<ul style="list-style-type: none"> Refer section on Gas sourcing on page 35 and 42 		SE5
	Energy	Fully	<ul style="list-style-type: none"> Refer section on achieving operational excellence on page 43 and Sustainability Aspiration Section on page 40 	Principle 7, Principle 9,	E2, E3
	Water	Fully	<ul style="list-style-type: none"> Refer 'managing water resources' on page 61 	Principle 7, Principle 8, Principle 9,	E6, E9
	Ecosystem services including biodiversity	Fully	<ul style="list-style-type: none"> Refer 'managing our impact on biodiversity' under communities section on page 60 	Principle 8,	E5
	Emissions, effluents and waste	Fully	<ul style="list-style-type: none"> Refer 'emissions and waste related sub sections' on page 62 	Principle 7, Principle 8,	E1, E7, E10
	Products and services	Fully	<ul style="list-style-type: none"> Refer section on Product responsibility on page 67 		HS4
	Compliance	Fully	<ul style="list-style-type: none"> Refer 'compliance to regulatory requirements' under Stakeholder/Investor Section on page 47 	Principle 10,	SE14

CONTINUE...

Indicator Reference	Description	Reported	Response	UNGC Principles link	API/ IPIECA guidelines link
	Transport	Fully	<ul style="list-style-type: none"> Refer supplier section on page 70 		
	Overall	Fully	<ul style="list-style-type: none"> Refer Environmental performance of our owned operations on page 82 Refer section on clean energy and operational excellence on page 43 		
Disclosure on Management Approach- LA					
	Employment	Fully	<ul style="list-style-type: none"> Refer Employees Section on page 73 and Sustainability Strategy section- Skilled Manpower Availability on page 37 	Principle 1,	SE6, SE 16, SE 17
	Labor/management relations	Fully	<ul style="list-style-type: none"> Refer Human rights section on page 77 	Principle 4, Principle 5,	SE 8, SE 9, SE 10
	Occupational Health and Safety	Fully	<ul style="list-style-type: none"> Refer section on health and safety of our operations on page 78 		HS1, HS2, HS3, HS5
	Training and education	Fully	<ul style="list-style-type: none"> Refer section on Employee learning and development on page 74 		HS1, SE16, SE 17
	Diversity and equal opportunity	Fully	<ul style="list-style-type: none"> Refer Human rights section on page 77 	Principle 6,	SE 15, SE18
	Equal remuneration for women and men	Fully	<ul style="list-style-type: none"> Refer Human rights section on page 77 Refer employee retention strategy on page 77 	Principle 1,	SE 8, SE 9, SE 10, SE 15
Disclosure on Management Approach – HR					
	Investment and procurement practices	Fully	<ul style="list-style-type: none"> Refer section Business Profile section on page 15, Material issues under sub section business growth and Gas sourcing on page 35 Refer Investor Section on page 41 	Principle 10,	HS 4, SE 4, SE 7, SE 9, SE 11, SE 12
	Non-discrimination	Fully	<ul style="list-style-type: none"> Refer Human rights section on page 77 Principle 1, Principle 2 	Principle 1, Principle 2,	SE2, SE7, SE9, SE15
	Freedom of association and collective bargaining	Fully	<ul style="list-style-type: none"> Refer Human rights section on page 77 	Principle 3,	SE 1, SE 2, SE 5, SE 16
	Child labor	Fully	<ul style="list-style-type: none"> Refer Human rights section on page 77 	Principle 5,	SE 9, SE 10
	Prevention of forced and compulsory labor	Fully	<ul style="list-style-type: none"> Refer Human rights section on page 77 	Principle 4,	SE 9, SE 10
	Security Practices	Fully	<ul style="list-style-type: none"> Refer section on health and safety of our operations on page 78 	Principle 1,	HS2, SE10

CONTINUE...



Indicator Reference	Description	Reported	Response	UNGC Principles link	API/ IPIECA guidelines link
	Indigenous rights	Fully	<ul style="list-style-type: none"> Refer community development section on page 50 		SE 2, SE 8
	Assessment	Fully	<ul style="list-style-type: none"> Refer suppliers, employees and communities section 		SE 8
	Remediation	Fully	<ul style="list-style-type: none"> Refer suppliers, employees and communities section 		SE 18
Disclosure on Management Approach- SO					
	Local communities	Fully	<ul style="list-style-type: none"> Refer community development section on page 50 		SE 1, SE 4, SE 5
	Corruption	Fully	<ul style="list-style-type: none"> Refer section on ethics and transparency on page 25 Supplier Management and Engagement System on page 71 Investor Management and engagement system on page 42 	Principle 10,	SE 11, SE 12, SE 13
	Public policy	Fully	<ul style="list-style-type: none"> Principle seven under NVG Principles on page 86 		SE 14
	Anti-competitive behaviour	Fully	<ul style="list-style-type: none"> We abide by all National regulations related to discouraging Anti Competitive behaviour 	Principle 10,	SE 11, SE 14
	Compliance	Fully	<ul style="list-style-type: none"> Refer section on Ethics and Transparency on page 25 Refer compliance to regulatory requirements on page 47 		SE11
	Emergency preparedness	Fully	<ul style="list-style-type: none"> Refer section on health and safety of our operations on page 78 		
	Involuntary resettlement	Fully	<ul style="list-style-type: none"> We abide by National Regulations on Resettlement and Rehabilitation; However none of our operations have caused any form of R&R this year 		SE 1
	Asset integrity and process safety	Fully	<ul style="list-style-type: none"> Refer section on health and safety of our operations on page 78 		HS 4, HS 5
Disclosure on Management Approach- PR					
	Customer health and safety	Fully	<ul style="list-style-type: none"> Refer customer satisfaction on page 36 Refer customer management and engagement systems on page 65 	HS4	

CONTINUE...

Indicator Reference	Description	Reported	Response	UNGC Principles link	API/ IPIECA guidelines link
	Product and service labelling	Fully	<ul style="list-style-type: none"> Not applicable 		HS4
	Marketing communications	Fully	<ul style="list-style-type: none"> Not applicable 		
	Customer privacy	Fully	<ul style="list-style-type: none"> Not applicable 		
	Compliance	Fully	<ul style="list-style-type: none"> Refer section on Ethics and Transparency on page 25 Refer compliance to regulatory requirements on page 47 	Principle 10,	SE 11,SE 14
	Fossil fuel substitutes	Fully	<ul style="list-style-type: none"> Refer material issue- Business growth on page 35 Refer Diversification into clean energy on page 43 	Principle 8, Principle 9,	E3
Performance Indicators- Economic					
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.	Fully	<ul style="list-style-type: none"> Refer Sustainability Performance Section on page 85 		
EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change.	Fully	<ul style="list-style-type: none"> GAIL has undertaken specific targets on Climate Change under SD Aspirations 2020, we will monitor the financial implications and outlays to undertake our projects to mitigate Climate Change impacts in the years to come 		
EC3	Coverage of the organization's defined benefit plan obligations.	Fully	<ul style="list-style-type: none"> Refer employee retention strategy on page 77 		
EC4	Significant financial assistance received from government.	Fully	<ul style="list-style-type: none"> Refer Sustainability Performance Section on page 85 		SE13
EC5	Range of ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation.	Fully	<ul style="list-style-type: none"> The minimum wage offered by us is more than the standard entry level wage as recommended by regulation across our operation. 		

CONTINUE...



Indicator Reference	Description	Reported	Response	UNGC Principles link	API/ IPECA guidelines link
EC6	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation.	Fully	<ul style="list-style-type: none"> We define local as Indian sub-continent. Refer the table on sustainability performance on page 82 for details on spend. Though we do not have a specific policy on fostering / favouring local vendors, wherever possible we give preference to local vendors given all parameters to be equal. Also, most of the contracts / transportation contracts / canteen contracts / township facilities have been outsourced to local vendors. 		SE4, SE7
EC7	Procedures for local hiring and proportion of senior management hired from the local community at significant locations of operation.	Fully	<ul style="list-style-type: none"> Recruitment at the Executive/ Officer cadre is done only at all India bases, and not at local level; also refer talent acquisition on page 74 		SE6
EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement.	Fully	<ul style="list-style-type: none"> Refer section on infrastructure on page 55 		SE4
EC9	Understanding and describing significant indirect economic impacts, including the extent of impacts.	Fully	<ul style="list-style-type: none"> Refer 'Communities Section' on page 48 and investor section on page 41 		SE4
OG1	Volume and type of estimated proved reserves and production.	Fully	<ul style="list-style-type: none"> Not applicable 		
Performance Indicators- Environmental					
EN1	Materials used by weight or volume.	Fully	<ul style="list-style-type: none"> Refer Sustainability Performance Section on page 82 		SE5
EN2	Percentage of materials used that are recycled input materials.	Fully	<ul style="list-style-type: none"> Refer Sustainability Performance Section on page 82 		
EN3	Direct energy consumption by primary energy source.	Fully	<ul style="list-style-type: none"> Refer Sustainability Performance Section on page 82 		E2
EN4	Indirect energy consumption by primary source.	Fully	<ul style="list-style-type: none"> Refer Sustainability Performance Section on page 82 		E2
OG2	Total amount invested in renewable energy.	Fully	<ul style="list-style-type: none"> Refer business profile section on page 43 		E3

CONTINUE...

Indicator Reference	Description	Reported	Response	UNGC Principles link	API/ IPECA guidelines link
OG3	Total amount of renewable energy generated by source.	Fully	<ul style="list-style-type: none"> Refer Sustainability Performance Section on page 82 		
EN5	Energy saved due to conservation and efficiency improvements.	Fully	<ul style="list-style-type: none"> Refer Sustainability Performance Section on page 82 and refer operational efficiency section on page 43 		
EN6	Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives.	Fully	<ul style="list-style-type: none"> Refer Sustainability Performance Section on page 82 		
EN7	Initiatives to reduce indirect energy consumption and reductions achieved.	Not	<ul style="list-style-type: none"> We are currently not systematically tracking reduction in indirect energy consumption 		
EN8	Total water withdrawal by source.	Fully	<ul style="list-style-type: none"> Refer Sustainability Performance Section on page 82 Refer section on managing water resources on page 61 		
EN9	Water sources significantly affected by withdrawal of water.	Fully	<ul style="list-style-type: none"> Refer Sustainability Performance Section on page 82 Refer section on managing water resources on page 61 		E6
EN10	Percentage and total volume of water recycled and reused.	Fully	<ul style="list-style-type: none"> Refer Sustainability Performance Section on page 82 Refer section on managing water resources on page 61 		
EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.	Fully	<ul style="list-style-type: none"> None of our operations are close to protected areas. Refer section on managing impact on biodiversity on page 60 		E5
EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.	Fully	<ul style="list-style-type: none"> Refer section on R&R and Right of Way on page 59 		E5
EN13	Habitats protected or restored.	Fully	<ul style="list-style-type: none"> Refer section on managing impact on biodiversity on page 60 		E5

CONTINUE...



Indicator Reference	Description	Reported	Response	UNGC Principles link	API/ IPIECA guidelines link
EN14	Strategies, current actions, and future plans for managing impacts on biodiversity.	Fully	<ul style="list-style-type: none"> Refer sub section 'Managing our impact on biodiversity' under 'Communities Section' 		E5
OG4	Number and percentage of significant operating sites in which biodiversity risk has been assessed and monitored.	Fully	<ul style="list-style-type: none"> 100 % of sites have been assessed for biodiversity risk 		
EN15	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.	Fully	<ul style="list-style-type: none"> None of our operations are located in areas with habitats of IUCN Red List species or those listed on National Conservation List 		
EN16	Total direct and indirect greenhouse gas emissions by weight.	Fully	<ul style="list-style-type: none"> Refer Sustainability Performance Section on page 82 		E1
EN17	Other relevant indirect greenhouse gas emissions by weight.	Fully	<ul style="list-style-type: none"> Refer Sustainability Performance Section on page 82 		E1
EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved.	Fully	<ul style="list-style-type: none"> Refer Sustainability Performance Section on page 82, Material issues on page 34, Reducing air emissions on page 62 		E1
EN19	Emissions of ozone-depleting substances by weight.	Fully	<ul style="list-style-type: none"> Refer Sustainability Performance Section on page 82 		E7
EN20	NOx, SOx, and other significant air emissions by type and weight.	Fully	<ul style="list-style-type: none"> Refer Sustainability Performance Section on page 82, reducing air emissions on page 62 		E7
EN21	Total water discharge by quality and destination.	Fully	<ul style="list-style-type: none"> Refer Sustainability Performance Section on page 82 Refer section on managing water resources on page 61 		E9
EN22	Total weight of waste by type and disposal method.	Fully	<ul style="list-style-type: none"> Refer Sustainability Performance Section on page 82, 		E10
OG5	Volume of formation or produced water.	Fully	<ul style="list-style-type: none"> Not applicable 		
EN23	Total number and volume of significant spills.	Fully	<ul style="list-style-type: none"> No significant spills 		E8
OG6	Volume of flared and vented hydrocarbon.	Fully	<ul style="list-style-type: none"> Refer Sustainability Performance Section on page 82 		E4
OG7	Amount of drilling waste (drill mud and cuttings) and strategies for treatment and disposal.	Fully	<ul style="list-style-type: none"> Not applicable 		

Indicator Reference	Description	Reported	Response	UNGC Principles link	API/ IPECA guidelines link
EN24	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally.	Fully	<ul style="list-style-type: none"> Not applicable 		
EN25	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff.	Fully	<ul style="list-style-type: none"> There is no significant impact of our wastewater discharges and run-offs to water bodies located in the vicinity of our operations 		
EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.	Fully	<ul style="list-style-type: none"> Refer section on Product responsibility on page 69 		
EN27	Percentage of products sold and their packaging materials that are reclaimed by category.	Fully	<ul style="list-style-type: none"> This is not applicable for our gas transmission businesses. However, for the petrochemicals on account of small size of packaging bags, it is not possible to track and reclaim the same 		
OG8	Benzene, Lead and Sulfur content in fuels.	Fully	<ul style="list-style-type: none"> Natural Gas does not contain Benzene and Lead; The content of sulphur is below 4.5 ppm, depending on natural gas quality and source 		
EN28	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations.	Fully	<ul style="list-style-type: none"> Refer Sustainability Performance Section on page 82 		
EN29	Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce.	Partially	<ul style="list-style-type: none"> Currently we are mapping and reporting GHG emissions generated on account of employee business travel 		
EN30	Total environmental protection expenditures and investments by type.	Fully	<ul style="list-style-type: none"> Refer Sustainability Performance Section on page 82 		
Performance Indicators- Labour Practices and Decent Work					
LA1	Total workforce by employment type, employment contract, and region, broken down by gender.	Fully	<ul style="list-style-type: none"> Refer Sustainability Performance Section on page 82 		SE15



Indicator Reference	Description	Reported	Response	UNGC Principles link	API/ IPECA guidelines link
LA2	Total number and rate of new employee hires and employee turnover by age group, gender, and region.	Fully	<ul style="list-style-type: none"> Refer Sustainability Performance Section on page 82 		
LA3	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations.	Fully	<ul style="list-style-type: none"> Refer section on employee retention strategy on page 77 		
LA15	Return to work and retention rates after parental leave, by gender. Fully	Fully	<ul style="list-style-type: none"> 100% return to work and retention rates after parental leave for both male and female employees 		
LA4	Percentage of employees covered by collective bargaining agreements.	Fully	<ul style="list-style-type: none"> All Workmen, which constitute 23.5% of total employee strength, are covered by collective bargaining agreement 		HS1
LA5	Minimum notice period (s) regarding significant operational changes, including whether it is specified in collective agreements.	Fully	<ul style="list-style-type: none"> We adhere to Section 9A of Industrial Dispute Act 1947 and Schedule 4 for providing notice period regarding significant operational changes 		
LA6	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs.	Fully	<ul style="list-style-type: none"> Refer Sustainability Performance Section on page 82 		HS1
LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region and by gender.	Fully	<ul style="list-style-type: none"> Refer Sustainability Performance Section on page 82 		HS2, HS3
LA8	Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases.	Fully	<ul style="list-style-type: none"> Refer section on health on page 78 		HS2
LA9	Health and safety topics covered in formal agreements with trade unions.	Fully	<ul style="list-style-type: none"> We are currently in the process of collating health and safety topics covered in unions across operations 		HS2
LA10	Average hours of training per year per employee by gender, and by employee category.	Fully	<ul style="list-style-type: none"> Refer Sustainability Performance Section on page 82 		SE17

CONTINUE...

Indicator Reference	Description	Reported	Response	UNGC Principles link	API/ IPECA guidelines link
LA11	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.	Fully	<ul style="list-style-type: none"> Refer section on employee retention strategy on page 77 		
LA12	Percentage of employees receiving regular performance and career development reviews, by gender.	Fully	<ul style="list-style-type: none"> Refer employee section page 73 		SE16
LA13	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity.	Fully	<ul style="list-style-type: none"> Please refer to Corporate Governance section on page 21 and page 36 of our Annual report 2011-12 		SE15
LA14	Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation.	Fully	<ul style="list-style-type: none"> No discrimination based on gender is practiced for Compensation in any work centres. 		
Performance Indicators- Human Rights					
HR1	Percentage and total number of significant investment agreements and contracts that include clauses incorporating human rights concerns, or that have undergone human rights screening.	Fully	<ul style="list-style-type: none"> Refer section on Ethics and Transparency on page 25 Refer section on Human rights on page 77 		SE8Q
HR2	Percentage of significant suppliers, contractors and other business partners that have undergone human rights screening, and actions taken.	Fully	<ul style="list-style-type: none"> Currently we are in the process of setting up systems to screen Human Rights performance of our suppliers and contractors. We will report on this indicator in FY 2013-14 		SE9
HR3	Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained.	Fully	<ul style="list-style-type: none"> Refer section on Human rights on page 77 		
HR4	Total number of incidents of discrimination and corrective actions taken.	Fully	<ul style="list-style-type: none"> No incidents of discrimination 		

CONTINUE...



Indicator Reference	Description	Reported	Response	UNGC Principles link	API/ IPECA guidelines link
HR5	Operations and significant suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and actions taken to support these rights.	Fully	<ul style="list-style-type: none"> Though there has not been a formal/ specific initiative to identify such operations, there is no operation which runs such a risk to the right to exercise freedom of association and collective bargaining. 		
HR6	Operations and significant suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor.	Fully	<ul style="list-style-type: none"> There is no incident of engagement of Child Labour reported in the reporting period. The Engineer in Charge (EIC) ensures relevant statutes are complied with. Prohibition to engage Child Labour is the standard C&P Clause. 		
HR7	Operations and significant suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of all forms of forced or compulsory labor.	Fully	<ul style="list-style-type: none"> Though there has not been a formal/ specific initiative to identify such operations, no incident of engagement of forced or compulsory labour has been reported in the assessment year. The Engineer in Charge (EIC) ensures relevant statutes are complied with. 		
HR8	Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations.	Fully	<ul style="list-style-type: none"> Please refer to Employees section on page 81 		SE10
HR9	Total number of incidents of violations involving rights of indigenous people and actions taken.	Fully	<ul style="list-style-type: none"> There have been no incidents of violations involving rights of indigenous people 		
HR10	Percentage and total number of operations that have been subject to human rights reviews and/or impact assessments.	Not	<ul style="list-style-type: none"> All our core operations are continuously monitored and reviewed to eliminate Human Right risks. For more information please refer to human rights section on page 77 		
OG9	Operations where indigenous communities are present or affected by activities and where specific engagement strategies are in place.	Fully	<ul style="list-style-type: none"> We have one of our operations at Jhabua where there is presence of indigenous communities near our operations. For more information please refer page 52 		

CONTINUE...

Indicator Reference	Description	Reported	Response	UNGC Principles link	API/ IPECA guidelines link
HR11	"Number of grievances related to human rights filed, addressed and resolved through formal grievance mechanisms."	Fully	<ul style="list-style-type: none"> No such grievances have been filed 		
Performance Indicators- Society					
SO1	Percentage of operations with implemented local community engagement, impact assessments, and development programs.	Fully	<ul style="list-style-type: none"> All our operations are governed by our CSR approach. For more information please refer page 52 		SE1
SO9	Operations with significant potential or actual negative impacts on local communities.	Fully	<ul style="list-style-type: none"> Not applicable 		
SO10	Prevention and mitigation measures implemented in operations with significant potential or actual negative impacts on local communities.	Fully	<ul style="list-style-type: none"> Not applicable 		
OG10	Number and description of significant disputes with local communities and indigenous peoples.	Fully	<ul style="list-style-type: none"> We did not have any incidents of significant disputes with local communities and indigenous peoples 		SE2
OG11	Number of sites that have been decommissioned and sites that are in the process of being decommissioned.	Fully	<ul style="list-style-type: none"> Not applicable 		
SO2	Percentage and total number of business units analyzed for risks related to corruption.	Fully	<ul style="list-style-type: none"> Corruption risks are covered under our vigilance procedures and risk management framework. Since our vigilance procedures are mandatory under the rules established by Government of India, 100% of our operations are covered under risk analysis including aspects related to corruption. 		SO3
SO3	Percentage of employees trained in organization's anti-corruption policies and procedures.	Fully	<ul style="list-style-type: none"> All our employees are mandated to go through the Code of Conduct and comply with it during their tenure. For more information please refer section on human rights on page 77 		

CONTINUE...



Indicator Reference	Description	Reported	Response	UNGC Principles link	API/ IPECA guidelines link
SO4	Actions taken in response to incidents of corruption.	Fully	<ul style="list-style-type: none"> While we have taken stringent measures to curb corruption and promote transparency in our operations, there were seven cases of corruption reported during the year. Necessary action was taken by the vigilance department, based on the outcome of their investigation. Refer section on ethics and transparency on page 25 		
SO5	Public policy positions and participation in public policy development and lobbying.	Fully	<ul style="list-style-type: none"> Refer principle no. 7 under NVG-SEE response 		SE14
SO6	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country.	Fully	<ul style="list-style-type: none"> There were no financial or in-kind contributions to political parties, etc. 		
SO7	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes.	Fully	<ul style="list-style-type: none"> No actions were taken against GAIL since there were no instances of anti-competitive behavior, anti-trust or monopolistic practices 		
SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations.	Fully	<ul style="list-style-type: none"> Apart from 1 show cause notice, there have been no legal violations in the year. Same information can be validated through the annual report as well. 		
OG12	Operations where involuntary resettlement took place, the number of households resettled in each and how their livelihoods were affected in the process.	Fully	<ul style="list-style-type: none"> No such operations 		SE3
OG13	Number of process safety events, by business activity.	Fully	<ul style="list-style-type: none"> No such events have taken place 		HS5
Performance indicators- Product responsibility					
PR1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures.	Fully	<ul style="list-style-type: none"> Refer section on product responsibility on page 67 & 69. For information on research and development please refer page 67. For transportation of our material and products please refer page 72 		HS4

CONTINUE...

Indicator Reference	Description	Reported	Response	UNGC Principles link	API/ IPIECA guidelines link
PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes.	Fully	<ul style="list-style-type: none"> There were no such incidents of non-compliance during the reporting period 		
PR3	Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements.	Fully	<ul style="list-style-type: none"> Our petrochemicals product packages bear the location of the manufacturing facility, chemical composition and total weight as per Indian legislations 		
PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes.	Fully	<ul style="list-style-type: none"> There were no such incidents of non-compliance during the reporting period 		
PR5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction.	Fully	<ul style="list-style-type: none"> Refer customer satisfaction as a material issue on page 36 		
PR6	Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship.	Fully	<ul style="list-style-type: none"> GAIL fully complies by the ASCI norms for advertising and communication and works with ASCI-authorized media agencies only 		
PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship by type of outcomes.	Fully	<ul style="list-style-type: none"> There were no such incidents of non-compliance during the reporting period 		
PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data.	Fully	<ul style="list-style-type: none"> Customer privacy is not a material issue for our industry and hence has not been reported 		
PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services.	Fully	<ul style="list-style-type: none"> There were no such incidents of non-compliance during the reporting period. 		
OG14	Volume of biofuels produced and purchased meeting sustainability criteria.	Fully	<ul style="list-style-type: none"> Not applicable 		



Report Application Level		C	C+	B	B+	A	A+
Standard Disclosures	<div>Profile Disclosures</div> <div>OUTPUT</div>	Report on: 1.1 2.1 - 2.10 3.1 - 3.8, 3.10 - 3.12 4.1 - 4.4, 4.14 - 4.15	Report Externally Assured	Report on all criteria listed for Level C plus: 1.2 3.9, 3.13 4.5 - 4.13, 4.16 - 4.17	Report Externally Assured	Same as requirement for Level B	Report Externally Assured
	<div>Disclosures on Management Approach</div> <div>OUTPUT</div>	Not Required		Management Approach Disclosures for each Indicator Category		Management Approach disclosed for each Indicator Category	
	<div>Performance Indicators & Sector Supplement Performance Indicators</div> <div>OUTPUT</div>	Report fully on a minimum of any 10 Performance Indicators, including at least one from each of: social, economic, and environment.**		Report fully on a minimum of any 20 Performance Indicators, at least one from each of: economic, environment, human rights, labor, society, product responsibility.***		Respond on each core and Sector Supplement* indicator with due regard to the materiality Principle by either: a) reporting on the indicator or b) explaining the reason for its omission.	
		<div>* Sector supplement in final version</div> <div>** Performance Indicators may be selected from any finalized Sector Supplement, but 7 of the 10 must be from the original GRI Guidelines</div> <div>*** Performance Indicators may be selected from any finalized Sector Supplement, but 14 of the 20 must be from the original GRI Guidelines</div>					

The GAIL Sustainability Report FY 2011-12, 'Shaping the Future ' is a GRI -G3.1+OGSS Compliant Application Level A+ Report

Way Forward

This year was a turning point in GAIL's sustainability journey. We took several critical decisions that will give our sustainability initiatives a definitive direction. We created several governance procedures to strengthen top management involvement in GAIL's sustainability agenda and improve implementation and monitoring of our sustainability initiatives. A Board level Sub-committee headed by an Independent Director was created for propagating our sustainability agenda, along with a steering committee headed by Director (BD). To provide a direction and streamline our sustainability initiatives, we also developed a comprehensive sustainability policy. These initiatives cover a wide spectrum of issues related to water conservation, GHG accounting, energy efficiency, watershed management, biodiversity management and renewable energy. We have rolled out our SD Aspirations 2020, where we will provide maximum thrust and achieve well-defined tangible targets on aspects of GHG emissions reduction, energy efficiency, water management and awareness on sustainability. In May 2011, to demonstrate our commitment to sustainability, GAIL became a signatory to United Nations Global Compact. These are some of the critical steps that will be the foundation of our efforts to create a better future for us and the generations to come.

We continue to implement innovative projects under the CSR and SD guidelines of the DPE and as a part of our MoU with the MoP&NG. As a part of our Strategy 2020, we have ventured beyond the realms of standard business operations to give a special thrust on promoting renewable energy. Going forward, we will concentrate on further developing aspects of awareness, stakeholder engagement and materiality, strategy and governance at GAIL. We plan to continue with our SD workshops across locations in order to increase the awareness of our employees including Senior Management, customers and suppliers on elements of sustainability. We will be further refining the process of our engagement with stakeholders and streamline the process across locations. This will also help us to completely integrate the materiality assessment process with stakeholder engagement. Achievement of SD Aspirations 2020 will be one of the major areas and eventually we plan to incorporate these aspirations in our Strategy 2020. This move will help us to streamline sustainability at GAIL and also give us a distinct competitive advantage in the market. We are also in the process of creating a senior level multi-disciplinary committee headed by OICs at sites to spearhead the sustainability initiatives at sites and shall also be responsible for authentication and certification of data and information submitted by sites. In the coming year, we plan to benchmark our sustainability performance against our national and international peers.

We continue to conduct needs assessment of local communities and also determine the impact of our community development initiatives with the help of TISS. This assessment will play an important role in defining our CSR budgets and initiatives. We also continue to pursue our association with MoP&NG, DGH, PNGRB, OISD, FICCI, CII, TERI, ASSOCHAM, International Gas Union, etc. on various business and sustainability issues in the oil and gas sector. As signatory to the UNGC, we will also communicate our progress on the initiatives adopted under the 10 principles.

If you would like to share with us your constructive feedback on how GAIL can shape the future towards betterment of all, queries can be directed to:

Mr. Santanu Roy, General Manager (Corporate Planning) at sroy@gail.co.in

Mr. Kamal Kishore Chatiwal, Dy. General Manager (Corporate Planning) at kk.chatiwal@gail.co.in



Ashwathah Sarva Vrakshanam

अश्वत्थः सर्व वृक्षाणाम

(Shlok in 10th Chapter of Geeta)
I (Form of Energy) am Ashwathah
(size, greatness and growth)
in all trees

(Hindi Name: Peepal)
(Ficus religiosa or Sacred Fig)

Our Green Colour is inspired
from Ashwathah: A Symbol of
long life and potential to
release more oxygen.

"Each one of us in this universe have
different forms of Energy". This
statement is derived from "Geeta"
-an ancient literature of India,
wherein Ashwathah tree with its
property of size, greatness and
growth matter is thought of as
Energy Particles. Artists, poets and
storytellers propagated this
wisdom by quoting Ashwathah tree
as a symbol of faith in India and many
other Asian Countries.



Reducing carbon footprint



GAIL (India) Limited

A MAHARATNA COMPANY

Regd. Off.: 16, Bhikaiji Cama Place, R. K. Puram, New Delhi-110 066

Website : www.gailonline.com