



GAIL (India) Limited

# Advancing Sustainable Transformation



GAIL Advances  
**NET ZERO**  
Target to **2035**

**Sustainability Report**  
2023-24  
**New India New Energy**



GAIL (India) Limited

# Advancing Sustainable Transformation

## Sustainability Report 2023-24 **New India New Energy**

Advancing Sustainable Transformation theme suitably reflects GAIL's efforts to contribute towards Sustainable Development Goals and align with India's Nationally Determined Contributions (NDC).

Natural Gas is the cleanest fossil fuel and has low carbon intensity compared to other fuels like Petrol, Diesel, Coal etc. Therefore, switching over to Natural Gas as a fuel by other industries helps in reducing GHG emissions. Hence, GAIL's operations help to improve the overall environment. India has targeted to increase Natural gas share in energy mix from 6.7% currently to 15% by the year 2030.

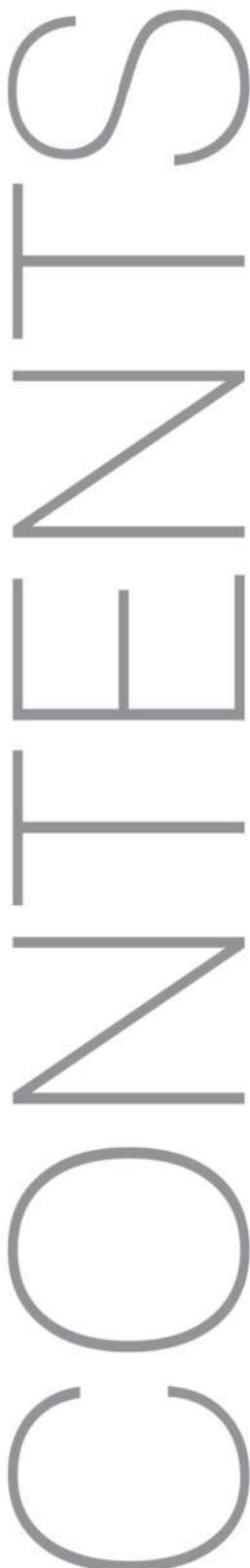
GAIL undertook laying of ~ 2,300 Km of new Natural Gas Pipelines during the year taking the total network 16,243 Km of Pipeline network spread across the length and breadth of the country to improve the distribution infrastructure. GAIL with its 15 City Gas Distribution (CGD) entities set-up 201 CNG stations in 72 Geographical Areas (GAs) across 17 states to advance the energy transition and also lowering pollution, thereby benefiting the citizens at large. It is also equally important to source additional natural gas to fulfil the increased requirement. During the year, GAIL signed long-term LNG purchase agreements with ADNOC Gas and Vitol Asia Pte Ltd for purchase of approx. 1.5 MMTPA LNG for a period of 10 years, commencing from 2026.

Further, to increase the availability of domestic gas, GAIL will be setting up 26 Compressed BioGas plants across India. This will not only improve the availability of Natural Gas but also help in supporting farmers to increase their income. GAIL shall also be investing approx. INR 600 Crores in a CBG Joint Venture with TruAlt Bioenergy to produce 33 million kg of CBG per annum by setting up 10 plants. GAIL also set-up India's first small-scale LNG unit at Vijaipur, M.P. to provide natural gas in regions devoid of pipeline connectivity. Many other Projects are being implemented that shall help to increase the availability of Natural Gas and other cleaner fuels like Hydrogen thereby helping the Government to achieve its Net Zero target.



Advancing Sustainable Transformation





	
	
	
<b>04</b>	About the Report
<b>08</b>	Message from Directors
<b>18</b>	GAIL Highlights
<b>34</b>	GAIL at a Glance
<b>42</b>	Sustainability at GAIL
<b>50</b>	Our Stakeholder Inclusion and Materiality
<b>68</b>	Strong Governance and Business Resilience
<b>88</b>	Business Growth
<b>100</b>	Operational Excellence
<b>110</b>	Energy and Environment

<b>124</b>	Climate Change
<b>140</b>	Our Employees
<b>156</b>	Ensuring Health and Safety for all
<b>168</b>	Responsible Supply Chain Management
<b>178</b>	Our Customers
<b>188</b>	Our Community
<b>202</b>	Performance & Standards
<b>212</b>	Independent Assurance Statement
<b>219</b>	GRI Content Index
<b>285</b>	Other Indices



01



## About The Report

## ABOUT THE REPORT

(GRI 2-2)

GAIL (India) Limited has published an annual Sustainability Report since 2011 providing details on the company's Environmental, Economic, Social and Governance performance. GAIL strives to disclose information about its Strategy, Goals, Targets and Performance through Sustainability Reporting.

This Sustainability Report outlines GAIL's engagements with stakeholders, as well as the programs and initiatives implemented to achieve those engagements. This Report also includes information on the material topics that are important to GAIL's business and stakeholders.

### 1.1 Reporting Year & Cycle

(GRI 2-3 a, b, c)

This is GAIL's 14<sup>th</sup> Sustainability Report, highlighting the company's Environmental, Social, Economic and Governance performance in the fiscal year. The reporting period for GAIL's financial accounting and performance data and sustainability performance spans from 1<sup>st</sup> April 2023 to 31<sup>st</sup> March 2024. The electronic version of the report can be found on GAIL's website.

<https://gailonline.com/SbSustainability.html>

### 1.2 Reporting Standards

GAIL's Sustainability Reports are in accordance with the most recent version of the International Petroleum Industry Environmental Conservation Association (IPIECA) guidelines, which is a global Oil and Gas industry association that focuses on Environmental and Social issues. This Report is also in compliance with the GRI Sustainability Reporting Standards, Sustainability Accounting Standards Board (SASB), International Sustainability Standards Board (ISSB), National Guidelines on Responsible Business Conduct (NGRBC) principles, SEBI's Business Responsibility and Sustainability Reporting (BRSR) requirements, the American Petroleum

Institute (API) guidelines, ISO 26000:2010, the United Nations Global Compact (UNGC), and Task Force on Climate-Related Financial Disclosures (TCFD).

GAIL has reported its performance for all the key indicators corresponding to the identified material aspects, along with the management approach for the identified material topics.

### 1.3 Reporting Scope

(GRI 204-1 b, c)

The scope of reporting includes GAIL's performance across all locations in terms of various Environmental, Economic, Social and Governance parameters. Unless stated otherwise, India is our significant location of operations. The word "local" refers to India, wherever applicable. Company's Joint Ventures, subsidiaries, Associates, leased facilities, outsourced operations and other entities have been excluded from the scope of this Report.

### 1.4 Reporting Boundary

(GRI 2-1d, GRI 2-2a, b, c,)

GAIL Sustainability Report data is collected with the help of Sustainability Software, namely the e-Sustainability Module and the e-Business Responsibility and Sustainability Reporting (BRSR) Module.

GAIL's reporting boundary is at a standalone level; it includes the following, unless stated otherwise:

- GAIL's Production and Processing Plants at Pata, Vijaipur, Vaghodia, Gandhar
- Natural Gas Compressor Stations (Hazira, Vaghodia, Jhabua, Khera, Vijaipur, Dibiyapur, Kailaras and Chhainsa)
- Liquified Petroleum Gas (LPG) pumping/receiving stations (Loni, Mansarampura, Nasirabad, Abu Road, Samakhiali, Jamnagar,



GAIL (India) Limited

## Sustainability Report 2023-24

New India New Energy

Kandla, Vishakapatnam, G Konduru and Cherlapalli (Secunderabad)).

- Regional pipeline offices in NCR, Baroda, Ranchi, Mumbai, Puducherry, Rajahmundry, Agartala and Dabhol Bengaluru Pipeline (DBPL)
- E&P business
- Corporate Office in New Delhi
- Info-Hub and Jubilee Tower office in Noida
- GAIL Training Institute at Noida and Jaipur
- Zonal Marketing offices at Mumbai, Noida, Chandigarh, Jaipur, Lucknow, Bhopal, Hyderabad, Bengaluru, Chennai, Bhubaneshwar, Kolkata, Guwahati, Ahmedabad

### 1.5 Data Management

Our sustainability coordinators at all plants/offices are responsible for implementing various initiatives and collecting data for reporting. We have a robust governance mechanism to track sustainability data. The coordinators leverage our internal sustainability portals to track and report the data. The data is further verified by respective departmental heads for accuracy.

### 1.6 Data Validation and Assurance

(GRI 2-5a, b, 2-3d)

An accredited external agency has carried out assurance of this Report. This Sustainability Report is a Type 2 High-Level Assurance/Reasonable Assurance Report following the latest AA1000AS V3 standard. The assurance process includes physical assurance at multiple sites, offices & corporate departments and virtual assurance at multiple locations to validate the data provided. The data on material topics is compiled by each of the Sustainability Coordinators from functional departments, and the report is developed by the Corporate Sustainability Department, which is approved by the Sustainable Development Committee of the Board.

The Sustainability Report is a communication tool for all our stakeholders and is an operational document that assists us in informed decision-making. Any feedback or query related to this report can be communicated to Shri Parivesh Chugh, Executive Director (SD & Renewables) ([pchugh@gail.co.in](mailto:pchugh@gail.co.in)) and Shri Sameer Virmani GM (Sustainability) ([s.virmani@gail.co.in](mailto:s.virmani@gail.co.in)).

Readers can also reach out to us at [sustainability@gail.co.in](mailto:sustainability@gail.co.in) to provide feedback on improving our performance and sustainability disclosures.

#### Disclaimer:

Statements in the GAIL's Sustainability Report FY 2023-24 may be "forward-looking statements" identified by words such as 'plans', 'expects', 'will', 'anticipates', 'believes', 'intends', 'projects', 'estimates' and may be progressive within the meaning of the applicable laws and regulations. The Company disclaims any obligation to update these forward-looking statements except as required by law or as deemed fit by the organization.



"GAIL Urja" LNG Vessel Naming Ceremony at South Korea



Shri Deepak Gupta Director (Projects) visit at Jhabua Compressor Station

02



## Message from Directors

# Message from CMD



**Dear Stakeholders,**

The theme of this year's report, "Advancing Sustainable Transformation," reflects our dedication to integrating sustainability into every facet of our operations. At GAIL, we believe that actual progress is measured not only by financial performance but also by our ability to create a positive impact on the environment and society. In the same spirit "GAIL Board has accorded approval to advance its Net Zero target for 100 % reduction in Scope 1 and Scope 2 GHG emissions by five years, from the year 2040 to year 2035. This shall help in the improvement of GAIL's Environmental, Social, and Governance (ESG) Rating which will result in improving company's credit worthiness and help raise finances. It shall also make GAIL future-ready in the era of upcoming Carbon Markets and Carbon Tax to be introduced in the country. The decision follows an extensive study undertaken by GAIL to enhance its sustainability goals and align with India's broader Net Zero commitments. GAIL plans to achieve this ambitious goal through a strategic approach involving the Electrification of Natural Gas based equipment, Renewable Energy, Battery Energy Storage Systems (BESS), Compressed Biogas (CBG), Energy Efficiency, Green Hydrogen, CO<sub>2</sub> Valorization and Afforestation.

At GAIL, we are deeply committed to positive climate action. Natural gas is a clean fuel and being the largest Natural Gas Company, GAIL is helping industries lower their GHG emissions by switching over to natural gas as a fuel. Hence, GAIL's operations help improve the overall environment.

In line with the Government of India's 'National Hydrogen Energy Mission', GAIL has commissioned a 10 MW Green Hydrogen Electrolyzer unit with a production capacity of 4.3 TPD in Vijaipur, using Proton Exchange Membrane (PEM) technology.

I am happy to announce that GAIL has been included in the FTSE4Good Index Series as a part of the London Stock Exchange Group Sustainability Index once again for 2024, which demonstrates strong Environmental, Social

and Governance (ESG) practices in the Oil Gas Sector. Additionally, GAIL has achieved a significant milestone by being upgraded from "C" to "B" in the CDP Global ESG 2023 Rating under the Climate Change category.

GAIL's endeavours are directed toward minimizing our ecological footprint. Implementing the Zero Liquid Discharge Project at GAIL Pata, with an investment of over INR 500 Crore, exhibits our steadfast commitment to enhancing water sustainability for the prosperity of forthcoming generations.

In conclusion, our actions and achievements show GAIL's commitment to advancing sustainable transformation. From our renewable energy projects to our efforts in reducing carbon emissions and engaging with communities, we are dedicated to creating a positive impact on the environment and society. As we continue this journey, we remain steadfast in our mission to drive sustainable growth and lead by example in the transition to a greener future. Together, let us continue to build a more sustainable tomorrow for generations to come.

GAIL as part of its societal responsibilities, is committed to the upliftment of the social and economic conditions of designated Aspirational districts. We have implemented strategic CSR projects in 23 aspirational districts with an expenditure of INR 175.71 Crore as part of CSR activities during the year.

I believe that this report serves to be an interesting read and provides you with a glimpse of our efforts taken in FY 2023-24. I look forward to your valuable comments and feedback on our work to further fuel a sustainable future.

A handwritten signature in blue ink, appearing to read "Sandeep Kumar Gupta".

**Sandeep Kumar Gupta**  
Chairman & Managing Director



GAIL (India) Limited

## Sustainability Report 2023-24

New India New Energy



### Message from Director (Finance)

Company has witnessed robust financial performance in Financial Year 2023-24 in-spite of presence of traces of multiple constraints owing the geopolitical conflicts, leading to various supply chain disruptions which brought uncertainties in energy supply and triggered significant peaks in energy prices. GAIL clocked the Turnover of INR 1,30,284 Crores and Profit before Tax (PBT) & Profit After Tax (PAT) stood at INR 11,555 Crores. and INR 8,836 Crores respectively. PBT and PAT increased by 75% and 67% as against previous years respectively.

Based on enhanced Gas Marketing & Transmission, Polymer production and LHC sales, translating to robust financial performance, GAIL's share price reached an all-time high of INR 196.35 on 5<sup>th</sup> March 2024 on the NSE, marking an approximately 80% increase from INR 109.05 on 6<sup>th</sup> March 2023. Additionally, our market capitalization peaked at INR 129,100 Crores on 5<sup>th</sup> March 2024, compared to INR 71,700 Crores on 6<sup>th</sup> March 2023 upto 31.03.2024. Further, in July 2024, Market Capitalization surpassed INR 1,60,000 Crores. mark. GAIL has always been in forefront in rewarding to its shareholders. In FY 2023-24, GAIL paid dividend @55% (INR 3,616 Crores).

Vendor Invoice Management (VIM), a major step towards complete digitalization, centralisation and automation of vendor payment, in partnership with IBM Consulting, was launched in GAIL on 01.04.2023. VIM is a complete Digital solution for prompt payments, better experiences, enhanced efficiencies and transparency to the end users. It will help GAIL remain competitive and succeed by providing ease of doing business. VIM has also contributed to GAIL's Net Zero by having invoices in Digital mode and saved more than 7 Lakh pages so far.

GAIL was conferred with the coveted SAP ACE Award – 2023 under the category "The Disruptor – Best Finance

Transformation" for Vendor Invoice Management (VIM) Systems, recognising the innovative use of technology in financial transformation. We have also extended the VIM Services to our subsidiary GAIL Gas Limited and GAIL Mangalore Petrochemicals Ltd.

In today's digital age, conventional business practices are being increasingly replaced by digitization and digital technologies, which are crucial for sustainable growth and business continuity. Embracing this digital shift, we have launched various in-house solutions enhancing overall efficiency.

GAIL has embarked upon its new financial journey by starting investment of its Surplus Funds in Tri-party Repo System (TREPS) and Clearcorp Repo Order Matching System (CROMS), ensuring high degree of safety of investments and attractive returns based on prevailing market conditions. As part of our investor relations, we held an interactive meeting and site visit on 6-7<sup>th</sup> March 2024, at Vijaipur showcasing all of GAIL's business segments, attended and appreciated by top investors and analysts.

Looking ahead, GAIL has set a target to achieve Net-Zero emissions through 100 % reduction in Scope 1 and Scope 2 emissions by 2035 and 35 % reduction in Scope 3 emissions (from the baseline year of 2020-21) by 2040. This will intensify our investment and commitment towards the greener future to help our business address climate related challenges.

Further, I am confident, that moving forward, we will be able to outperform the current margins and grow sustainably.

Rakesh Kumar Jain  
Director (Finance)



## Message from Director (Projects)

Empowered by company's vision and mission, Sustainability finds a new impetus in GAIL that reinforces and fortifies its three pillars of Environmental, Social and Governance. At GAIL, we are constantly fuelling the country's economy with cleaner and greener energy with overarching goal of changing the energy landscape for a better tomorrow.

With all scenarios predicting the importance of natural gas as a bridging fuel in mitigating climate change impact, we are working on all fronts to enhance its reach to all parts of the country by creating new infrastructure, upgrading the existing ones and delivering the gas sustainably to the end consumers. With a wide network of ~16,243 Km of natural gas pipelines and strong presence in 24 states & union territories, we take pride in ~65% natural gas transmission in the country.

Every year, we are charting into the new territories and building new assets at a pace which others are finding hard to execute. Currently, we have ~3,400 Km of pipeline projects under construction which may get commissioned in next 2-3 years. Last year, we commissioned 858 Kms of pipelines, the most notables among them being 434 Km of West Bengal & Assam Sections of Barauni-Guwahati Pipeline, 150 Km of Odisha section of Dhamra-Haldia Pipeline and 51 Km of Haridwar-Rishikesh-Dehradun pipeline.

Not only, we are enhancing our horizon of operations but our focus also remains on the decarbonization of our operations. Aligning with Govt. of India's commitment to become Net Zero by 2070, GAIL has already adopted a science-based approach to create

a detailed Net-Zero strategy roadmap to become Net Zero by 2040 with projects envisaged in the areas of Electrification, Energy Transition, CO<sub>2</sub> Valorization, Energy Efficiency improvement and Carbon Offsetting.

We have already embarked on the decarbonization journey and are marching slowly but steadily on the same with commissioning of 10 MW Green Hydrogen Projects at Vijaipur, India's first Small Scale LNG skid and increase in renewable energy capacity from 132 MW to 135 MW during the year. Replacing gas turbine drive with electrical motor drive at Vijaipur is a pilot project that we are implementing as a test case for achieving net zero through electrification powered by renewable electricity. Around 35 MWp Solar power projects are presently under implementation in GAIL, which include 10 MW & 1.8 MW ground-mounted and 7.8 MW & 15 MW floating solar power plant at Vijaipur & Pata. I am confident that this renewable portfolio is going to grow on Mega Scale as our decarbonization initiatives take momentum and our expedition into energy transition space deepens.

With all the energy channelized for reversal of the climate change and its impact on the planet around the globe, we at GAIL remains fully committed to meet society's aspirations and Govt. of India's vision on sustainability as a responsible business entity.

A handwritten signature in blue ink, appearing to read "Deepak Gupta".

**Deepak Gupta**  
Director (Projects)



GAIL (India) Limited

## Sustainability Report 2023-24

New India New Energy



### Message from Director (HR)

As we reflect upon the distinguished journey of 40 years of GAIL, we find ourselves at a juncture adorned with remarkable achievements and significant milestones, thanks to the unwavering commitment and unparalleled dedication of our extraordinary team. The global Oil and Gas sector is undergoing significant transformations and as an organization operating in this fast-paced industry, it is imperative that we stay ahead of the curve and equip ourselves with the competencies needed to adapt and excel.

At GAIL, we constantly focus our endeavours on building capabilities, nurturing a learning environment, implementing the best HR practices in line with global standards, digitalizing HR processes and helping leaders prepare for business volatility. Aligned with the Government's vision for a cleaner and sustainable future, GAIL has also already advanced its Net Zero targets by 5 years to 2035. For achieving the same, HR has a crucial role to play in building capabilities and filling the skill gaps while fostering a collaborative work environment.

In FY 2023-24, GAIL undertook several noteworthy initiatives aimed towards employee engagement and overall employee well-being. We introduced the Monthly Wellness Hour initiative—Spandan—holding over 250 sessions across the organization focused on wellbeing of our employees. Project Samanvaya 2.0 was undertaken involving over 70 HR representatives visiting 35 work centres to address various issues and gather employee feedback to enhance HR services delivery and overall employee experience. The "GAIL-ABHA" initiative was successfully implemented to promote entrepreneurship among the spouses of employees' at our 02 largest work centres at Pata and Vijaipur. Physical and Virtual "Townhall Meetings" were initiated for creating a direct channel for communication and feedback for employees.

Additionally, several employee related policies in the broad areas of Medical Attendance Rules, Post-Retirement Medical Scheme (PRMS), Working pattern, Guidelines of Safety Kits & Liveries, etc., were reviewed to keep in sync with the changing employee needs as well as evolving priorities of the organization.

Prioritizing learning and development are crucial for GAIL's progress and long-term success. With

this objective in mind, GAIL Training Institute (GTI) conducted specially curated learning programs for employees both in-house and in collaboration with leading institutions including ASCI, AIMA, SCOPE, MDI etc. Further, GTI has meticulously curated comprehensive training programs for the upcoming year designed to unlock every employee's potential and enabling excellence in respective roles.

Through our CSR programmes, GAIL has been successful in creating a positive impact in the communities at large. To name a few, 'GAIL Arogya' is helping to bridge gaps in existing health infrastructure, 'GAIL Kaushal' is focused on providing skill training in trades related to hydrocarbon sector, plastic product manufacturing, health related skills, etc., 'GAIL Saksham' provides aids and assistance devices along with capacity building and skill development support to persons with disabilities (PwDs), 'GAIL Utkarsh', an initiative for underprivileged students marked resounding success this year also with 174 students from its 3 centres at Kanpur, Varanasi (Uttar Pradesh) and Haldwani (Uttarakhand), qualifying for the JEE Mains 2024 examination. Adding impetus to women's participation in STEM, all the 30 girls at Utkarsh centre in Varanasi (UP) have also cleared NEET exam.

GAIL's social media follower base has consistently grown to over 1.5 million and achieved an annual digital reach of over 150 million through various social media channels. GAIL's continued focus on environmental advocacy has been demonstrated through specially designed Hawa Badlo campaigns including #ReconnectToRoot, #TogetherForCleanAir, and #HawaBadloWithLifestyleForEnvironment.

I strongly believe that a culture of Sustainability helps in creating a competitive edge by nurturing a collective sense of social responsibility within the organization. Sustainable business practices and commercial success are mutually reinforcing. By leveraging our organization's unique energy and capabilities, our sustainability strategy will create value for both society and the company.

Ayush Gupta  
Director (HR)



## Message from Director (Marketing)

As a leader in the Natural Gas sector, GAIL carries an added responsibility to engage with its stakeholders and lead the industry responsibly. While we need to maintain our dominant market leader position in our core business areas, it is equally important to align our future goals with sustainable growth. This will not only benefit our customers and the communities we serve, but it will also help us to differentiate ourselves in a highly competitive marketplace.

GAIL is in the business of marketing Natural Gas, Petrochemicals, LPG and other Liquid Hydrocarbon products. During FY 2023-24, GAIL achieved its highest-ever sales of Natural Gas of 98.45 MMSCMD in FY 2023-24, up from 94.91 MMSCMD in FY 2022-23. Average Gas Transmission increased by 12%, reaching 120.46 MMSCMD in FY 2023-24 from 107.28 MMSCMD in FY 2022-23. Polymer sales increased to 787 TMT in FY 2023-24 from 399 TMT in FY 2022-23.

GAIL is pursuing and expanding the scale of its core business areas while leveraging capabilities to venture into newer opportunities in diversified sectors. GAIL is strengthening its existing customer base while simultaneously working on expanding gas consumption in existing/emerging sectors. GAIL has been instrumental in addressing the demand for gas-based power producers during critical periods.

Natural Gas is often considered a “bridge fuel” because of its low emission and it will play a pivotal

role in India’s journey towards energy transition. Achieving sustainable energy with natural gas involves minimizing its environmental impact while maximizing its efficiency and role in the transition to cleaner energy sources. Further, utilizing advanced technologies like combined heat and power (CHP) systems to improve the efficiency of natural gas usage, implementing Carbon Capture and Storage (CCS) technologies and integrating Natural Gas with biogas (as part of the SATAT initiative of MoP&NG) or Hydrogen will help push the role of Natural Gas as a sustainable energy for the future.

I am confident that with continued diligence of our team, we can achieve these goals and continue to grow our business. Our commitment to meet the country’s sustainable and green energy needs is unwavering, with a strong focus on societal and environmental responsibility.

A handwritten signature in black ink, appearing to read "Sanjay Kumar".

**Sanjay Kumar**  
Director (Marketing)



GAIL (India) Limited

## Sustainability Report 2023-24

New India New Energy



### Message from Director (Business Development)

At GAIL, we acknowledge that sustainable growth is only possible through integrating Economic with Environmental, Social & Governance (EESG) parameters into our growth strategy. Our overall performance is a culmination of all our efforts in this direction. We continually strive to meet the increasing energy demands of our nation, aiming to bolster self-reliance and energy security, while addressing the growing concerns on climate change and carbon emissions.

GAIL is setting up a 500 KTA Propane Dehydrogenation and Polypropylene (PDH-PP) Plant at Usar, Maharashtra, the first of its kind in India, which is expected to be commissioned in 2025. This would be the first plant in India to use PDH technology for the production of Propylene. GAIL is also setting up a 60 KTA Polypropylene (PP) plant at Pata, Uttar Pradesh. GAIL is also carrying out revamping activities at its recently acquired GAIL Mangalore Petrochemicals Limited (GMPL) having a capacity of 12,50 KTA of PTA. To further expand its business, GAIL has also approved setting up of its first specialty chemical project of 50 KTA Iso Propyl Alcohol (IPA) unit at Usar. Various project related activities are going on in full swing at all these locations.

GAIL has successfully commissioned India's first Small Scale LNG Skid at Vijaipur. GAIL is also exploring the possibility of small-scale manufacturing facilities in India under the Atmanirbhar Bharat initiative. In line with Government of India's 'National Hydrogen Energy Mission', GAIL has commissioned a 10 MW Green Hydrogen Electrolyzer unit with a production capacity of 4.3 TPD in Vijaipur, using Proton Exchange Membrane (PEM) technology.

For FY 2023-24, we have achieved a capex of INR 11,426 Crores, exceeding the annual target of INR 10,011 Crores by about 14.13%. Our IEBR capex for the same period stands at INR 11,411 Crores, surpassing the yearly target of INR 10,011 Crores by about 13.98%.

GAIL Board has accorded in-principle approval for undertaking pre-project activities for setting up of 170 MW captive wind project in Maharashtra. GAIL is also planning to set up another 100 MW captive solar project in Uttar Pradesh. Our goal is to become Net Zero by 100% reduction in Scope-I and Scope II emissions by 2035.

GAIL is also setting up a Compressed Biogas (CBG) plant at Ranchi which would process 150 TPD of Municipal Solid Waste (MSW) to produce 5 TPD of CBG and organic manure. GAIL plans to set up 26 CBG plants across India in the near future. In line with Government of India's aim to achieve 20% blending of Ethanol Blended Petrol (EBP) by 2025-26, GAIL is considering setting up of 1-G 500 KLPD bio-ethanol plant and collaborating with industry leaders in the field of CO<sub>2</sub> valorization to reduce the carbon footprint at its installations.

These initiatives lead to a more sustainable business by ensuring that we create positive impacts on society and the environment. By making conscious business decisions in association with our valued and trusted partners, we are energizing growth and creating long-term value for all our stakeholders.

**Rajeev Kumar Singhal**  
Director (Business Development)

## ESG Performance Highlights

### Environmental

 <p>GAIL's market share in <b>FY 2023-24</b> was <b>~65%</b> in gas transmission and <b>~48%</b> in gas trading</p>	 <p>Commissioned <b>10 MW</b> PEM Electrolyser to produce <b>4.3 TPD</b> of Green Hydrogen, at Vijaipur (M.P.).</p>	 <p>Net Zero strategy aims to achieve <b>100%</b> reduction in <b>Scope 1</b> and <b>Scope 2</b> emissions by the year <b>2035</b> and a <b>35%</b> reduction in <b>Scope 3</b> emissions by the year <b>2040</b>.</p>	
 <p>GAIL has set a target to attain <b>1.7 GW</b> of Renewable Energy by <b>2030</b></p>	 <p>Recycled <b>74,000 Kilo Litre</b> of Wastewater</p>	 <p>Spent <b>INR 50 Lakhs</b> on Environmental awareness and employee development</p>	 <p>GAIL planted over <b>1.85 lakh trees</b> in <b>FY 2023-24</b></p>



### Social

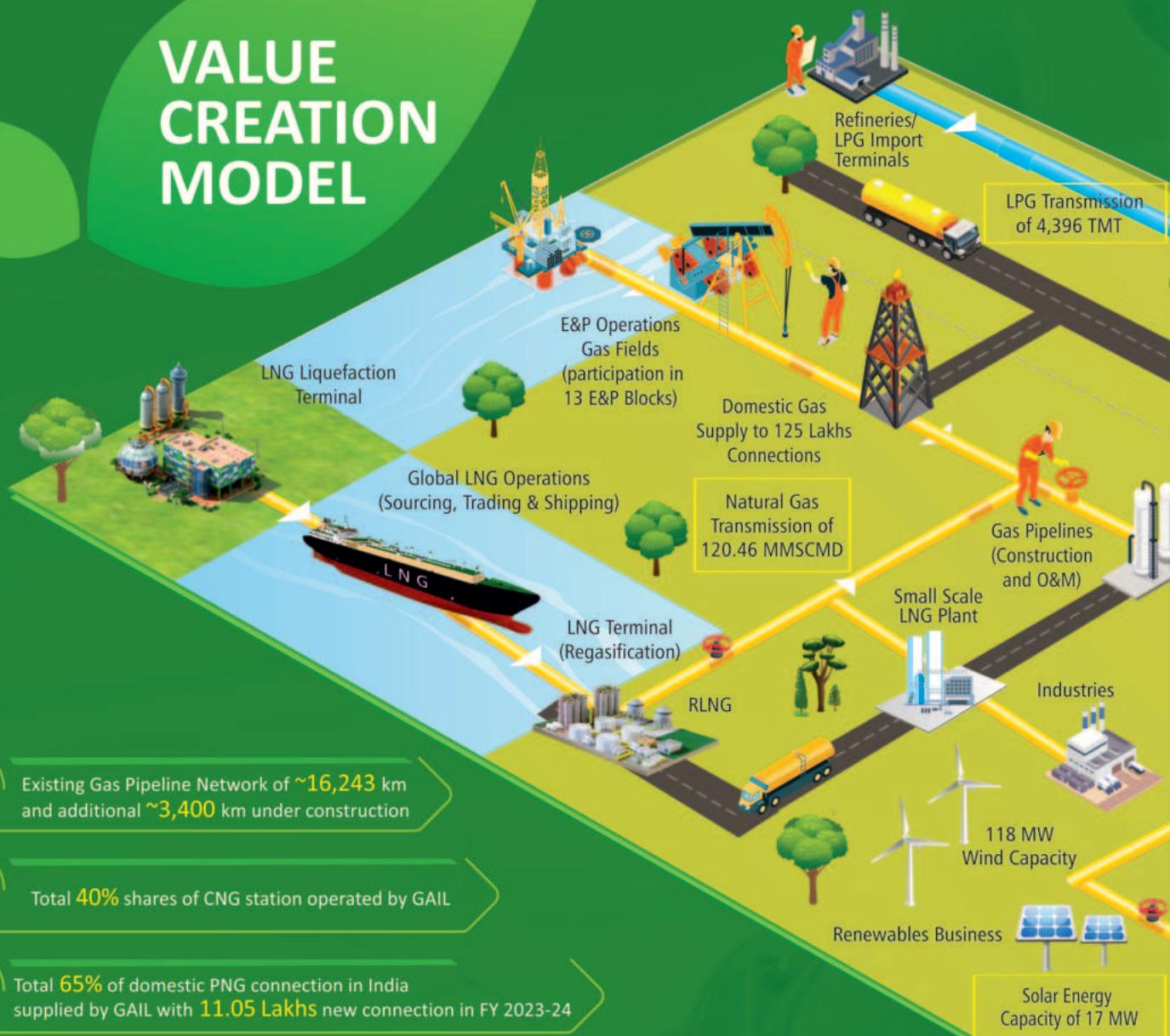
 <p>GAIL spent <b>INR 175.71 Crores</b> under CSR Initiatives.</p>	 <p>More than <b>13 Lakh</b> people benefitted through GAIL's CSR projects in <b>FY 2023-24</b></p>
 <p>GAIL procured <b>INR 1,963 Crores</b> of goods from MSEs in <b>FY 2023-24</b>, which is approximately <b>56.51%</b> of total procurement</p>	 <p>In <b>FY 2023-24</b>, Purchase from MSMEs owned by Women Entrepreneurs increased to <b>6.65%</b> from <b>3.11%</b>.</p>
 <p>In <b>FY 2023-24</b>, GAIL's Customer Satisfaction Index increased to <b>91%</b> from <b>89%</b>.</p>	

### Governance

 <p>Achieved HSE Score of <b>95.75%</b> for <b>FY 2023-24</b> against an internal target of <b>93.5%</b></p>	 <p><b>Zero</b> Reportable Lost Time Injury Frequency Rate (<b>RLTIFR</b>) for permanent employees</p>
 <p>In <b>FY 2023-24</b>, GAIL received <b>214 complaints</b> from internal and external Stakeholders through the CPGRAMS portal, and <b>100%</b> of these were promptly resolved</p>	
 <p>GAIL has received <b>NIL</b> comments for <b>15<sup>th</sup> year</b> in a row from the Comptroller and Auditor General (CAG) in <b>FY 2023-24</b>.</p>	 <p><b>Moody's</b> International, Singapore, assigned Long-Term Corporate Issuer Rating of '<b>Baa3</b>' with Stable Outlook equivalent to the Sovereign Rating of India.</p>

# GAIL's Supply Chain

## VALUE CREATION MODEL



Existing Gas Pipeline Network of ~16,243 km and additional ~3,400 km under construction

Total 40% shares of CNG station operated by GAIL

Total 65% of domestic PNG connection in India supplied by GAIL with 11.05 Lakhs new connection in FY 2023-24

2<sup>nd</sup> largest player in Polyethylene portfolio

Authorized to operate in 72 CGD Geographic Areas (GAs) throughout India

15% domestic Market share in Petrochemicals

GAIL's target to support 400 CBG plants

GAIL share in country's Natural Gas Transmission is ~65%

GAIL Supplied around 40% of the total Natural Gas sold to Fertilizer Sector

Supplies 11% of total Natural Gas sold to Power Sector

Commissioned PEM Electrolyser for producing 4.3 TPD Green Hydrogen

E&P operations Gas Fields (participation in 13 E&P Blocks)



## GAIL (India) Limited



Domestic Gas supply to 125 Lakhs connection

LPG Transmission of 4,396 TMT

118 MW Wind Capacity

Solar Energy capacity of 17 MW

LPG Pipelines ~2,040 km

Gas Processing Plants (5 Numbers)

Gas Marketing of 98 MMSCMD

LHC sales of 998 TMT

Petrochemical sales of 787 TMT

## GAIL Highlights

### Business Growth Highlights



Shri Hardeep Singh Puri, Hon'ble Union Minister of Petroleum & Natural Gas dedicates to the nation 201 CNG stations across 17 states and India's first small-scale LNG unit



Shri Hardeep Singh Puri, Hon'ble Union Minister of Petroleum & Natural Gas, inaugurated a floating re-fuelling CNG station for boats at Ravidas Ghat, Varanasi



Inauguration of 10 MW Green Hydrogen Plant in Vijaipur by Shri Pankaj Jain, Secretary, Ministry of Petroleum and Natural Gas



Vitol and GAIL Sign Long Term LNG Supply Deal into India in the presence of Shri Sanjay Kumar, Director (Marketing), GAIL and Vitol CEO, Mr Russell Hardy



GAIL, ONGC and Shell Energy India signed a tripartite MoU to explore opportunities for the import of ethane and development of ethane evacuation infrastructure at Shell Energy Terminal, Hazira, in the presence of Shri Rajeev Kumar Singhal, Director (Business Development), GAIL



GAIL and ADNOC Gas Ink A Long-Term LNG Contract Fuelling India's Natural Gas Industry Growth in the Presence of Shri. Sandeep Kumar Gupta, CMD, GAIL

### GAIL Greening Efforts

Symbolizing the company's dedication to fostering a greener future and reinforcing its commitment to sustainable development.



Shri Sandeep Kumar Gupta, CMD, GAIL, inaugurated the tree plantation at GAIL Jaipur



Shri Ayush Gupta, Director (HR), GAIL, participated in the tree plantation drive at GAIL Bengaluru, joined by Shri Sandeep Kumar Gupta, CMD, GAIL



Shri Deepak Gupta, Director (Projects), GAIL, participated in the tree plantation drive at GAIL Bengaluru

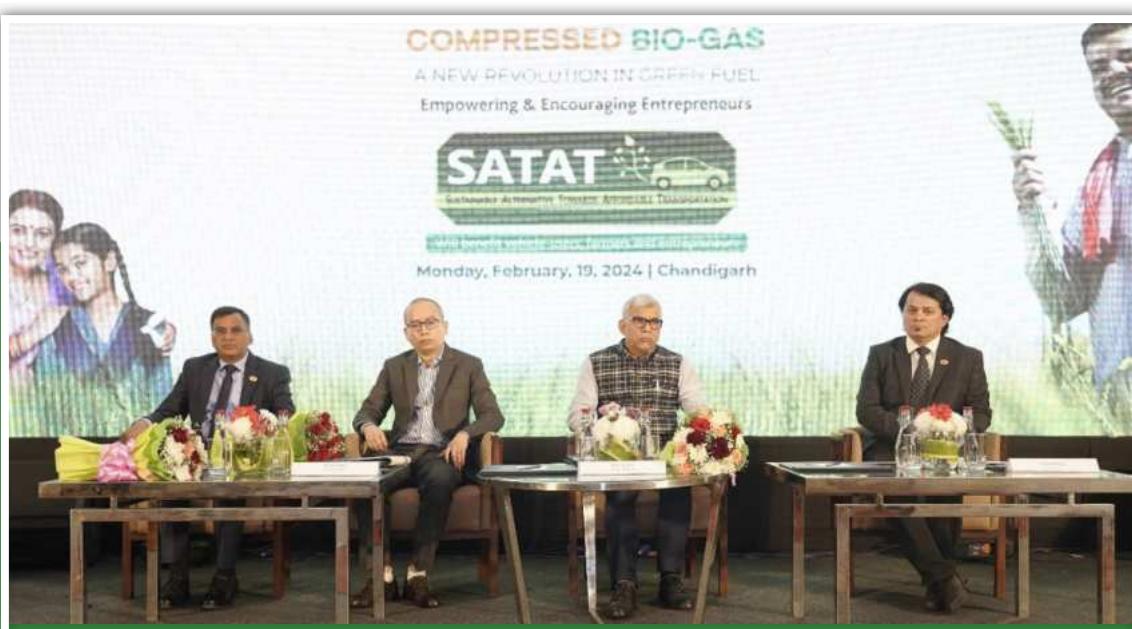


Shri Rakesh Kumar Jain, Director (Finance), GAIL, participated in the tree plantation drive at GAIL Bengaluru

### Deepening efforts towards Energy Security and Decarbonisation



Mr. Sanjay Kumar, Director (Marketing) at India Energy Week 2024



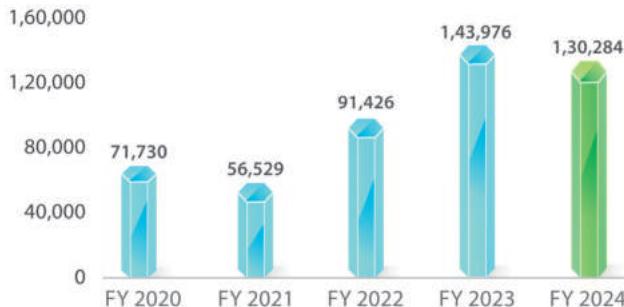
GAIL organises CBG Workshop for stakeholders under the aegis of MoPNG

## Performance Highlights

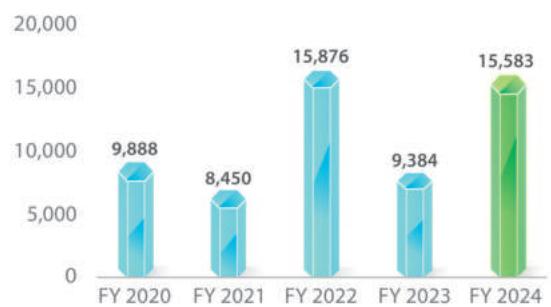
### Financial performance Standalone



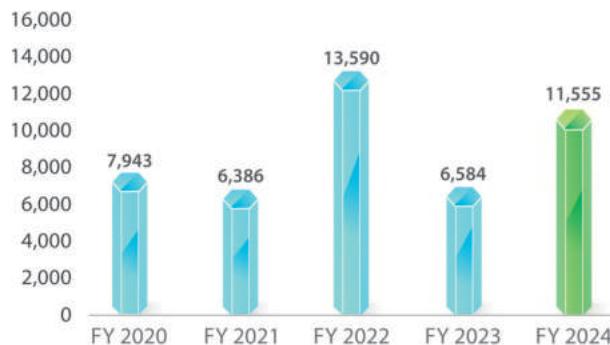
Turnover (Gross) (INR Crores)



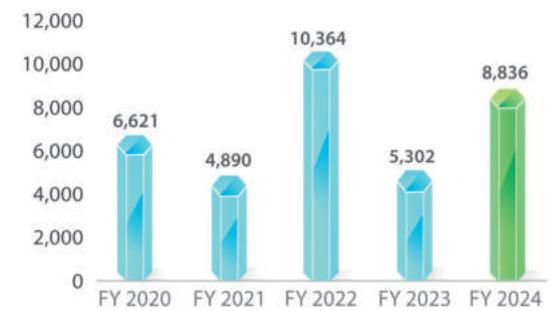
Gross Margin (EBITDA) (INR Crores)



Profit Before Tax (PBT) (INR Crores)



Profit After Tax (PAT) (INR Crores)





GAIL (India) Limited

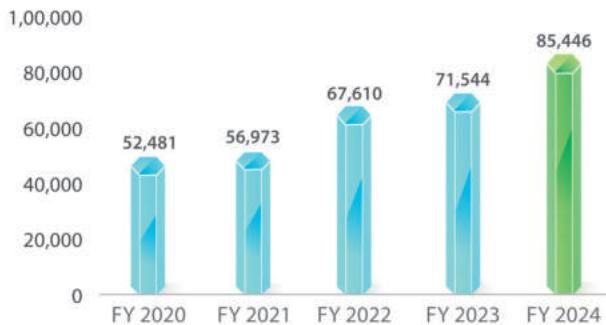
## Sustainability Report 2023-24

New India New Energy

### Financial Performance Standalone



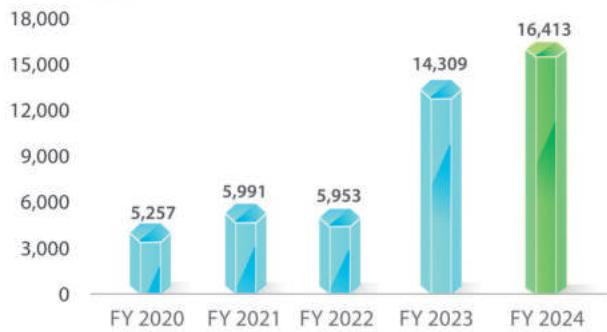
**Capital Employed** (INR Crores)



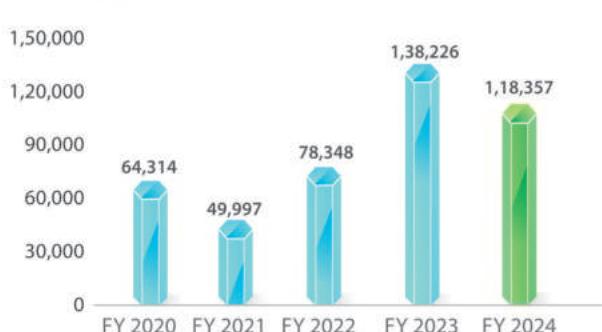
**Net Worth** (INR Crores)



**Loan Outstanding** (INR Crores)



**Operating Cost** (INR Crores)



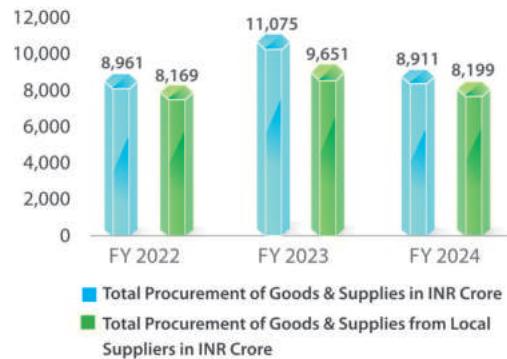
## Economic, Environmental, Social and Governance Performance



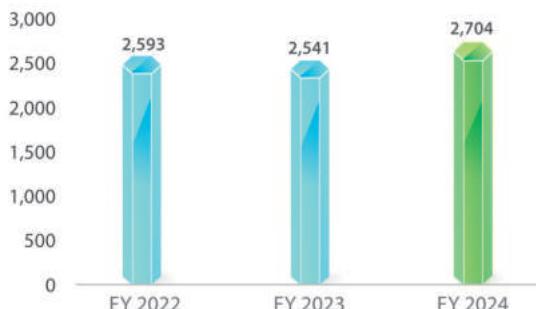
**Economic Value Generated vs  
Distributed (INR Crores)**



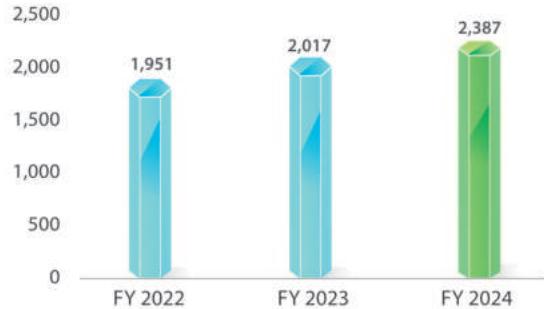
**Procurement Highlights (INR Crores)**



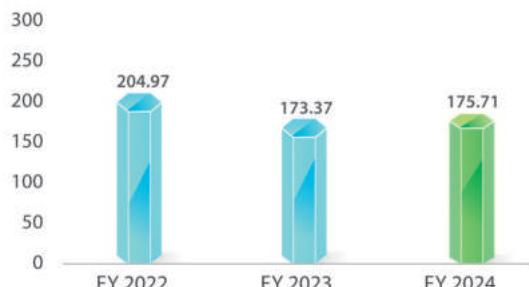
**Procurement from Government  
eMarketplace (GeM) (INR Crores)**



**Employees Wages and Benefits (INR Crores)**



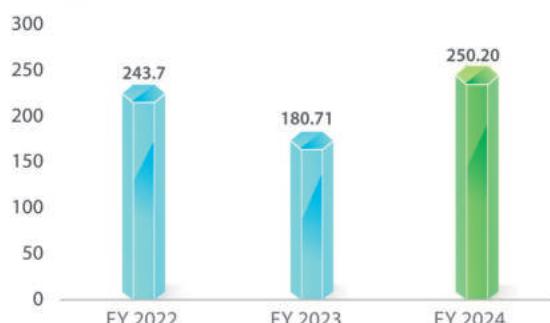
**CSR Expenditure (INR Crores)**



\*The total CSR Expenditure for the FY 2023-24 is INR175.71 Crores i.e. 2.47% of the avg. net profit of the preceding three years after setting off the excess expenditure of previous financial years



**R & D Expenditure (INR Crores)**





GAIL (India) Limited

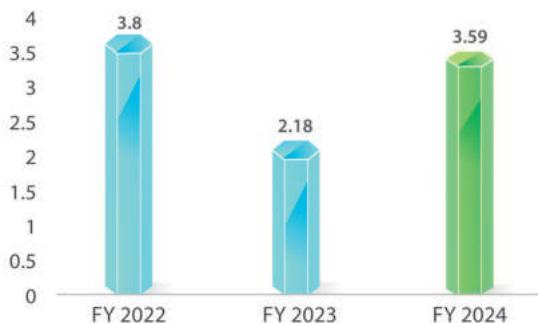
## Sustainability Report 2023-24

New India New Energy

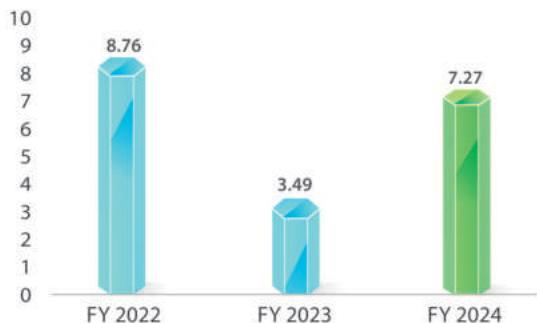
# Economic, Environmental, Social and Governance Performance



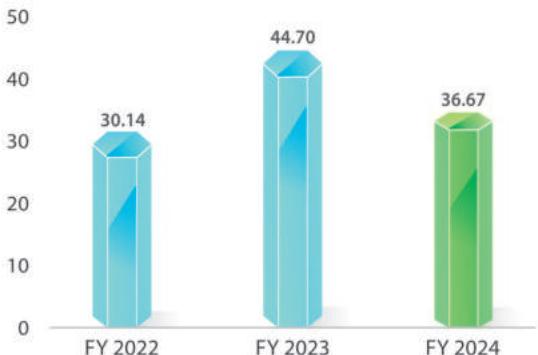
**Value Added Per Employee (INR Crores)**



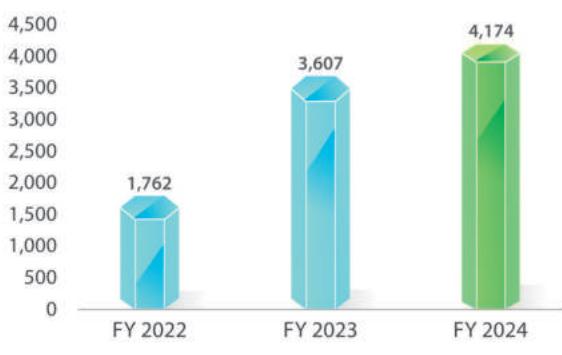
**Human Capital Return on Investment (%)**



**Total Environment Expenditure (INR Crores)**



**Cost of NG (Used as Fuel) (INR Crores)**



**Power Charges (INR Crores)**



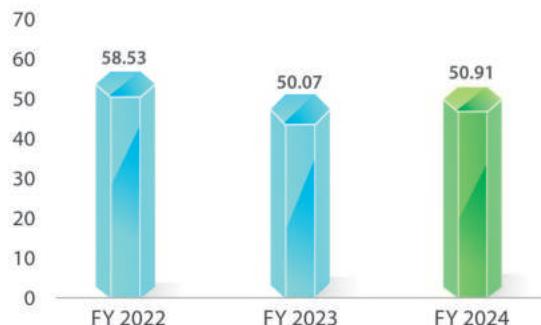
**Water Charges (INR Crores)**



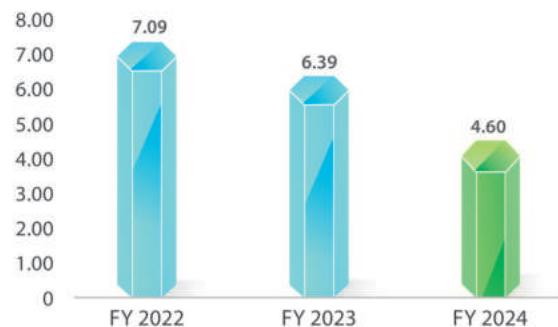
## Economic, Environmental, Social and Governance Performance



**Energy Consumption (Million GJ)**



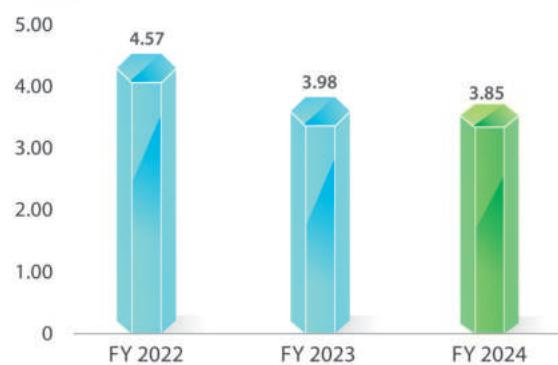
**Energy Savings (Lakh GJ)**



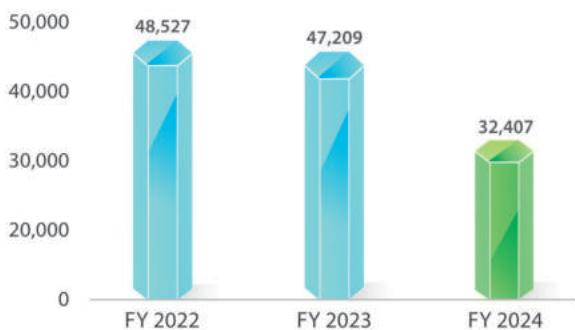
**Energy Intensity (GJ/ INR Crores)**



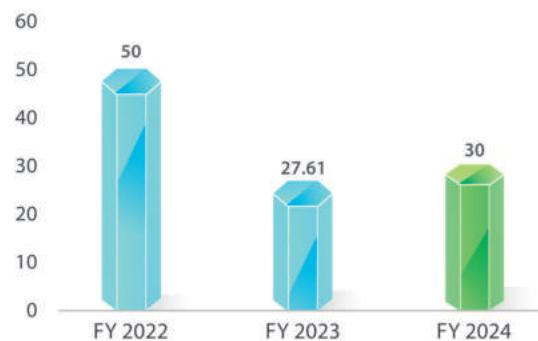
**GHG Emissions (Scope 1+ Scope 2) (Million tCO2e)**



**GHG Savings (tCO2e)**



**GHG Intensity (Scope 1+ Scope 2) wrt Turnover (tCO2e/INR Crores)**





GAIL (India) Limited

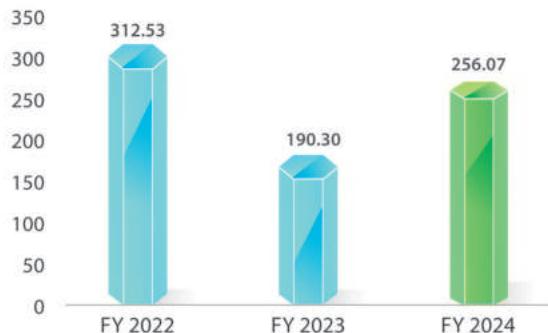
## Sustainability Report 2023-24

New India New Energy

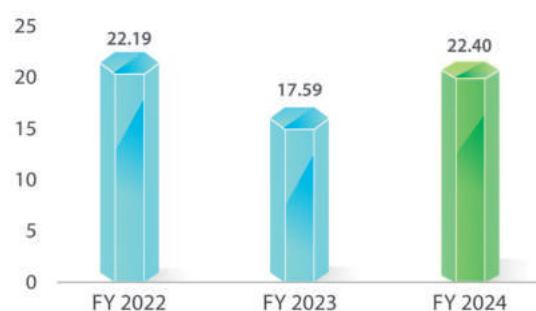
### Economic, Environmental, Social and Governance Performance



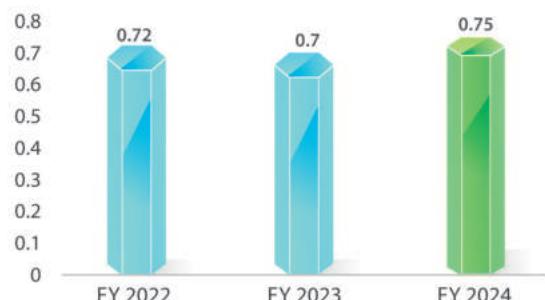
**GHG Intensity (Scope 1+2+3)  
wrt Turnover (tCO<sub>2</sub>e/INR Crores)**



**Water Consumption (Million m<sup>3</sup>)**



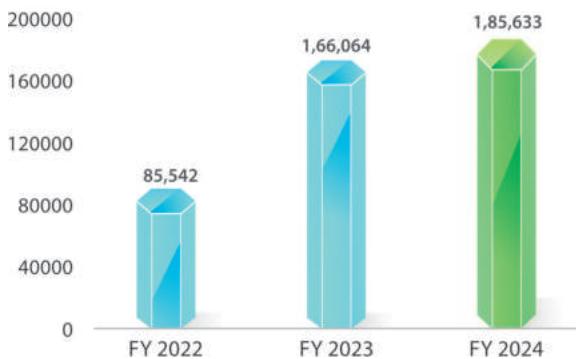
**Water Recycled/Reused (Million m<sup>3</sup>)**



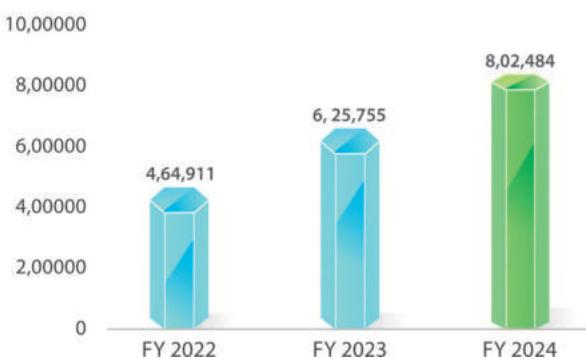
**Waste Recycled (Hazardous & Non-Hazardous)**



**Tree Plantation (Numbers)**



**Cumulative Numbers of tree Plantation  
(Sites+Township) (Numbers)**



## Economic, Environmental, Social and Governance Performance



**Permanent Employee Distribution (Numbers)\***



\* Excluding (07) Board of Directors



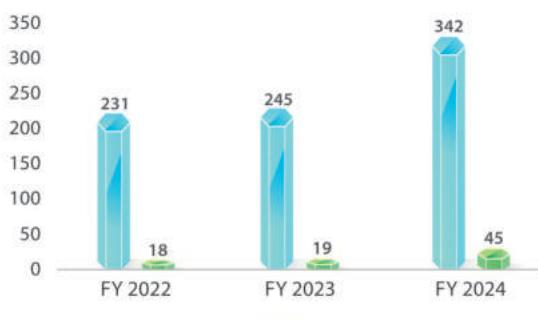
**Permanent Employee Distribution (Age) (Numbers)\***



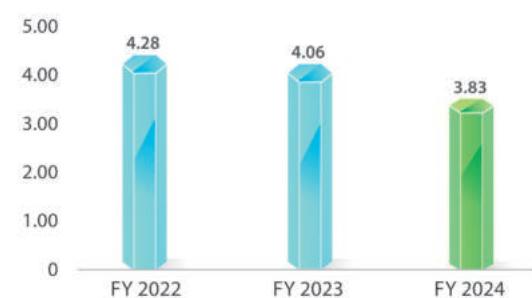
\* Excluding (07) Board of Directors



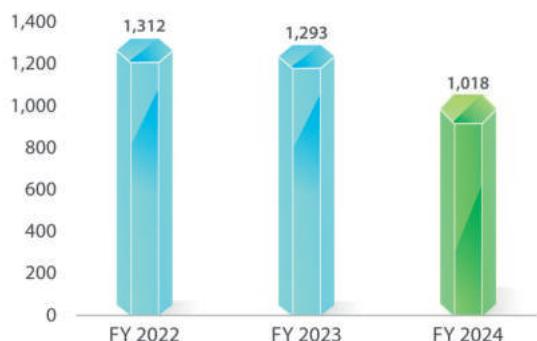
**New Permanent Employees (Numbers)**



**Total Employee Turnover Rate (%)**



**Total Near Miss Cases (Numbers)**



**Training Efficacy Score (%)**





GAIL (India) Limited

## Sustainability Report 2023-24

New India New Energy

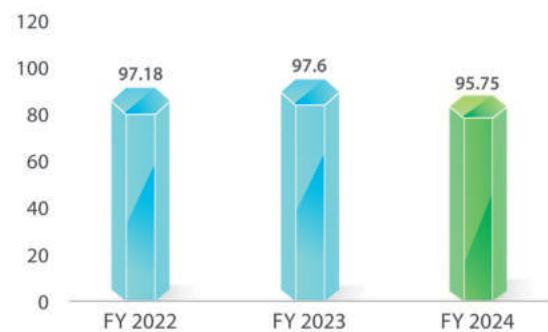
# Economic, Environmental, Social and Governance Performance



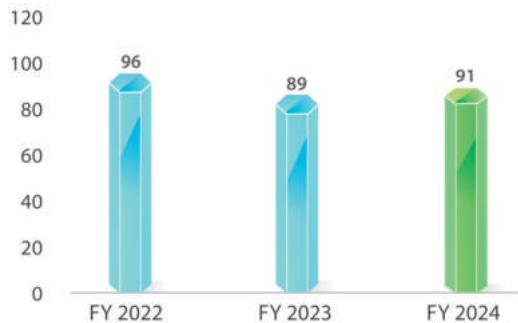
**RTI Application (Numbers)**



**Health, Safety and Environment Score (out of 100%)**



**Customer Satisfaction Index  
(Score out of 100)**



**CPGRAMS Grievance (Numbers)**



## Operational Performance





GAIL (India) Limited

## Gas Sourcing and Sector wise Performance for the year 2023-24

### Gas Sourcing & Sector Wise Supply

(TOTAL 98.45 MMSCMD, % SHARE)

#### Gas Sourcing

Overseas: 50.06 MMSCMD

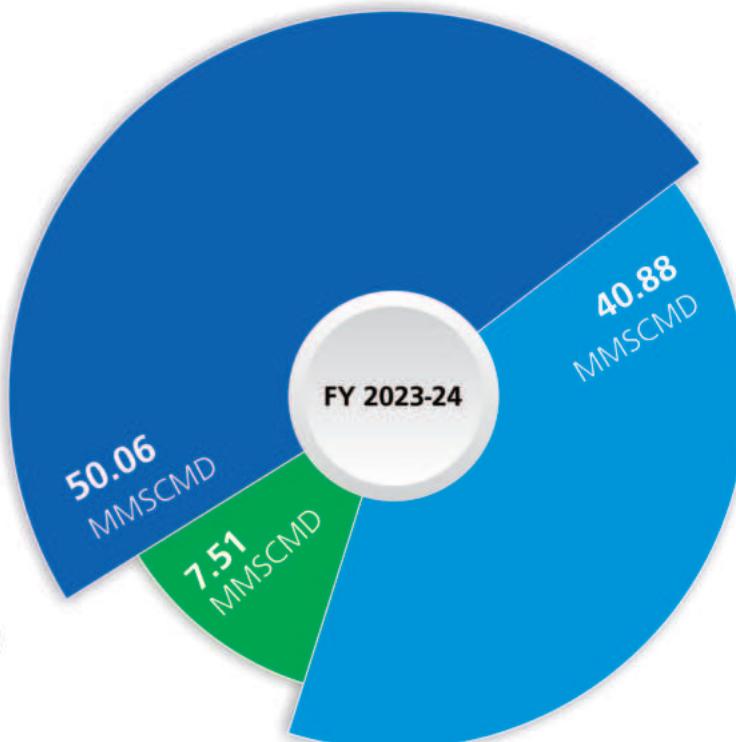
Overseas

Domestic Gas: 7.51 MMSCMD

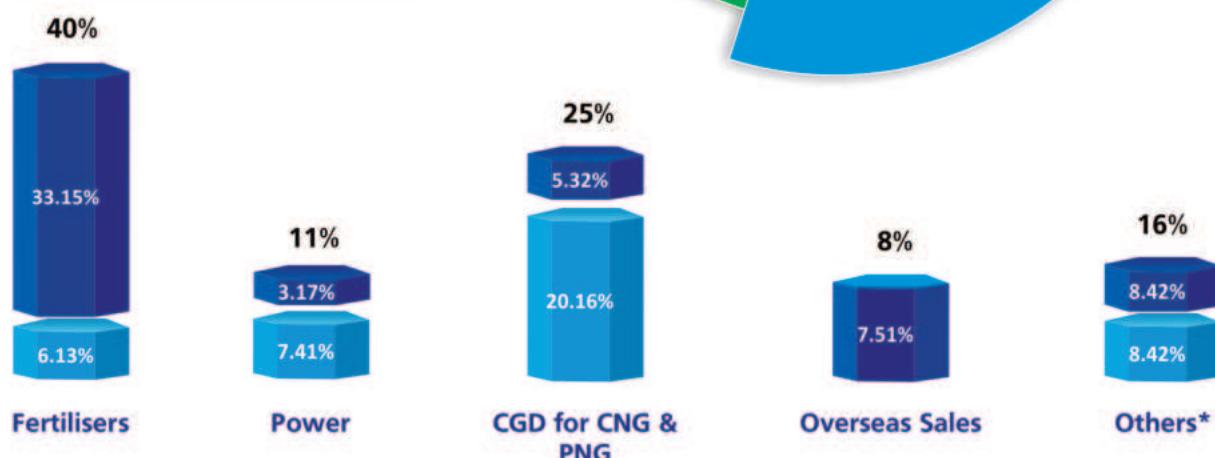
Domestic Gas

RLNG: 40.88 MMSCMD

RLNG



#### Sector Wise Gas Supply



#### CUSTOMERS

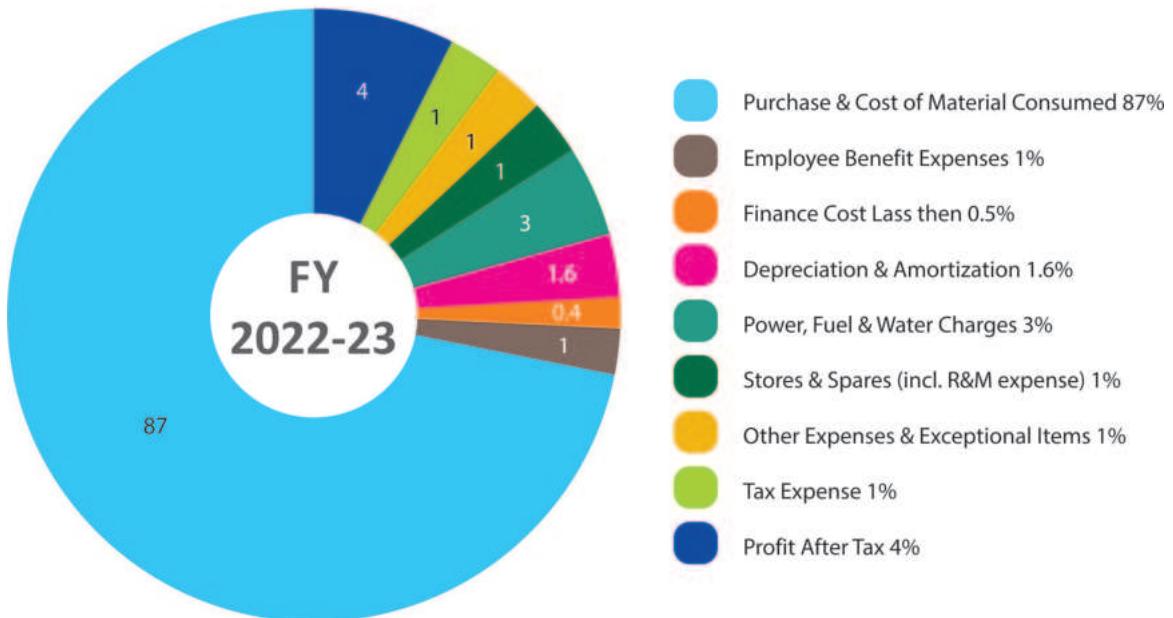


- Imported Gas primarily consists of Long Term RLNG and Spot
- Major sources for domestic gas are ONGC (APM & MDP), Ravva, Ravva satellite, CBM etc.
- Highest demand of Natural Gas from Fertilizer, Power & CGD companies

\* Others include Steel, Refineries, Sponge Iron, Petrochemicals, GAIL Internal consumption etc.

## Cost and Profit as a Percentage of Total Income

**Cost & Profit as a Percentage of Total Income (INR Crore, %)**



03



## GAIL at a Glance

 GAIL operates a network of ~16,243 km of Natural Gas Pipeline and ~2,040 km of LPG pipelines.



GAIL's market share in FY 2023-24 is ~65% in gas transmission and ~48% in gas trading.

## GAIL at a Glance

### 3.1 About GAIL

(GRI 2-1-a, b, c, d, GRI 2-6-a, b, c, d)

GAIL (India) Limited began its distinguished 40-year history in August 1984, and it now proudly serves as the nation's leading marketer and distributor of natural gas. The Government of India (GoI) honoured the Central Public Sector Enterprise (CPSE) under the Ministry of Petroleum and Natural Gas (MoP&NG) in 2013 by granting it the prestigious Maharatna status. GAIL, being the leading gas company in the country with diversified operations across the natural gas value chain, including exploration & production, processing, transportation, distribution and marketing of natural gas, has played a crucial role in the growth of the country's energy industry.

GAIL is a Public Sector Enterprise with its headquarters in New Delhi. As of 31<sup>st</sup> March 2024, the GoI held 51.52% of the company's paid-up equity capital, followed by FPIs (14.05%), Mutual Funds/UTI (10.18%), Oil and Natural Gas Corporations (ONGC) (4.97%), Life Insurance Corporation of India (LIC) (7.10%), Indian Oil Corporation Limited (IOCL) (2.48%), and Others 9.69%. GAIL is listed at both the Bombay Stock Exchange (BSE) & the National Stock Exchange (NSE), and its shares are publicly traded.

GAIL operates a network of ~16,243 km of Natural Gas pipelines and ~2,040 km of LPG pipelines that span the country.

GAIL controls a market share of ~65% in gas transmission and ~48% in gas trading. Additionally, GAIL and its affiliates/joint ventures hold a sizable market share in the City Gas Distribution. We also have a substantial presence in the LNG market and is taking steps towards expanding its LNG carrier fleet. In May 2024, GAIL entered into a 14-year time charter with M/s CoolCo for a newly built LNG carrier. This would support the delivery of the LNG carrier in 2026 as part of GAIL's ambitious plans for meeting the increasing demand for Natural Gas in India. In addition, new commercial ventures are being explored. As part of the Energy transition, we are extending our footprint in the Renewable Energy sector with an emphasis on Solar, Wind and Biofuels. Our renewable energy portfolio is presently 135 MW. By defining business models, leveraging market positions and strengthening areas for value creation, we seek to maximize the potential of each of the portfolio verticals to provide the country with energy in the most sustainable way by forging partnerships, acquisitions and expansion. We have also prepared a strategic action plan in accordance with India's NDCs and international obligations to reduce carbon emissions in order to reinforce our position as an environmentally conscious and responsible company.

GAIL has taken step towards expanding its LNG carrier fleet. In May 2024, GAIL has entered into a **14-year time charter with CoolCo for newly built LNG carrier**. This would support delivery of the LNG carrier in 2026 as part of GAIL's ambitious plans for meeting the increasing demand for Natural Gas in India.



GAIL signed a 14-year contract with CoolCo for an LNG carrier to meet India's growing Natural Gas demand

## 3.2 GAIL Network

## Gas infrastructure in India - "One Nation-One Grid"



Natural gas, as an environment-friendly clean fuel, has the potential to play a significant role in providing sustainable solutions to environmental challenges as well as meet ever-increasing energy needs.

GAIL has launched a campaign, 'Waah Kya Energy Hai' to highlight the accessibility and benefits of embracing new, clean and environmentally friendly fuel options - Compressed Natural Gas and Piped Natural Gas offered by GAIL and its group companies.

A gas-based economy is critical for India, and efforts are being made to achieve the goal of “One Nation, One Gas Grid.” The term “One Nation, One Gas Grid” refers to the integration of several regional networks for creation of a National Grid for supplying natural gas to various consumers at a competitive price.

### 3.3 National Gas Grid

Natural Gas Pipeline Infrastructure connects various gas sources to different gas markets to meet the existing/ future natural gas demand of various Powers, Fertilizer, CGD and other industries in the

country. The gas pipeline infrastructure has facilitated widespread industrialization and has brought significant socio-economic changes to different parts of the country.

GAIL as a major gas pipeline operator has contributed to the growth and development of Natural Gas Pipeline infrastructure and natural gas market. It has an existing ~16,243 Km. of gas pipeline network with a capacity of 209.51 MMSCMD. GAIL's existing Natural Gas Pipeline network covers 20 States (Andhra Pradesh, Assam, Bihar, Goa, Gujarat, Haryana, Himachal Pradesh, Jharkhand, Karnataka, Kerala, Maharashtra, Madhya Pradesh, Odisha, Punjab, Rajasthan, Tamil Nadu, Tripura, Uttar Pradesh, Uttarakhand and West Bengal) and 3 UT's (Delhi, Puducherry & Dadra Nagar Haveli).

#### The progress status of the approved projects is as follows:

No	Projects	Total Length (in Km)	Commissioned as on Mar'24	States covered
1	Jagdishpur-Haldia and Bokaro-Dhamra Pipeline (JHBDPL)	2,561	2,267	Uttar Pradesh, Bihar, Odisha, Jharkhand and West Bengal
2	Barauni-Guwahati Pipeline (BGPL)	727	717	Bihar, West Bengal and Assam
3	Coimbatore to Krishnagiri Pipeline (Part of Kochi-koottanad-Bengaluru-Mangaluru Pipeline Phase- II)	901	579	Kerala, Tamil Nadu and Karnataka
4	Srikakulam Angul Pipeline (SAPL)	744	0	Odisha and Andhra Pradesh
5	Mumbai Nagpur Jharsuguda Pipeline (MNJPL)	1,755	0	Maharashtra, Madhya Pradesh, Chhattisgarh and Odisha
6	Dhamra Haldia Pipeline (DHPL)	253	150	Odisha and West Bengal
7	Gurdaspur-Jammu Pipeline	160	0	Punjab and UT of Jammu

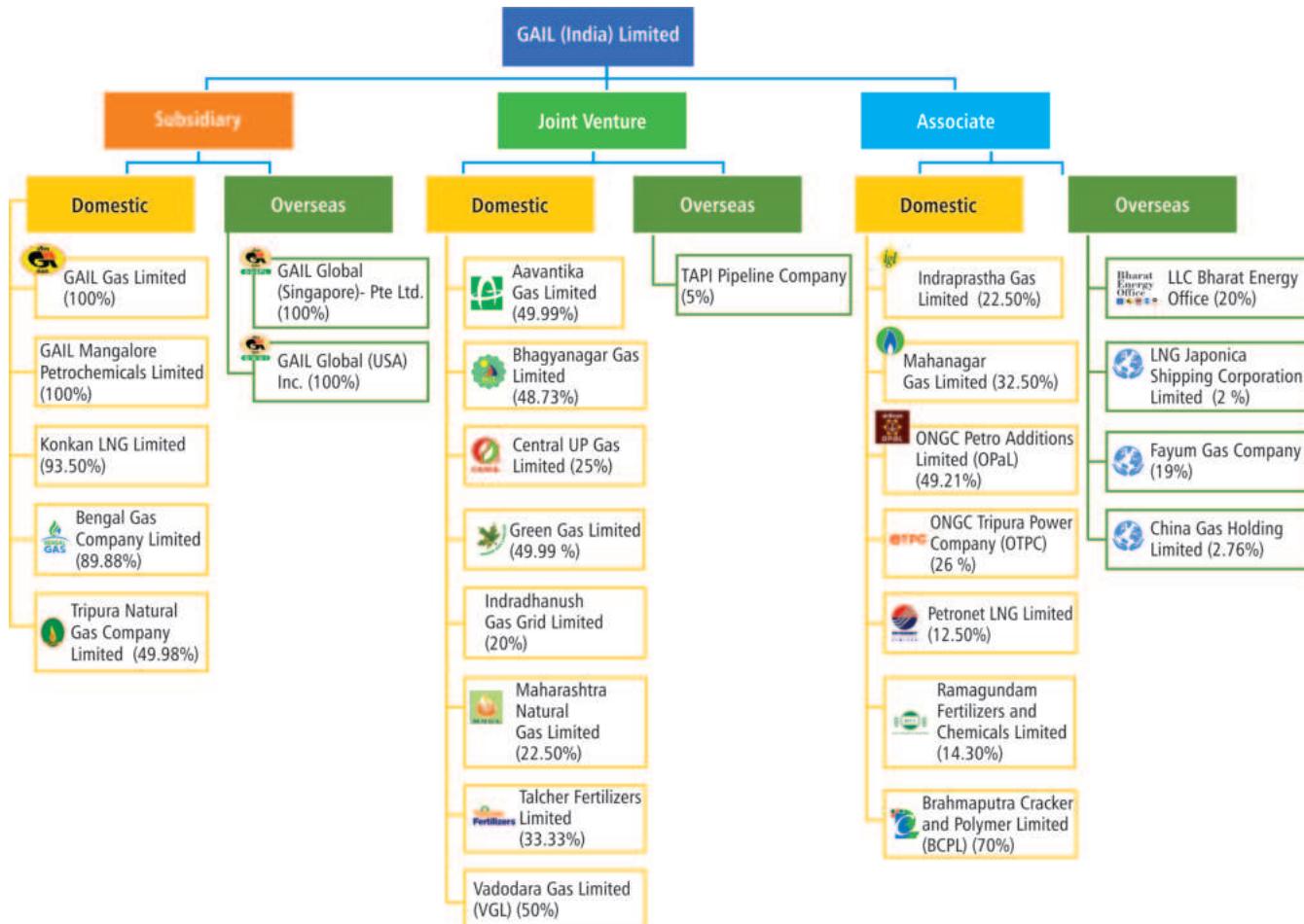
GAIL is committed to increasing the reach of Natural Gas in the country by way of providing Last Mile Connectivity (LMC) to Industrial customers and to City Gas Distribution (CGD) entities for the supply of natural gas as CNG and PNG in various cities.



Finance NextGen Summit conducted in Dehradun, led by Rakesh Kumar Jain, (Director) Finance

### 3.4 GAIL Subsidiaries & JVs

GAIL has established Subsidiaries and Joint Ventures for City Gas Distribution and Petrochemicals. GAIL is one of the pioneers in introducing City Gas Projects in India for gas supplies to households, commercial users and the transportation sector through its Subsidiaries/Joint Venture Companies.



### 3.5 GAIL Social Outreach

Through its CSR initiatives, GAIL is committed to uplifting the living standards of marginalized and underprivileged sections of society. In FY 2023-24, GAIL spent INR 175.71 Crores, i.e. 2.47 % of the average net profits of the preceding three years after setting off the excess expenditure of the previous financial years.

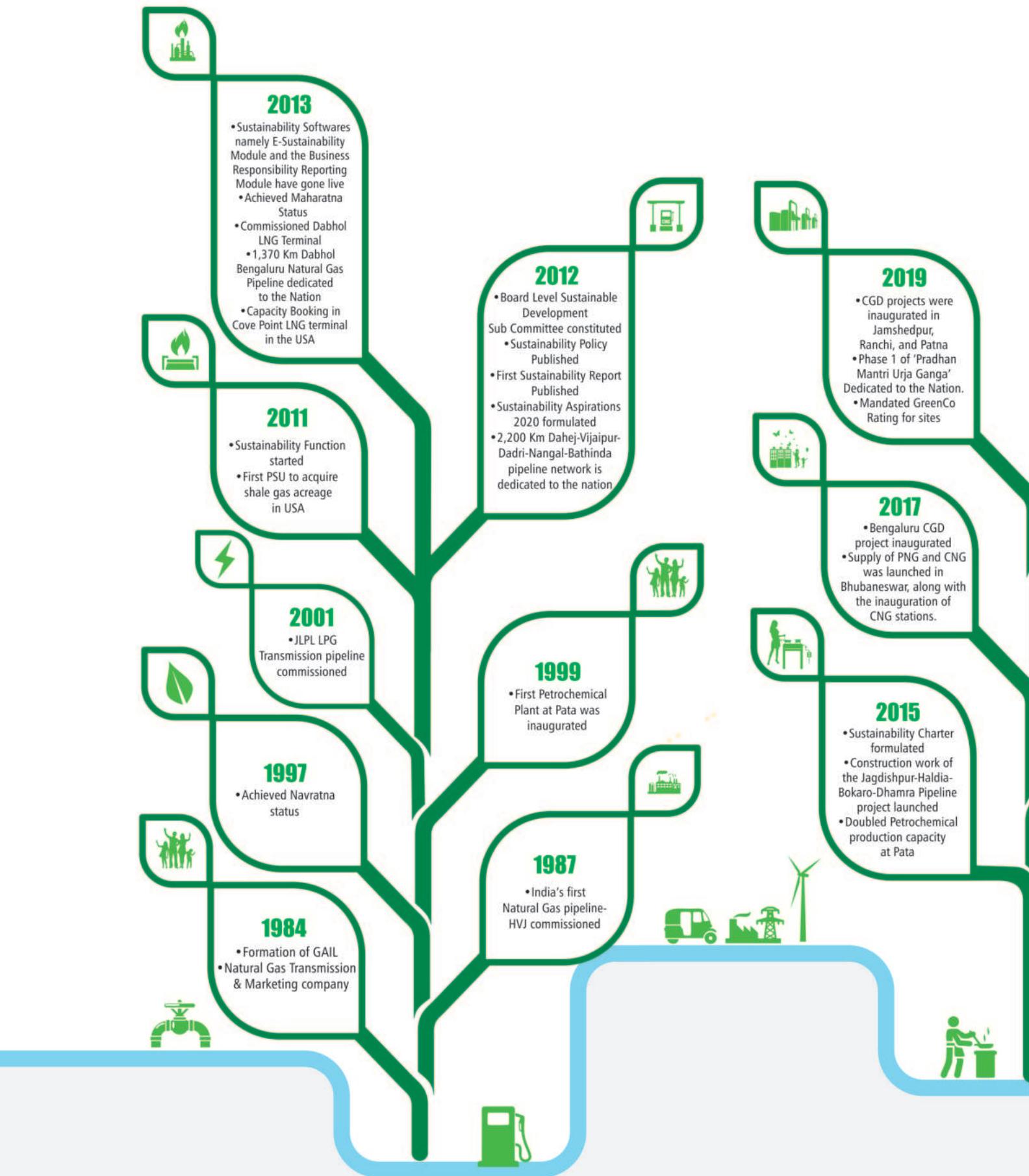
GAIL has taken up a number of projects during this financial year to fulfil its societal commitments, and more than 13 lakh people benefitted from its CSR projects in FY 2023-24. It includes GAIL Arogya (Healthcare and Sanitation), GAIL Harit (Environment Centric Initiatives), GAIL Kaushal (Skill Development Related Initiatives), GAIL Saksham (Care for elderly & differently-abled people), GAIL Shashakt (Women Empowerment Initiatives), GAIL Ujjwal (Education Centric Initiatives), GAIL Unnati (Rural development projects) and Others during this financial year to fulfil its societal commitments.

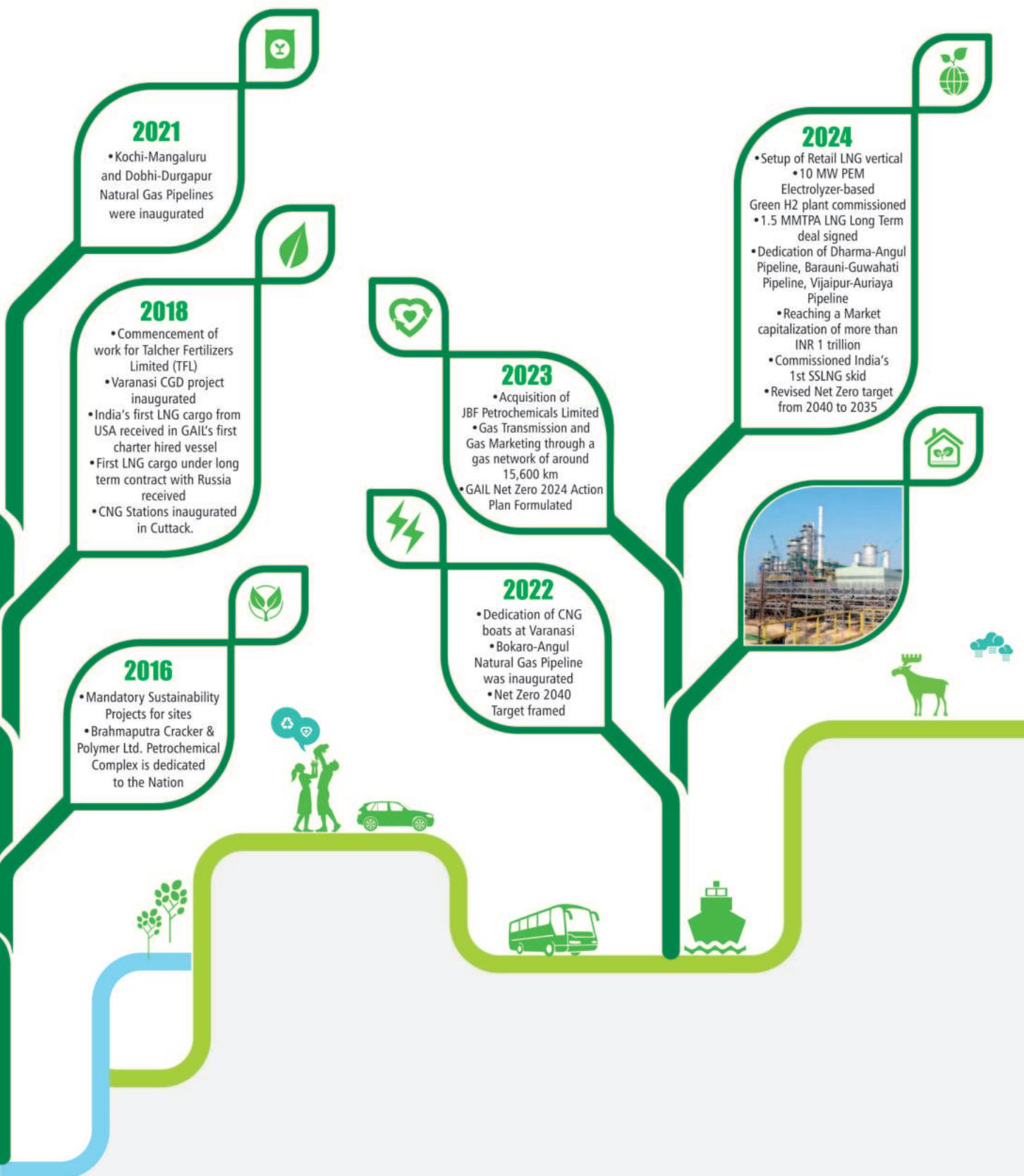


As part of the Swachhta Pakhwada activities commenced on 1<sup>st</sup> July 2024,  
a tree plantation drive was organized on 3<sup>rd</sup> July 2024 at GAIL Hazira

# Beyond the Horizon:

## GAIL's Journey to a Brighter Future





04



## Sustainability at GAIL



GAIL has been awarded the FTSE4GOOD ESG Rating and is now included in the London Stock Exchange Group Sustainability Index for the year 2024.



In the FY 2023-24, GAIL's Dabhol-Bengaluru Pipeline received "GreenCo Platinum Certification". This is the first Green Co platinum certified rating unit in GAIL.

## Sustainability at GAIL

### 4.1 GAIL's Approach to Sustainability

GAIL's business plan is structured to expedite its advancement towards becoming an integrated energy company. GAIL is committed to creating long-term value for all its stakeholders and ensuring the sustainability of its operations. To achieve this, various sustainability related Projects are taken up that can make a positive impact on the environment and society. GAIL is committed to building a transparent, sustainable, and responsible supply chain. As the company expands its business, it will continue to engage with suppliers and support them in their sustainability journey.

GAIL regularly reviews its material sustainability topics to ensure their continued relevance to the organization's business and stakeholders. Details of the materiality assessment and a list of identified material topics are provided in this Report.

GAIL has set an ambitious target to achieve 100% reduction in Scope 1 and Scope 2 emissions by 2035 and 35% reduction in Scope 3 emissions by 2040. This shall help to contribute towards India's long-term goal of attaining Net Zero GHG emissions by 2070.

To achieve 100% reduction in Scope 1 and Scope 2 emissions by 2035, GAIL has developed a comprehensive roadmap that will accelerate its de-carbonization efforts by driving transformative changes in the Oil and Gas sector.



GAIL has been conferred with the Corporate Responsibility Champion Award at the distinguished Outlook Planet Sustainability Summit & Awards 2024

### 4.2 Sustainability Policy

#### (GRI 2-23a, b, c, d, e, f)

GAIL recently revised its Sustainability Policy in June 2024 in alignment with GAIL's Net Zero vision aimed at reducing Scope 1, 2 and 3 emissions and other Sustainability priorities, and the Policy articulates our commitment to Economic, Environmental, Social and Governance aspects. It serves as a guideline for setting targets, monitoring, evaluating and reporting performance, and ensuring compliance with applicable laws and global Sustainability Standards, including Sustainable Development Goals.



GAIL (India) Limited

## Sustainability Report 2023-24

New India New Energy



GAIL (India) Limited

### Sustainability Policy

#### Objective

Aligned with GAIL's Net Zero vision aimed at reducing Scope 1, 2 and 3 emissions, and other Sustainability priorities, the Policy articulates our commitment to Environmental, Social, Governance and Economic aspects. It serves as a guideline for setting targets, monitoring, evaluating and reporting performance, ensuring compliance with applicable laws and global sustainability standards including Sustainable Development Principles.

Our aspiration is to achieve and continually enhance our Sustainable Growth through actions in the following areas:

#### Environmental

- Increasing access to more affordable, reliable and cleaner energy sources
- Optimizing resource utilization and continuous improvement of environmental performance through sustainable operations
- Effectively assessing climate-related risks and opportunities to mitigate their impact through business strategy
- Conserving biodiversity and ecosystems in and around the regions of our operations
- Developing more sustainable products and processes

#### Social

- Engaging regularly with all stakeholders to understand and address their concerns
- Respecting human rights, promoting diversity, equity and inclusion, and prioritizing the well-being of our employees
- Ensuring the health, safety and security of our people, plants, customers, suppliers and communities
- Integrating sustainability across our value chain
- Empowering local communities and improving their quality of life
- Upskilling employees in the areas of Environment, Social responsibility and Governance

#### Governance

- Adhering to the highest standards of Ethics and Corporate Governance
- Advocating Public Policy in a responsible and transparent manner
- Maintaining a zero-tolerance policy for corruption and bribery
- Ensuring compliance with cybersecurity and data privacy laws

Date : 24<sup>th</sup> June, 2024

Chairman and Managing Director  
GAIL (India) Limited



The policy is available on GAIL's website and can be accessed via the following link:  
[https://www.gailonline.com/pdf/Sustainability/Sustainability\\_Policy\\_English\\_17072024.pdf](https://www.gailonline.com/pdf/Sustainability/Sustainability_Policy_English_17072024.pdf)

Apart from the Sustainability Policy, other ESG-related Policies also guide our Sustainability initiatives. The list of key ESG-related Policies are as below:

**A. Code of Conduct**

1. **The Code of Conduct for Board Members and Senior Management Personnel** <https://gailonline.com/pdf/InvestorsZone/CodeofConductason09042019.pdf>

2. **Code of Fair Disclosure and Conduct- Practices and Procedures for Fair Disclosure of Unpublished Price Sensitive Information** <https://gailonline.com/pdf/InvestorsZone/GAIL-Principles-of-Fair-Disclosures.pdf>

3. **Code of Conduct to regulate, monitor and report trading by insiders - insider trading code** <https://gailonline.com/pdf/InvestorsZone/GAIL-Insider%20Trading%20Code%202018-10.04.2019.pdf>

**B. Fraud Prevention Policy:** <https://www.gailonline.com/pdf/othersFraudPreventionPolicyRev01withSOPonFPPRev00.pdf>

**C. MoU between GAIL (India) Ltd and Transparency International India (TII):** <https://gailonline.com/pdf/others/MOU-With-TII-23rd.July-2007.pdf>

**D. Sustainability Policy:** <https://www.gailonline.com/pdf/Sustainability/Sustainability%20Policy10-02-2020.pdf>

**E. CSR Policy:** [https://gailonline.com/CSR\\_Ploicy.html](https://gailonline.com/CSR_Ploicy.html)

**F. Policy For Prevention, Prohibition and Redressal of Sexual Harassment of Women at Workplace** <https://gailonline.com/pdf/othersPolicyforPreventionProhibitionAndRedressalOFSexualHarassmentOfWomenAtWorkplace11072022.pdf>

**G. Material Subsidiary Policy**

<https://gailonline.com/pdf/InvestorsZone/GAILMaterialSubsidiarypolicyFinal2021.pdf>

**1. Related Party Transaction Policy**

<https://gailonline.com/pdf/InvestorsZone/GAILRelatedPartyTransactionPolicyMarch2022.pdf>

**2. GAIL Policy for determination of Materiality and Disclosure**

<https://gailonline.com/pdf/InvestorsZone/GAILPolicyforDeterminationofMaterialityandDisclosure06102022.pdf>

**H. Dividend Distribution Policy**

<https://gailonline.com/pdf/InvestorsZone/GAIL%20Dividend%20Distribution%20Policy.pdf>

**I. Policy on Diversity of Board of Directors**

<https://gailonline.com/pdf/InvestorsZone/Policy%20on%20Diversity%20of%20Board.pdf>

**J. Whistle Blower Policy**

[https://www.gailonline.com/pdf/others/Circular\\_Whistle%20Blower%20Policy\\_12.02.2019-english.pdf](https://www.gailonline.com/pdf/others/Circular_Whistle%20Blower%20Policy_12.02.2019-english.pdf)

**K. Equal Opportunity Policy**

<https://www.gailonline.com/pdf/others/EqualOpportunityPolicyEnglish14022024.pdf>

**L. Public Interest Disclosure & Protection of Informers**

<https://www.gailonline.com/pdf/others/PIDPI.pdf>

**M. Quality Policy**

<https://www.gailonline.com/pdf/others/GAILQualityPolicyinEnglish.pdf>

**N. Information Security Policy**

<https://www.gailonline.com/pdf/others/Information-Security-Policy-Statement-12-feb-21.pdf>

**O. Health, Safety and Environment Policy**

<https://www.gailonline.com/pdf/others/CorporateHSEPolicyUpdated.pdf>

**P. Document Preservation Policy**

<https://www.gailonline.com/pdf/others/Document%20Preservation%20%20Policy.pdf>

**Q. Conciliation Rule**

[https://www.gailonline.com/pdf/others/GAIL\\_\(INDIA\)\\_LIMITED\\_CONCILIATION\\_RULES\\_2010.pdf](https://www.gailonline.com/pdf/others/GAIL_(INDIA)_LIMITED_CONCILIATION_RULES_2010.pdf)



### 4.3 Sustainability Governance

(GRI 2-9a, b)

GAIL's commitment to Sustainable Governance is driven by its core values of Integrity, Ethics, Customer focus, Safety, Excellence, Technology, and Innovation. The company has a strong governance structure that is responsible for driving its sustainable growth. GAIL has a Sustainable Development Committee (SDC), which is a sub-committee of the Board of Directors of GAIL to guide and monitor Sustainability initiatives. The SDC has five (05) members (including 02 independent directors) comprising of (i) CMD-Chairperson, (ii) Director (Projects), (iii) Director (BD), (iv) Dr. Nandhagopal Narayanasamy, (v) Shri Sanjay Kashyap. In FY 2023-24, the SDC was convened twice.

The roles and responsibilities of the Sustainable Development Committee (SDC) are as follows:

- Formulating and monitoring a sustainable development plan and its execution.
- Review and Approval of Sustainability Report and Sustainability Policy.
- To review HSE performance and emergency preparedness.
- Recommend Emergency Response and Disaster Management Plans.
- Review of Net Zero Ambition and Action Plan.

### 4.4 Sustainability Activities

(GRI 2-24)

Sustainability is viewed as a means of creating long-term value by evaluating the company's operations concerning Economic, Environmental, Social, and Governance aspects. GAIL is committed to integrate these aspects into its value chain, aiming to contribute to a better world for future generations. As India's leading gas Company, GAIL is dedicated to advancing the nation's energy sector sustainably by embedding sustainability into its operations and decision-making processes.

In FY 2023-24, GAIL undertook numerous initiatives across various locations aligned with its specified sustainability goals and targets.

- GAIL has developed a Net-Zero strategy and clear organization-wide Net Zero roadmap to achieve a 100% reduction in Scope 1 and Scope 2 emissions by 2035 and a 35% reduction in Scope 3 emissions by 2040. The action plan was developed after conducting a detailed science-based study for Net-Zero action plan for GAIL.
- GAIL has entered into an MoU with the Centre of Excellence in Oil, Gas and Energy (CoEOGE) under the aegis of IIT Bombay for conducting a study titled 'Decarbonization of Petrochemical, Gas Processing and Petroleum Refineries: Technology Evaluation and Life Cycle Assessment' in line with its Net Zero 2035 Vision.
- GAIL was part of the Sectoral Study on Carbon Capture Utilisation and Sequestration (CCUS) with FIPI
- GAIL and TruAlt Bioenergy Limited (TBL) signed a Term Sheet with the intent to set-up 10 Compressed Biogas (CBG) plants at an investment of INR 600 Crores through equity participation in TruAlt's joint venture company Leafinti Bioenergy Private Limited.
- GAIL invited Expression of Interest for selecting a joint venture partner for setting up of Municipal Solid Waste (MSW) based CBG plants.

#### Achievements:

- GAIL has been upgraded from "C" to "B" level in the CDP Global ESG Rating under the Climate Change category.
- GAIL is included in the **FTSE4Good Index**, which is a **Global Sustainability Index** of the London Stock Exchange Group. The **FTSE4Good Index Series** is designed to identify companies that demonstrate strong environmental, social and governance practices measured against globally recognized standards.

FTSE  
Russell

# CERTIFICATE OF MEMBERSHIP

This is to certify that

**Gail India**

is a constituent company in the FTSE4Good Index Series



## FTSE4Good

June 2024

The FTSE4Good Index Series is designed to identify companies that demonstrate strong environmental, social and governance practices measured against globally recognised standards.

v3.0



### 4.5 Monitoring of Sustainability Projects

#### 4.5.1 Dashboards

GAIL has developed various dashboards to obtain a real-time overview of GAIL's diverse operational units and the efficiency of different production lines. These dashboards enable real-time monitoring (at major plants) of several Significant Energy Users (SEUs) viz., Extruder, Steam Turbines, Centrifugal compressors, Gas Cracker, Boilers, Heat Recovery Steam Generators (HRSGs) etc. Real-time monitoring of these SEUs helps in taking proper action to reduce losses and improve efficiency. Additionally, GAIL uses an internal dashboard to monitor shared value creation and sustainability performance against key performance indicators. GAIL Sustainability data is collected with the help of Sustainability Software, namely the e-Sustainability Module and e-Business Responsibility and Sustainability Reporting (BRSR) Module, which covers case

studies of energy efficiency, water and waste management, etc.

#### 4.5.2 GreenCo Assessment of the Sites

The Green Company Rating System by CII - Sohrabji Godrej Green Business Centre endorses an approach that is based on Sustainability Performance. This Rating System evaluates the companies based on criteria such as Energy efficiency, Renewable energy, GHG mitigation, Materiality conservation, etc.

GAIL has implemented GreenCo rating across its operational sites, which provides leadership and guidance on how to make Products, Services and Operations more sustainable. The Company's internal and external stakeholders are trained on the latest Green concepts so that we can implement better systems and global best practices in our operations.

#### In the FY 2023-24, GreenCo rating secured across GAIL operational sites

Dabhol-Bengaluru Pipeline	GreenCo Platinum Certification
Jhabua Compressor Station	GreenCo Silver Certification
Chhainsa Compressor Station	GreenCo Bronze Certification



GAIL - Dabhol Bengaluru Pipeline has been certified as GreenCo Platinum rating by CII - Sohrabji Godrej Green Business Centre. This is the first ever Unit & Pipeline Segment of GAIL to achieve Platinum rating. Another important feature of this achievement was the maiden attempt by this Unit which signifies the efforts made in carrying out various activities in the most sustainable manner. Additionally, in previous years different GAIL sites viz., Vijaipur, Vaghodia, Pata, VSPL, Gandhar, and Jhabua have been certified for the GreenCo rating.



78<sup>th</sup> Independence Day at GAIL Jubilee tower Noida



Shri Sandeep Kumar Gupta, CMD, GAIL  
at GAIL Jubilee Tower Noida on  
78<sup>th</sup> Independance Day



GAIL's 41<sup>th</sup> Foundation Day



05



## Our Stakeholder Inclusion and Materiality



Internal & External  
Stakeholder Identification



Robust five step materiality  
assessment process to  
identify key material issues



In FY 2023-24, we have  
analysed the identified  
material issues using a  
double materiality concept

## Our Stakeholder Inclusion and Materiality

### GRI (3-3)

GAIL lays great emphasis on Materiality Assessment to identify different material topics that can impact decision-making of internal and external stakeholders. It also helps us to identify the potential risks and opportunities and thereby provides an opportunity to address them proactively. GAIL is a responsible entity that believes in meeting the needs of all stakeholders responsibly to foster sustainable growth. To achieve this, we carried out a thorough evaluation to pinpoint key areas impacting stakeholders and the company.

### 5.1 Our Approach to Stakeholder Engagement

#### GRI (2-29, 2-30)

Stakeholder engagement is a pivotal component of our Sustainability Framework. This process entails multiple stages, starting with the identification of stakeholder Groups, followed by their prioritization based on their relative importance to our Business and their impact. After prioritizing the Groups, we establish engagement mechanisms to maintain regular interaction and gather their valuable inputs. The insights obtained from these interactions play a crucial role in defining our Sustainability priorities and planning our ESG programs. Considering the significance and level of influence of our Stakeholders on our Business, as well as the impact our business has on them, we have categorized Stakeholder groups into Internal and External categories, as outlined below.

Stakeholders	
Internal Stakeholders	Employees
External Stakeholders	<ol style="list-style-type: none"> <li>1. Government &amp; Other Regulators</li> <li>2. Investors</li> <li>3. Suppliers</li> <li>4. Customers</li> <li>5. Joint Ventures, Subsidiaries and Associates</li> <li>6. Industry Associations</li> <li>7. Community</li> <li>8. Contractors/Implementing Agencies</li> <li>9. Academic and R&amp;D institutions</li> <li>10. NGOs/Civil Society Organisations</li> <li>11. Media</li> <li>12. Public at large</li> </ol>

### 5.2 Stakeholder Engagement Framework

Stakeholder Engagement is a critical aspect of GAIL's business. GAIL identify and meet the stakeholders' expectations to create long-term value. The engagement with the stakeholders and understanding of their concerns and interests is done through a Materiality Assessment process.

Stakeholder engagement is a multi-stage process of identifying & prioritizing the stakeholders, identifying the means & modes of engagement and managing the stakeholder expectations. The engagement with various Stakeholders whose interests are affected or could be affected by GAIL's activities are as follows:



GAIL (India) Limited

## Sustainability Report 2023-24

New India New Energy

Stakeholder Group	Objective of Engagement	Frequency of engagement	Mode of Communication
<b>Employees - Internal stakeholder</b>	<ul style="list-style-type: none"> <li>Communication on GAIL's business goals, values and principles</li> <li>Action planning on major projects</li> <li>Implementation of best practices</li> <li>Facilitating Learning and Development</li> <li>Track Key Performance Indicators and Action plans</li> <li>Understand and address concerns Idea generation, sharing and learning</li> </ul>	Annual, Quarterly, Monthly, Ongoing/Need basis	<ul style="list-style-type: none"> <li>Satisfaction surveys</li> <li>Social Media</li> <li>Grievance Redressal</li> <li>Suggestion schemes</li> <li>CMD open house</li> <li>Various committees</li> <li>GAIL Day celebration</li> <li>Emails, Journals,</li> <li>Meetings with Employee Association and unions</li> <li>Townhall</li> <li>Samanvay-Visit of Delhi-NCR HR Officials to sites</li> </ul>
<b>Government and other regulators - External Stakeholder</b>	<p>Support government missions to promote sustainable development goals, such as</p> <ul style="list-style-type: none"> <li>Support the government in transitioning to a clean gas-based economy</li> <li>Building Relationship</li> <li>Performance appraisal through MoUs</li> <li>Submission of progress reports</li> <li>Discussions on major investment plans</li> </ul>	Annual, Monthly, Periodic/Need basis	<ul style="list-style-type: none"> <li>Email</li> <li>Meetings</li> <li>Telephonic conversation</li> <li>MoUs</li> <li>Quarterly Progress Report</li> <li>Annual Report</li> </ul>
<b>Financial Institutions -External stakeholder</b>	<ul style="list-style-type: none"> <li>Financial performance</li> <li>Share broad future strategies</li> <li>Get feedback and address concerns</li> <li>Seek approval from shareholders on major decisions</li> </ul>	Annual, Quarterly	<ul style="list-style-type: none"> <li>Meetings with Investors</li> <li>Attending Investor Relations (IR) Conferences/ roadshows</li> <li>Conducting site visits for investment community</li> <li>Arranging Conference Calls for Investment Community</li> <li>Conducting Analyst Meets</li> <li>Publishing Public disclosures and quarterly results</li> <li>Conducting Press conferences</li> <li>Communication with Shareholders</li> </ul>

<b>Stakeholder Group</b>	<b>Objective of Engagement</b>	<b>Frequency of engagement</b>	<b>Mode of Communication</b>
<b>Employees - Internal stakeholder</b>	<ul style="list-style-type: none"> <li>• Communication on GAIL's business goals, values and principles</li> <li>• Action planning on major projects</li> <li>• Implementation of best practices</li> <li>• Facilitating Learning and Development</li> <li>• Track Key Performance Indicators and Action plans</li> <li>• Understand and address concerns Idea generation, sharing and learning</li> </ul>	Annual, Quarterly, Monthly, Ongoing/Need basis	<ul style="list-style-type: none"> <li>• Satisfaction surveys</li> <li>• Social Media</li> <li>• Grievance Redressal</li> <li>• Suggestion schemes</li> <li>• CMD open house</li> <li>• Various committees</li> <li>• GAIL Day celebration</li> <li>• Emails, Journals,</li> <li>• Meetings with Employee Association and unions</li> <li>• Townhall</li> <li>• Samanvay-Visit of Delhi-NCR HR Officials to sites</li> </ul>
<b>Suppliers -External stakeholder</b>	<ul style="list-style-type: none"> <li>• Feedback Understand and address their concerns</li> <li>• Dispute resolution</li> <li>• Building Strong Relationship</li> <li>• Quality Assurance / Innovation and Improvement</li> <li>• Compliance and Standards</li> <li>• Negotiate Terms and conditions</li> </ul>	Annual, Quarterly, Monthly, Ongoing/Need basis	<ul style="list-style-type: none"> <li>• Supplier Meets</li> <li>• Industry Conclave</li> <li>• Access to empowered C&amp;P committee</li> <li>• Vendor Development program/ Vendor coaching programs</li> <li>• Hand-holding programs for SC/ ST-owned MSEs, Women entrepreneurs etc.</li> <li>• Pre-tender /pre-bid meetings</li> <li>• Meets with micro and small enterprises</li> <li>• Emails, Telephonic Conversation, Video Calls</li> </ul>
<b>Customers - External stakeholder</b>	<ul style="list-style-type: none"> <li>• To understand their satisfaction levels</li> <li>• To address operational concerns</li> <li>• To get feedback on new product development</li> </ul>	Annual, quarterly	<ul style="list-style-type: none"> <li>• Annual Customer Meet</li> <li>• Zonal Customer Meet</li> <li>• Customer Interactive Meet</li> <li>• Customer satisfaction Survey</li> <li>• Exhibition</li> <li>• Seminars</li> <li>• Symposiums</li> <li>• Emails, Telephonic Conversation, Video Calls</li> </ul>
<b>Joint Ventures and Subsidiaries of GAIL - External stakeholder</b>	<ul style="list-style-type: none"> <li>• Discussions on major investment plans</li> <li>• Sharing of performance data</li> <li>• Facilitate decision-making on major topics</li> </ul>	Periodic/Need basis	<ul style="list-style-type: none"> <li>• Meetings</li> <li>• Reports and Newsletters</li> <li>• Emails, Telephonic Conversation, Video Calls</li> </ul>



GAIL (India) Limited

# Sustainability Report 2023-24

New India New Energy

Stakeholder Group	Objective of Engagement	Frequency of engagement	Mode of Communication
<b>Industry Associations -External stakeholder</b>	<ul style="list-style-type: none"> <li>Share performance data</li> <li>Inform on keys decisions and projects</li> <li>Participate in conferences and seminars</li> <li>Engage in public policy advocacy</li> </ul>	Periodic/Need basis	<ul style="list-style-type: none"> <li>Seminars</li> <li>Conferences</li> <li>Industry Expo</li> <li>Interviews</li> <li>Reports and Newsletters</li> <li>Emails, Telephonic Conversation, Video Calls</li> </ul>
<b>Communities - External stakeholder</b>	<ul style="list-style-type: none"> <li>Engaging with communities for conducting need assessment and executing community development projects</li> <li>Understanding and addressing their concerns on critical incidents</li> <li>Community Grievances Redressal</li> </ul>	Ongoing/Need basis	<ul style="list-style-type: none"> <li>Meetings and direct interaction</li> <li>Community events</li> <li>Need analysis and Impact Assessments</li> <li>CSR initiatives</li> <li>Telephonic Conversation</li> </ul>
<b>Contractors/ Implementing Agencies - External stakeholder</b>	<ul style="list-style-type: none"> <li>Communicate operational decisions</li> <li>To align their work with company policies and mandates (Compliance)</li> <li>Seek their performance data/ information</li> <li>Understand and address their concerns</li> <li>Communicate company obligations such as contract renewal, payments etc.</li> <li>Dispute resolution</li> <li>Review of Contracts</li> </ul>	Annual, Quarterly, Monthly, Ongoing/Need basis	<ul style="list-style-type: none"> <li>Meetings</li> <li>Website</li> <li>Emails, Telephonic Conversation, Video calls</li> </ul>
<b>Academic and Research Institutions - External stakeholder</b>	<ul style="list-style-type: none"> <li>Partner and participate in GAIL research and development activities</li> </ul>	Periodic/Need basis	<ul style="list-style-type: none"> <li>Project meetings</li> <li>Periodic reviews</li> <li>Website</li> <li>Social media</li> <li>Press</li> <li>Emails, Telephonic Conversation, Video calls</li> </ul>
<b>NGOs / Civil Society Organizations - External stakeholder</b>	<ul style="list-style-type: none"> <li>Executing community development projects</li> <li>Understanding and addressing their concerns on critical incidents</li> </ul>	Periodic/Need basis	<ul style="list-style-type: none"> <li>Project meetings</li> <li>Annual reviews</li> <li>Emails, Telephonic Conversation, Video calls</li> </ul>

Stakeholder Group	Objective of Engagement	Frequency of engagement	Mode of Communication
Public at large & Media -External stakeholder	<ul style="list-style-type: none"> <li>Participate and support GAIL initiatives for the public</li> <li>Converting passive citizens to an active consumer</li> <li>Brand awareness and improved brand recall</li> <li>Understanding and addressing their concerns on critical incidents</li> </ul>	Annual, Quarterly, Monthly, Periodic/Need basis	<ul style="list-style-type: none"> <li>Social media campaigns/posts etc.</li> <li>Community events</li> <li>CSR initiatives</li> <li>Website</li> <li>Press</li> <li>Emails</li> </ul>

### 5.3 Our approach to Materiality

(GRI 3-1a, b)

We recognize the importance of understanding how our operations affect the environment, society, and individuals, including human rights and the expectations of our stakeholder groups. Our primary focus has been on creating long-term value for our stakeholders. Towards this end, identifying material topics is a crucial step. This process allows us to prioritize Sustainability related focus areas or topics and align our business with sustainability objectives with stakeholder needs and expectations. To achieve this, we conduct a Materiality Assessment annually using a structured methodology.

GAIL conducts the Materiality assessment exercise in accordance with the GRI 2021 standard to examine the focus areas or topics that are important for sustained business operations via the multi-stage process of identifying and prioritizing stakeholders, identifying the means & modes of the engagement, i.e., materiality survey and one-on-one discussions. GAIL identifies important stakeholders who are involved in the materiality process, and their perspectives are considered while assessing the key material concerns. This stakeholder feedback is used to determine the major ESG areas. We also refer to sector-specific standards, including those from the International Petroleum Industry Environmental Conservation Association (IPIECA) and International Finance Corporation (IFC) for Performance Standards on Environmental and Social Sustainability, as well as the ISSB and SASB industry-specific standards for materiality assessment. This approach ensures that our materiality assessment process aligns with

globally recognized standards. The assessment comprises five phases, which are explained in detail.

Further, the Materiality Assessment process of GAIL is carried out by third-party agencies, following national and/or international standards and frameworks. The results of the Materiality Assessment are analysed and put-up to the SDC of the Board.

GAIL policy for Determination of Materiality or Disclosure of Material Events:

<https://www.gailonline.com/pdf/InvestorsZone/FinalMaterialityDisclosurePolicy23112023.pdf>

### 5.4 Understanding the Context

Initially, we perform a comprehensive assessment of our Operations, Business Relationships, Stakeholders including for all entities under GAIL's control. Additionally, we meticulously review sector-specific ESG frameworks, such as GRI 11, along with sectoral regulations and industry trends to gain a deeper understanding of the impact of our operations on various stakeholders throughout the value chain. Following this, we identify potentially relevant topics for our entity and determine the stakeholders likely to be significantly affected by our actions.

#### 5.4.1 Understanding Our Impact

Our objective is to understand the actual and potential impacts of the identified topics on the Economic, Environment, Social and Governance. Actual impacts are those that have already taken place, while potential impacts are those that may



happen in the future. To identify these impacts, we gather information from various sources, including sector-specific standards, financial and non-financial audits, industry forums, legal reviews and research papers.

#### **5.4.2 Understanding the Significance of Our Impact**

To obtain further insights, we consult our stakeholders regarding the identified topics through a survey, allowing them to rate the importance of these topics as high, medium, or low priority. The stakeholders' responses are analysed to determine the significance of the impact of the identified material topics. The impacts are categorized into positive and negative impacts. Additionally, we assess the severity and likelihood of these impacts on the

company. The scale, coverage, and nature of the impacts were analyzed to evaluate the intensity of both current and potential impacts.

#### **5.4.3 Prioritizing Key Material Topics**

The stakeholder feedback was utilized to develop key M from most to least significant and establishing a threshold to determine the impacts of those material topics that require action.

#### **5.5 Review of Material Topics**

(**GRI 3-2a, b**)

Detailed review of material topics that emerged from the findings of the Materiality Assessment was carried out. The material topics were categorized into three groups based on their importance viz., High, Medium, and Low.

No	Material Topics	Rationale for Importance	Economic, Environment, Social, Governance	Level of Importance	Chapters
1	<b>Towards Decarbonization and Net-Zero (GHG Emissions), Climate Change Adaptation and Mitigation</b>	Potential risks are operating the plants in extreme weather conditions, i.e., extreme heat, cold waves, cyclones, excessive rains and floods which can cause damage. Globally, countries and corporations have taken Net Zero targets towards reduction in GHG emissions.  This shall create an additional financial burden for adopting clean technologies and transitioning to green energy.  GAIL will invest in resilient infrastructure to withstand extreme weather and prioritize adopting clean technologies to align with global Net Zero targets, ensuring a sustainable transition to green energy while managing financial impacts.	Economic, Environment, Governance	High	<b>Chapter 9:</b> Energy and Environment <b>Chapter 10:</b> Climate Change
2	<b>Access and Affordable Clean energy for all</b>	Natural Gas is a relatively clean fuel. GAIL is in the business of Natural gas marketing and transmission; hence it provides an opportunity to increase access of affordable energy to more number of customers.	Economic, Environment, Governance	High	<b>Chapter 7:</b> Business Growth <b>Chapter 10:</b> Climate Change
3	<b>Resource Optimization (Management of energy, water, waste, materials and Emission Management)</b>	At GAIL, we always strive for optimum utilization of resources like water, energy and materials. We are actively exploring Electrification of existing Natural Gas based equipment, increasing our Renewable Energy generation, improving process efficiency etc. GAIL sites have also implemented Energy Management (ISO 50001) and carry out periodic Energy Audit. GAIL is also setting up a Zero Liquid Discharge Plant at GAIL Pata.	Environment, Governance	High	<b>Chapter 8:</b> Operational Excellence <b>Chapter 9:</b> Energy and Environment

No	Material Topics	Rationale for Importance	Economic, Environment, Social, Governance	Level of Importance	Chapters
4	<b>Health and Safety (Assets, Employees and Stakeholders)</b>	<p>GAIL's pipeline network spreads across the length and breadth of the country and also operates few Process Plants. GAIL is committed to uphold best Health and Safety practices across all our Operations.</p> <p>Due to handling of large quantities of Hydrocarbons, Health &amp; Safety of our assets, employees, stakeholders is an important focus area.</p>	Economic, Social, Governance	High	<b>Chapter 11:</b> Our Employees  <b>Chapter 12:</b> Ensuring Health and Safety for All  <b>Chapter 13:</b> Responsible Supply Chain Management  <b>Chapter 16:</b> Performance and Standards
5	<b>Human Capital Management (employee wellbeing, employee engagement, diversity, non- discrimination, and equal opportunity)</b>	GAIL recognizes the importance of having a strong human capital, which helps in maintaining consistent business growth. The Company takes various initiatives to provide conducive work environment and growth opportunities to its employees.	Social, Governance	High	<b>Chapter 5:</b> Our Stakeholder Inclusion and Materiality  <b>Chapter 11:</b> Our Employees
6	<b>Community Development and Engagement (Rights of indigenous people, Land, and Resource rights)</b>	GAIL regularly interacts with its local communities, to identify their most pressing needs, understand the lives of the less privileged. GAIL takes various projects for uplifting of the communities through CSR fund.	Social, Governance	High	<b>Chapter 5:</b> Our Stakeholder Inclusion and Materiality  <b>Chapter 15:</b> Our Communities
7	<b>Business Ethics, Integrity, and Compliance (Including anti- corruption, anti-competitive behaviour, tax transparency and strategy), ESG in governance and transparency in reporting (Board oversight, management role, leadership &amp; policy advocacy, payments to government)</b>	Ethical business conduct is paramount for GAIL to achieve sustainable growth.	Governance	High	<b>Chapter 4:</b> Sustainability at Glance  <b>Chapter 5:</b> Strong Governance and Business Resilience  <b>Chapter 7:</b> Business Growth
8	<b>Economic Performance</b>	<p>India has planned to increase Natural Gas (NG) share in Energy Mix from 6.7% to 15% by 2030. GAIL is the leading Gas marketing company in India with approximately 16,243 Kms of NG pipelines and sells ~48% of NG in the country. GAIL is continuously expanding its Pipeline and CGD network to cater to the increased demand of NG.</p> <p>The per capita Petrochemical consumption is also on the rise and GAIL is expanding its Petrochemical capacity to cater to the increased demand. Hence suitable opportunity for growth and profitability are available in the existing businesses. In addition, GAIL is foraying into new business areas to further increase the growth.</p>	Economic, Environment, Social, Governance	High	<b>Chapter 7:</b> Business Growth



No	Material Topics	Rationale for Importance	Economic, Environment, Social, Governance	Level of Importance	Chapters
9	Air Quality and Emissions	At GAIL, we constantly strive for controlling and regulating air emissions which can arise during the transportation of Natural Gas. We regularly monitor and regulate the emissions in accordance with various Central and State Pollution Control Board norms, World Business Council for Sustainable Development (WBCSD), Greenhouse Gas Reporting Standards, ISO 14064-2018 and the American Petroleum Institute (API)- 2022.	Environment	High	<b>Chapter 8:</b> Operational Excellence <b>Chapter 9:</b> Energy and Environment
10	Protection of Human Rights	As a socially responsible organization, GAIL is dedicated towards the promotion of human rights and the implementation of responsible labour practices in every facet of our operations. GAIL is in compliant with both domestic regulations and international frameworks (including ILO convention).	Social	High	<b>Chapter 5:</b> Our Stakeholder Inclusion and Materiality <b>Chapter 13:</b> Responsible Supply Chain Management
11	ESG in governance and transparency in reporting (Board oversight, management role, leadership and policy advocacy, payments to government)	GAIL is committed to integrate Environmental, Social, and Governance (ESG) principles into its value chain, aiming to contribute to a better world for future generations.	Governance		<b>Chapter 4:</b> Sustainability at Glance
12	Protection of Biodiversity and Ecology	GAIL endeavours to operate in a responsible way that ensures the conservation and protection of biodiversity and ecology, in a manner that shall not harm the biodiversity, flora and fauna.	Environment	Medium	<b>Chapter 4:</b> Sustainability at Glance <b>Chapter 9:</b> Energy and Environment
13	Marketing and Labelling	At GAIL, it is of utmost importance to inform the customers about the products and services by labelling the product information on the packaging, ensure product safety, transparency, building brand trust and loyalty.	Governance	Medium	<b>Chapter 14:</b> Our Customers
14	Supply Chain Management (supplier social assessment and capacity building),	At GAIL, Suppliers are key stakeholders as they ensure smooth operations and are significant contributors to the overall success of the business. GAIL assures that its suppliers follow the national/international legislations and standards, as applicable.	Social, Governance	Medium	<b>Chapter 13:</b> Responsible Supply Chain Management
15	Sustainable Sourcing (consideration of human rights, wages, work conditions, procurement practices, no child/forced labour in supply chain)	GAIL follows sustainable sourcing & procurement throughout its supply chain, acquiring raw materials and goods from local suppliers, focusing on reducing risks associated with non-compliant suppliers.	Social, Governance	Medium	<b>Chapter 5:</b> Our Stakeholder Inclusion and Materiality <b>Chapter 13:</b> Responsible Supply Chain Management

No	Material Topics	Rationale for Importance	Economic, Environment, Social, Governance	Level of Importance	Chapters
16	<b>Customer Relationship, Experience and Satisfaction</b>	GAIL embraces customer-centric approach, regularly interacts with its customers to comprehend their needs, enhance customer experience by producing high quality products and services.	Economic, Governance	Medium	<b>Chapter 5:</b> Our Stakeholder Inclusion and Materiality <b>Chapter 14:</b> Our Customers
17	<b>Product Service and Quality</b>	GAIL is continuously working towards producing quality products and services to build long-lasting value to meet the expectation of the customers, improving overall brand reputation and establishing a strong market presence.	Economic, Governance	Medium	<b>Chapter 14:</b> Our Customers
18	<b>Business Growth and Profitability (energy security, business model resilience, market presence)</b>	To ensure a sustainable growth, GAIL is focusing on expanding its business. It has ventured into Renewable and alternative energy sources such as Solar, Wind, Compressed Bio Gas, Green Hydrogen etc., and adopting latest technologies to increase the productivity of the business and contribute towards profitability and business growth.	Economic,	Medium	<b>Chapter 7:</b> Business Growth
19	<b>Risk and Crisis Management (Closure and Rehabilitation, Asset integrity and critical incident management)</b>	To tackle the crisis and risks associated with its operations, GAIL has an Enterprise Risk Management framework, Crisis Management Plan and has a Risk Management Committee.	Economic, Governance	Medium	<b>Chapter 6:</b> Strong Governance and Business Resilience <b>Chapter 7:</b> Business Growth <b>Chapter 8:</b> Operational Excellence <b>Chapter 9:</b> Energy and Environment
20	<b>Data Privacy and Cyber Security</b>	GAIL implemented a thorough comprehensive Crisis Management Plan to address Cyber Attacks and Cyber Terrorism. To ensure efficient control, GAIL established an Incident Handling Team which consist of a Crisis Management Cell (CMC) and a Level-II Incident Resolution Team.	Economic, Governance	Medium	<b>Chapter 14:</b> Our Customers
21	<b>Product Design and Life Cycle Management</b>	GAIL is conducting a Life Cycle Assessment (LCA) study to assess the negative environmental impact of its products, processes and services throughout its life cycle, from raw materials, extraction to disposal or recycling, as it provides a valuable insight towards developing more sustainable practices and products.	Environment	Low	<b>Chapter 4:</b> Sustainability at Glance
22	<b>Innovation, Patents and Technology Transfer</b>	GAIL is continuously working towards innovating new products and improve the performance of existing services, digitalization for stimulating economic growth of the business and create a strong presence in the market.	Economic, Governance	Low	<b>Chapter 7:</b> Business Growth <b>Chapter 8:</b> Operational Excellence <b>Chapter 9:</b> Energy and Environment <b>Chapter 10:</b> Climate Change



## 5.6 KPI's with Respect to Material Topics

(GRI 3-3a, b, c, d, e, f)

Material Topics	GRI Topic	KPI
<b>Adverse impacts of Climate Change</b>	302 Energy, 305- Emissions, Topic 10.1, 10.2	Reducing GHG emissions, RE power in operations, Investment in alternative green fuel sources, Energy efficient equipment's, Electrification
<b>Towards Decarbonization &amp; Net-zero (GHG Emissions)</b>	302 Energy, 305- Emissions, Topic 12.3, 10.4	GHG emission, Renewable Energy usage, Energy Efficiency, Investment in Low-carbon Technologies
<b>Access and Affordable Clean energy for all</b>	302 Energy, 305- Emissions, Topic 10.4, 10.5	Increase in Gas Pipeline networks, Energy Access, Energy Affordability, Renewable Energy Adoption, Energy Efficiency, Investment in Clean Energy
<b>Air Quality and Emissions</b>	305-7 Nitrogen oxides (NOX), Sulphur oxides (SOX) and other significant air emissions Topic 9.4	Air Quality Monitoring, Emission Reduction Targets, Renewable Energy and Efficiency, Transportation Emissions
<b>Resource Optimization (Management of energy, water, waste and materials)</b>	301-Materials, 302- Energy, 303-Water and Effluents, Topic 9.3, 9.4, 9.5, 306 - Waste Topic 9.6	Energy consumption, Energy savings, Resource Efficiency, Renewable Energy generated, Water recycling, Implementation of GreenCo rating for resource optimization at major factories, Capacity utilization percentage, financial saving through QC projects, Environmental Expenditure
<b>Health and Safety (customers, employees and suppliers)</b>	403-Occupational health and safety, 416- Customer health and safety, Topic 12.4, 12.5, 12.6, 12.7	HSE score, Number of minor incidents, Number of safety observations reported, Near miss, LTIFR (Lost Time Injury Frequency Rate)
<b>Protection of Human Rights</b>	411- Rights of Indigenous People, Topic 11.9	Total number of operations with significant actual and potential negative impacts on local communities, Number of complaints received through grievances and redressal mechanism.
<b>Community Development (rights of Indigenous people, land and resource rights)</b>	413- Local Communities, Topic 15.1.1, 15.2.1, 15.4	Total CSR Expenditure, Operations with local community engagement, Total CSR expenditure in aspirational districts
<b>Business Ethics, Integrity and Compliance (Including anti- corruption, anti-competitive behaviour, tax transparency and strategy)</b>	205 Anti-Corruption, 206 Anti-competitive Behaviour 207- Tax Topic 6.1.6, Governance Mechanism	Awareness Programs/Training for employees to sensitize on anti-corruption policies and other organizational procedures. Number of vigilance and corruption cases.
<b>Economic Performance, Business Growth and Profitability (energy security, business model resilience, market presence)</b>	201-Economic performance, Topic 7.2, 7.4	Revenue and Profit from Operations, Economic Value Generated, Economic Value Distributed.

<b>Material Topics</b>	<b>GRI Topic</b>	<b>KPI</b>
<b>ESG in governance and transparency in reporting (Board oversight, management role, leadership &amp; policy advocacy, payments to government)</b>	405-1 Governance structure, Board oversight at GAIL, Management Committee	Board structure (number of committees, number of members), ESG specific trainings hours of Directors.
<b>Protection of Biodiversity and ecology</b>	304- Biodiversity Topic 9.2	Biodiversity Initiatives at various sites, maintaining Green Belt, Numbers of Trees planted.
<b>Marketing and Labelling Practices</b>	202- Market presence	Compliance with mandatory and voluntary codes concerning the health and safety impacts of products and services
<b>Human Capital Management (employee wellbeing, employee engagement, diversity, non- discrimination and equal opportunity)</b>	401- Employment, 402-Labour Management, 404- Training and education, 405- Diversity and Equal Opportunity, 406- Non-discrimination 407- Freedom of Collective Bargaining, 408-Child Labour, 409- Forced Labour, 410-Security Practices, 412-Human Rights Assessment, Topic 11.5, 11.9, 11.10, 11.11	Average Training hours, Attrition rate, Training on Human Rights, training Efficacy score, Training expenditure, diversity.
<b>Supply Chain Management (supplier social assessment and capacity building)</b>	204-Procurement Practices, 308-Supplier Environment Assessment, 414- Supplier Social Assessment Topic 13.3	Order value through GeM portal, Number of new suppliers assessed.
<b>Sustainable Sourcing (consideration of human rights, wages, work conditions, procurement practices, no child/ forced labour in supply chain)</b>	204 Procurement Practices, 308 Supplier Environment Assessment, 414- Supplier Social Assessment Topic 13.4	Percentage procurement from MSEs, Percentage of suppliers belonging from vulnerable and marginalized communities
<b>Customer Relationship, Experience and Satisfaction</b>	418 – Customer Privacy, Topic 14.2, 14.3	Customer Satisfaction Index
<b>Product Service and Quality</b>	301-Materials	Customer Satisfaction Index, Customers Complains and Redressal
<b>Business Growth and Profitability (energy security, business model resilience, market presence)</b>	201-Economic Performance, 202- Market Presence, 203- Indirect Economic Impacts Topic 7.2	Revenue and Profit from Operations, Economic Value Generated, Economic Value Distributed.
<b>Risk and Crisis Management (Closure and Rehabilitation, Asset integrity and critical incident management)</b>	413- Local communities 403- Occupational Health and Safety Topic 6.2, 12.2.2, 12.5	Key Risks and Mitigation measures



GAIL (India) Limited

## Sustainability Report 2023-24

New India New Energy

Material Topics	GRI Topic	KPI
Digital Transformation	201-Economic performance Topic 13.7	Adoption and Utilization of Digital Tools, Data Management and Analytics, Cybersecurity and Risk Management
Data Privacy (employee, supplier, customer and sensitive data) and Cyber Security	201-Economic performance Topic 8.2.7	Number of data breaches/ incidents
Product design and Life Cycle management	301-Materials,	Conducting Life Cycle Assessment
Innovation, Patents and Technology Transfer	201-Economic performance Topic 9.7	Expenditure on Research and Development.

### 5.7 Double Materiality

Double Materiality involves a dual approach of assessing and disclosing material information about Financial, Environmental and Social Aspects. Financial Materiality includes evaluating the impact of ESG factors on the organisation's financial performance, stability, and long-term viability. The Environmental & Social Materiality includes the impact of the organisation's activities on the Environment and Society.

GAIL is working on Double Materiality approach, where we have identified few material topics regarding their impact on the environment and society, and the organisation's financial performance.

As a Company that integrates key stakeholder concerns and business needs into its overall strategy, we analysed the identified material topics using a Double Materiality perspective. The following diagram enumerates the material topics from financial and impact materiality viewpoints.



### **5.7.1 Impact Assessment of Material Topic on the Company**

No	Material Topic	Positive Impact	Negative Impact	SDGs
1	<b>Adverse impacts of Climate Change</b>	Reducing GHG emissions through the adoption of Renewable Energy projects, integrating Energy-efficient technologies, Electrification, CO2 Valorisation and Offsetting initiatives, will help preserve the environment and ecosystem.	Potential risks like operating the plants in extreme weather conditions i.e., extreme heat, cold waves, cyclones, excessive rains and floods which can cause damage. This will lead to higher investments in adapting new technologies and also make existing infrastructure redundant.	     
2	<b>Decarbonisation and Net-Zero (GHG Emissions)</b>	This will significantly reduce the organization's carbon footprint, mitigating climate change impacts. This transition also enhances long-term business sustainability, aligns with global climate goals, and boosts reputation among environmentally conscious stakeholders.	Due to adverse effects of Global warming as a result of increase in GHG emissions, countries and corporates have taken Net Zero Targets towards reduction in GHG emissions.  This shall create additional financial burden for adopting clean technologies and transition to green energy.	     
3	<b>Access and Affordable Clean energy for all</b>	This will help in improving the sale of NG as it is a cleaner fuel thereby improving the growth prospects of GAIL.	This will increase Scope – 3 emissions leading higher investments for its mitigation.	   
4	<b>Resource Optimization (Management of energy, water, waste and materials)</b>	Reduction in operational costs, efficiency improvement, and mitigation of risks in compliance management.	This will lead to higher investments in adapting new technologies and also make existing infrastructure redundant.	     
5	<b>Health and Safety (assets, employees and stakeholders)</b>	Better Health & Safety will improve efficiency and productivity.	In order to provide its human capital with a working environment that places utmost emphasis on their mental and physical well-being, employee health and safety is a non-negotiable element for the Company.	      



GAIL (India) Limited

# Sustainability Report 2023-24

## New India New Energy

No	Material Topic	Positive Impact	Negative Impact	SDGs
6	<b>Human Capital Management (employee wellbeing, employee engagement, diversity, non-discrimination and equal opportunity)</b>	Improved work culture in the Company.		<ul style="list-style-type: none"> <li>3 GOOD HEALTH AND WELL-BEING</li> <li>4 QUALITY EDUCATION</li> <li>5 GENDER EQUALITY</li> <li>8 Decent Work and Economic Growth</li> <li>10 REDUCE INEQUALITIES</li> <li>16 PEACE, JUSTICE AND STRONG INSTITUTIONS</li> <li>17 PARTNERSHIPS FOR THE GOALS</li> </ul>
7	<b>Community Development (rights of Indigenous people, land and resource rights)</b>	Social upliftment of marginalized communities. Bolster Public Trust. Brand Image.		<ul style="list-style-type: none"> <li>1 NO POVERTY</li> <li>2 ZERO HUNGER</li> <li>5 GENDER EQUALITY</li> <li>10 REDUCE INEQUALITIES</li> <li>11 SUSTAINABLE CITIES AND COMMUNITIES</li> <li>15 LIFE ON LAND</li> <li>16 PEACE, JUSTICE AND STRONG INSTITUTIONS</li> <li>17 PARTNERSHIPS FOR THE GOALS</li> </ul>
8	<b>Business Ethics, Integrity and Compliance (Including anti-corruption, anti- competitive behaviour, tax transparency and strategy)</b>	Instils high morale among the employees, with a sense of belongingness. Improves governance and transparency.	Ethics and integrity have always been the key values to acquire stakeholder trust and establish a strong reputation. These elements are essential for a Company in order to sustain over the long term. Any mishaps in business ethics or integrity can prove risky and can cause business instability	<ul style="list-style-type: none"> <li>8 Decent Work and Economic Growth</li> <li>10 REDUCE INEQUALITIES</li> <li>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</li> <li>16 PEACE, JUSTICE AND STRONG INSTITUTIONS</li> </ul>
9	<b>Economic Performance</b>	Improve Growth prospects and enhance shareholder value.		<ul style="list-style-type: none"> <li>1 NO POVERTY</li> <li>7 AFFORDABLE AND CLEAN ENERGY</li> <li>8 Decent Work and Economic Growth</li> <li>9 INDUSTRY, INNOVATION AND INFRASTRUCTURE</li> <li>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</li> <li>13 CLIMATE ACTION</li> <li>17 PARTNERSHIPS FOR THE GOALS</li> </ul>
10	<b>Air Quality and Emission</b>	Improved Community Health. Mitigation of risks in compliance management. Improved Brand image.	This will lead to higher investments in adapting new technologies.	<ul style="list-style-type: none"> <li>3 GOOD HEALTH AND WELL-BEING</li> <li>7 AFFORDABLE AND CLEAN ENERGY</li> <li>11 SUSTAINABLE CITIES AND COMMUNITIES</li> <li>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</li> <li>13 CLIMATE ACTION</li> <li>15 LIFE ON LAND</li> </ul>

No	Material Topic	Positive Impact	Negative Impact	SDGs
11	<b>Protection of Human Rights</b>	Improved Community well-being. Improved Brand Image. It will save unwanted social unrest and litigations.		     
12	<b>ESG in Governance and Transparency in reporting (Board oversight, management role, leadership &amp; policy advocacy, payments to government)</b>	Better trust among stakeholders. Improves ESG rating. Access to sustainable Finance.	GAIL may lead to increased short-term costs and administrative burdens. It could also expose potential gaps or inconsistencies in existing processes, leading to reputational risks if not effectively managed.	     
13	<b>Protection of Biodiversity and Ecology</b>	Improved Earth's eco system.		    
14	<b>Marketing and Labelling Practices</b>	Ensure product safety, transparency, Build brand trust and loyalty.		    
15	<b>Supply Chain Management (supplier social assessment and capacity building)</b>	Ensures reliable supply of material at reasonable price. Ensures reliable offtake of Products.	Compliance cost of our Suppliers and Offtakers shall increase.	    
16	<b>Sustainable Sourcing (consideration of human rights, wages, work conditions, procurement practices, no child/ forced labour in supply chain)</b>	Compliance with regulatory framework. Better acceptability of Product. Improved Brand Image.		     



GAIL (India) Limited

# Sustainability Report 2023-24

New India New Energy

No	Material Topic	Positive Impact	Negative Impact	SDGs
17	<b>Customer Relationship, Experience and Satisfaction</b>	Improved Brand image. Better Customer Loyalty. Improved realizations.		
18	<b>Product Quality and Service</b>	Reduction in Cost due to lower rejections. Improved market share. Better realization. Improved Profit. Better customer relations. Promotes business growth.	Increased Investment in Plant and Technology.	
19	<b>Business Growth and Profitability (energy security, business model resilience, market presence)</b>	Enhance shareholder value.		
20	<b>Risk and Crisis Management (Closure and Rehabilitation, Asset integrity and critical incident management)</b>	Safe working environment. Lower downtime. Resource optimization, Better Productivity and improved Profit.		
21	<b>Data Privacy (employee, supplier, customer and sensitive data) and Cyber Security</b>	Better Trust. Lower disruptions. Lower Compliance Risk.	Increased Investment in Technology.	

No	Material Topic	Positive Impact	Negative Impact	SDGs
22	<b>Product design and Life Cycle management</b>	Improved sustainable performance. Enhanced acceptability of Product due to better disclosures.  Enhance the durability and reliability of the product.		
23	<b>Innovation, Patents and Technology Transfer</b>	Competitive advantage. Improved Market share. Better Profit and Growth.	High cost of R&D and Risk of failures.	



Review Meeting of GAIL's CGD JVCs-Subsidiaries

06



## Strong Governance and Business Resilience



GAIL has received NIL comments from Comptroller and Auditor General (CAG) in FY 2023-24



GAIL's Corporate RTI Cell has a 100% disposal rate with respect to RTI Applications received in FY 2023-24



In FY 2023-24, GAIL was a member of the following 30 national and international institutions

## Strong Governance and Business Resilience

### 6.1 Governance and Board Oversight at GAIL

(GRI 3-3)

The Corporate Governance Framework helps to foster and sustain a robust, ethical organizational culture. GAIL has formulated a comprehensive Corporate Governance structure to identify, evaluate, and manage the Company's risks while offering constructive insights. It also ensures that the Management's duties align with the Board's oversight. Further, the Policies and Procedures of the Company undergo regular reviews and updates to effectively manage risk exposures, which are critical for the smooth functioning of our operations. As a result, GAIL exemplifies commendable corporate ethics through establishment and execution of a comprehensive Corporate Governance Framework.

#### 6.1.1 Governance Structure

(GRI 2-9, GRI 2-10, GRI 2-11, GRI 2-12, GRI 2-13, GRI 405-1 a, 2-17 a)

The Board of Directors and its various Sub-Committees form the Apex of the Governance Framework. GAIL employs a cohesive Board structure governed by a Board Charter that delineates the Board's composition and responsibilities.

The Board of Directors comprises Executive (Functional/ Whole-time) and Non-Executive (Government Nominee and Independent) Directors. As of 31<sup>st</sup> March 2024, there were 14 (Fourteen) Directors on the Board comprising 6 (six) Functional Directors, including the Chairman & Managing Director and 8 (eight) Non-Executive Directors [comprising of 2 (two) Government Nominee Directors and 6 (six) Independent Director(s)]. The diversity policy for our Board of Directors stipulates an optimal balance of executive and non-executive directors, with a requirement for at least 1 (one) woman Director. The Directors are nominated and appointed by the Government of India.

Our Board Directors possess extensive experience in Marketing, Project management, Operations, Finance, and Governance and prioritize Sustainability and ESG in decision making. In line with our training philosophy, we provide Board members with the necessary training to update and enhance their skills. The newly appointed Directors benefit from custom-designed orientation and induction courses, which help them comprehend the organizational structure and contribute to the company's overall growth. During the induction period, they receive an On-boarding kit outlining their duties and responsibilities and the relevant laws and regulations they must follow.

We also regularly conduct capacity-building sessions on the evolving ESG landscape, including climate change, to keep them abreast of the latest information. This aspect is detailed further in subsequent sections of this Report.

*Refer to the Performance and Standard Chapter tables to analyse the representation of individuals in the organization's governance bodies across different diversity categories, including gender and age groups categorized as under 30 years old, 30-50 years old and over 50 years old.*

Details regarding the composition of the Board and member profile are available on our website (<https://www.gailonline.com/ABLeadership.html>)

GAIL has multiple Board-Level Sub-Committees, such as the Sustainable Development Committee (SDC), HR Committee, CSR Committee, Stakeholders Relationship Committee, etc., to assess the various facets of Company's Business Responsibility performance.

The senior management team is responsible for identifying and understanding the long-term



GAIL (India) Limited

## Sustainability Report 2023-24

### New India New Energy

interests of various stakeholders. The Board level Sub Committees are responsible for reviewing, recommending and approving processes for managing the organisation's impact on the stakeholders. Further, the Board of Directors oversees the overall Processes and ensures that the needs of stakeholders are properly managed.

#### Training for Board of Directors in FY 2023-24

No	Trainings Attended	Number of Directors
1	Orientation on the 1 <sup>st</sup> Board Meeting	05
2	One-day orientation programme on "Capacity building of newly appointed Non-Official Directors of CPSE's"	06
3	Participation in Programme on "Role of Chairman and Independent Directors of the Board"	06
4	Awareness Program Conducted on City Gas Distribution and Compressed Natural Gas	01

#### Familiarization Programmes for Independent Directors.

No	Name of the Director	No. of programmes attended during FY 2023-24	No. of hours spent in such programmes during FY 2023-24	No. of programmes attended from appointment till date	No. of hours spent in such programmes to date
1	Shri Akhilesh Jain	0	0	4	38.0
2	Shri Sher Singh	2	38	8	81.5
3	Smt. Kangabam Inaocha Devi	1	22	7	65.5
4	Prof. Dr. Ravikant Kolhe	2	38	8	89.5
5	Dr. Nandhagopal Narayanasamy	1	22	7	78.8
6	Shri Sanjay Kashyap	2	38	6	67.5

Link:

<https://www.gailonline.com/pdf/InvestorsZone/FamiliarizationProgramme01042024.pdf> Committees of the Board

#### 6.1.2 Committees of the Board

##### (GRI 2-18)

As of 31<sup>st</sup> March 2024, GAIL's Governance Structure comprises the Board of Directors, including five (05) statutory committees: Audit Committee, Corporate Social Responsibility Committee, Nomination and Remuneration Committee, Stakeholders Relationship

Committee and Risk Management Committee. Since each Committee performs specific tasks, the well-specified Terms Of Reference help each Committee work effectively, including quickly settling issues. The various Board-level committees are listed in the table below:

No	Committees of the Board	Number of meetings held in FY 2023-24
1	Audit Committee	10
2	Business Development and Marketing Committee (BDMC)	8
3	Corporate Social Responsibility Committee	7
4	Empowered Contracts & Procurement Committee (ECPC)	17

No	Committees of the Board	Number of meetings held in FY 2023-24
5	Empowered Committee (Natural Gas, LNG & Petrochemicals)	6
6	Finance Committee	4
7	HR Committee	1
8	Nomination and Remuneration Committee	2
9	Project Committee	3
10	Stakeholders Relationship Committee	2
11	Sustainable Development Committee	2
12	Stakeholders Grievance Redressal Committee	2
13	Risk Management Committee	2

The structure of each Committee includes a mix of independent and non-independent directors to promote diversity, equity, and objectivity. The Board of Directors consistently assesses and oversees the Committees' performance and the Company's objectives. The Board is also committed to establishing performance benchmarks encompassing ESG and climate change goals for the entire year while remaining aligned with its strategic priorities

*Detailed information regarding the membership of our Board committees and GAIL's Corporate Governance practices can be found in our Annual report for the Financial Year 2023-24.*

GAIL's Corporate Governance Report for FY 2023-24 is available at link

<https://gailonline.com/IZQuarterlyCompliances.html>

### **6.1.3 Performance Evaluation, Remuneration and Incentives (GRI 2-19, GRI 2-20, GRI 202-1, 405-2)**

We are a public sector company, and our Directors are appointed or nominated by the Government of India, which also conducts performance reviews. The responsibilities of the Nomination and Remuneration Committee are defined by SEBI (LODR) Regulations, 2015, the Companies Act 2013, and the Department of Public Enterprises (DPE) Guidelines on Corporate Governance for Central Public Sector Enterprises 2010, as amended periodically.

As of 31<sup>st</sup> March 2024, the Nomination and Remuneration Committee of the Company comprised Dr. Nandhagopal Narayanasamy as the Chairperson, Shri Kushagra Mittal and Shri Sher Singh as the member (s). The Nomination and Remuneration Committee is also responsible for determining the Performance Related Payment (PRP) pool and the policy for PRP distribution to employees.

The Ministry of Petroleum & Natural Gas (MoP&NG) assesses the performance of the company and its board members using both financial and non-financial factors, as outlined in the Memorandum of Understanding. The MoU provides the vision, weightage and targets which are related to economic parameters like revenue, Market Capitalisation, Capex, EBITA etc as well as expenditure on R&D/innovation initiatives, procurement from MSMEs (marginalised groups and women), compliance with Company's Act etc.

The performance review of senior management, including the CMD, Directors, EDs, and CGMs, is based on individual parameters and also GAIL's performance in MoU during the reporting period. This comprises both financial and nonfinancial goals aimed at improving the company's overall ESG performance

*Further details on Performance targets and corresponding remuneration are available in the Annual Report and the MoU with the government. Performance evaluation scores and composite scores are used to determine performance-related compensation.*



Key Compensation Change and Ratios		
1	Percentage change (from FY 2022-23 to FY 2023-24) in annual total compensation for the company's highest-paid individual	- 42.62%
2	Median percentage increase (from FY 2022-23 to FY 2023-24) in annual total compensation for all employees (excluding the highest-paid individual)	5.58%
3	Ratio of the annual total compensation for the organization's highest-paid individual to the median annual total compensation for all employees (excluding the highest-paid individual).	2.60

#### 6.1.4 Highlights of Remuneration and Incentives at GAIL

(GRI 2-21, GRI 202-1, GRI 405-2)

Particulars	Male		Female	
	Number	Median remuneration/salary/wages of the respective category	Number	Median remuneration/salary/wages of the respective category
Board of Directors (BoD)	06	3,45,577	00	00
Key Managerial Personnel (Six Functional Directors & Company Secretary)	07	2,51,978	00	00
Employees other than BoD and KMP	3,882	1,74,253	302	1,46,901
Workers	805	75,092	42	59,778

No	Particulars	Number	INR	Remark
1	Management level average remuneration (Base salary & other incentives) for FY. a) Female b) Male	302 3,882	1,46,901 1,74,253	Management Level is considered as Executive Level E0-E9 grades. Components considered in Base Salary (Basic, VDA, PP Stagnation)
2	Non-Management level average remuneration (Base salary & other incentives) for FY. a) Female b) Male	42 805	59,778 75,092	Non-management is considered as non-executive grades (S0-S7 grades). Components considered in Base Salary (Basic, VDA, PP Stagnation)
3	Executive level average remuneration (Base salary & other incentives) for FY. a) Female b) Male	- 7	NA 3,41,766	Executive Level taken as CMD & Functional Director Components considered in Base Salary (Basic, VDA, PP Stagnation)

#### Avoidance of Conflict of Interest

(GRI 2-15 a, b)

We aim to foster an ethical and trustworthy culture by establishing effective leadership. We advocate transparency and accountability among all stakeholders to prevent conflict of interest in workforce operations. We strive to create a reliable work environment where employees feel

confident raising and reporting potential conflicts of interest. Discussions are also held at the Board level to address these issues effectively. GAIL's conflict of interest policies in this regard are as follows:

- Whenever a Director has a direct or indirect interest in a particular agenda item or matter, they must abstain from participating in the

discussion. Each Director discloses their interest in any company, corporate entity, firm, or other association of individuals by submitting a written notice, which is then presented to the Board.

- GAIL's Related Party Transaction Policy is designed to address any challenges and concerns related to transactions with related parties. This policy is governed by the SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015, and the Companies Act, 2013. It includes materiality thresholds and recommendations for managing transactions involving related parties.
- All Approvals invariably require details of any Related Party transactions to be clearly mentioned.

*Further information regarding each Director's attendance, additional directorships, chairmanships/memberships of committees, and stock ownership is provided in our annual report.*

### 6.1.5 Internal Control System and their Adequacy

**(GRI 2-14 a)**

To enhance operational and financial integrity, we have established guiding principles, frameworks and rules as part of our internal control system. Strengthening financial reporting controls improves the thoroughness of audits and contributes to creating more accurate and reliable financial statements. GAIL's updated formal, centralized, and controlled internal financial control documentation is supported by its Internal Financial Control (IFC) System. Following an IFC compliance investigation, a Risk Control Matrix (RCM) was developed in consultation with external consultants.

GAIL has received NIL comments for 15<sup>th</sup> year in a row from the Comptroller and Auditor General (CAG) in FY 2023-24.

The Internal Audit Department functionally reports to the Audit Committee and administratively reports to the Director

(Finance). The audit assignments are conducted as per the annual audit program approved by the Audit Committee. The Internal Audit team examines the effectiveness of internal controls through a risk-based audit of business processes. In congruence with the mission of internal audit, "To provide comprehensive and quality audit services, which facilitates efficiency of business operation, enhance the integrity of information and result in recommendations that improve operating procedures, to enable the Company to achieve its objective", the significant audit observations along with its root cause and impact are reported to the management.

The Board's audit committee oversees authorizing the annual audit programme and reviewing the CAG audit's and audit team's conclusions. The internal audit team also performs audits of GAIL's subsidiaries, joint ventures and E&P blocks.

### 6.1.6 Ethics and Integrity

**(GRI 3-3, GRI 205-2 a, b, c, d, e, GRI 205-1 a, b, GRI 205-3 a, b, c, d)**

We are dedicated to conducting business following the strictest moral principles. GAIL's Code of Conduct aims to support our dedication to operating with the highest ethical standards. Our business policies and procedures are designed to achieve excellence while addressing various issues related to the ethics, transparency, human rights, etc.

GAIL's Code of Conduct and accompanying circulars outline the ideals, tenets and guidelines that guide our actions. We create and support sustainable growth and cultivate trustworthy relationships with our customers, staff and business partners. All employees, including senior management, board members, contractors and all corporate representatives, must adhere to this code of conduct guideline. Since we're a responsible business, we abide by anti-corruption, export control, and trade sanctions laws in our Business operations. During FY 2023-24, trainings conducted related to anti-corruption policies and procedures are mentioned below:



- Anti-corruption policies and procedures were communicated to all employees in FY 2023-24.
- All governance body members received anti-corruption training in FY 2023-24.
- 18.11% of employees received anti-corruption training in FY 2023-24.

Our robust policy frameworks discourage employees from engaging in dishonest and unethical behaviour. The following is a list of our organization's ethics and integrity policies:

- i. Fraud Prevention Policy
- ii. Whistle Blower Policy
- iii. Code of Fair Disclosure and Conduct
- iv. Practices and Procedures for disclosure of unpublished price-sensitive information.
- v. Code of Conduct to Regulate, Monitor and Report Trading by Insiders
- vi. Code of Conduct for Board Members and Senior Management Personnel

We undertake awareness workshops to ensure that our employees and vendors are committed to fighting corruption and that we are entirely independent of it. In addition, we conduct periodic risk assessments to identify potential corruption issues in our operational units. In FY 2023-24, we encountered two (02) corruption-related incidents; no other significant corruption risks were identified or reported.

Under the Right to Information Act, Whistle Blower Policy, Fraud Prevention Policy, and Integrity Pact, employees are encouraged to report any suspicious, illegal, unethical, or improper conduct within the company. This enhances the vigilance system and supports the organization's anti-corruption efforts.

## GAIL Core Values

**Integrity and Ethics:** We are transparent, fair and consistent in dealing with people. It insists on honesty, integrity and trustworthiness in all its activities and seeks to exhibit highest levels of personal and institutional integrity.

**Excellence:** We seek to achieve the pinnacle of excellence in all the business verticals where it has significant presence with continuous improvement and learning.

**Respect:** We have faith in people. We appreciate the employees' individual contributions, collaboration, dignity, rights and privacy and are aware of our obligations to them.

**Technology and Innovation:** We acknowledges entrepreneurial spirit and constantly supports development of new technologies, introduction of new ideas/ products, improved processes, better services and management practices.

**Customer:** We strives relentlessly to exceed the expectations of its customers and to be their first preference by delivering superior products and services, and creating sustainable value.

**Safety:** We aims at providing a safe workplace for its workforce and the communities around it, along with respecting the environment.

## Governance Mechanism (GRI 2-16)

**Right to Information:** A suitable mechanism has been set up within the company following the provisions of the Right to Information Act, 2005, to promote transparency and accountability. GAIL has nominated 01 Central Public Information Officer (CPIO) and 01 Link-CPIO/ Nodal Officer (RTI) at the Delhi Corporate office. Besides, 59 Assistant CPIOs and 26 First Appellate Authorities are also nominated across our units/ offices to provide information to citizens under the provisions of the RTI Act, 2005.

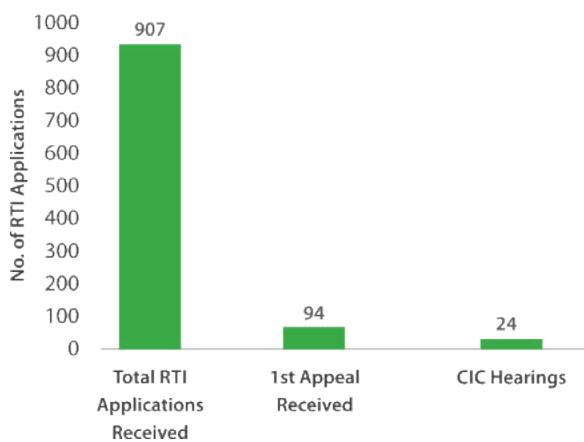
GAIL has hosted RTI Guidelines and related information on its website, which may be accessed at <https://gailonline.com/RTI.html>. Besides, the MIS Report on RTI Applications, Record Retention Schedule and contact details of CPIO/Link-CPIO and ACPIOs have also been web-hosted under the same link.

Considering the purpose of suo-motu disclosures under Section 4 of the RTI Act, 2005, GAIL has hosted a dedicated page on its website, through

which a significant amount of information is placed in the public domain on a proactive basis. This is done to increase transparency and accountability in the company's working mechanism and reduce the need to file RTI applications. Furthermore, GAIL has been active on the Government of India DoPT Online RTI Portal since July 2016, and information has been provided online since then.

Approximately 80% of the RTI applications/1<sup>st</sup> stage appeals are received through the online RTI portal. All RTI applications received (online/offline mode) are being processed per the RTI Act, 2005 provisions. For FY 2023-24, GAIL, as a public authority, has a disposal rate of 100% for RTI applications and First-stage RTI appeals. A total of 907 RTI applications and 94 RTI first-stage Appeals were disposed of per the RTI Act 2005 provisions. A total of 24 Hearings regarding second-stage RTI appeals were attended at the Central Information Commission (CIC). CIC disposed of all the second-stage RTI appeals favouring the Public Authority during FY 2023-24.

#### RTI Application Status 2023-24



**Whistle Blower Policy:** We encourage employees, suppliers, contract workers concerned about suspected misbehaviour to speak up without fear of retaliation. This policy strives to offer a secure environment for employees to express their concerns without fear of being harassed or mistreated.

**Fraud Prevention Policy:** This policy is implemented to detect, prevent, and report frauds or suspected frauds/fraudulent activities at GAIL. It applies to frauds or suspected frauds in connection with the business transaction(s) with GAIL, committed by the employee(s), employee(s) working as an advisor(s), the person engaged on an ad hoc/temporary/contract basis, vendor(s), supplier(s), the contractor(s), the customer(s), the lender(s), consultant(s), the service provider(s), any outside agency (ies) or their representative(s), employees of such agencies and any other parties.

**Related Party Transaction:** In line with the requirement of Regulation 23 of SEBI LODR, 2015 and The Companies Act, 2013, the Audit Committee of GAIL quarterly reviews the details of related party transactions. As required, approval of the Audit Committee/Board/shareholders is taken for the related party transactions.

**Anti-Corruption Policy:** GAIL firmly upholds the guidelines and circulars of the Central Vigilance Commission (CVC) for dealing with issues related to ethics, bribery and corruption at the organisational level. The policy applies to GAIL and its subsidiaries and joint ventures with jurisdiction. GAIL organizes an annual Vigilance Awareness Week to sensitize stakeholders against corruption.

#### Transparency in Business

Effective stakeholder involvement is essential to achieving our strategic goals because it allows us to comprehend their expectations, resolve their problems, and prioritize our key areas. Our stakeholder engagement process aligns with global best practices, giving our businesses the tools they need to engage and communicate with their stakeholders consistently. We regularly interact with our stakeholders and peers to develop consensus. To adapt and improve our projects through conversations and forums, we publicly state explicit opinions, express our concerns and keep ourselves updated on industry best practices. The Board of Directors routinely



reviews inputs received through stakeholder engagement for taking suitable actions in the Policies.

### Tax Strategy

We are a Public Sector enterprise with the Government of India (GoI) holding 51.52% of our paid-up equity share capital. The GoI governs the Tax Policy. We ensure compliance with all legal requirements, including Income tax, GST, Excise duty, Customs duty, Cess and other statutory obligations with the relevant tax authorities. We strictly adhere to any changes in tax policies and rates as notified by the GoI from time to time.

### Anti-Competitive Behavior

(**GRI 2-27 a, b, c, d, GRI 3-3, GRI 206-1 a, b**)

We collaborate with our stakeholders to ensure transparency in our business operations. We take proactive measures to prevent anti-competitive behaviour, thereby enhancing the integrity of our company. This involves aligning our Systems and Procedures with National and International standards across our Company. Additionally, we have submitted status reports detailing any involvement in antitrust violations, monopoly law violations, unfair trade practices, and anti-competitive activities. Over the past five years, we have not faced any penalties or settlements for such violations.

The following cases involving GAIL's monopolization, anti-competitive behaviour and unfair trade practices have been resolved or are still pending as of FY 2023–2024:

- i. CA 2473-2476/2016- GSPCL filed a case against GAIL before PNGRB, claiming Restrictive Trade Practice (RTP) for not allowing to change connectivity from GAIL-PLL to GSPL-PLL connectivity. PNGRB held against GAIL. GAIL challenged the same before APTEL, which was decided in favour of GAIL. GSPCL appealed against that order before the Hon'ble Supreme Court, which is pending.

Current Status- The Hon'ble Supreme Court, as an interim measure, has directed GSPCL to

pay @INR12/ MMBtU to GAIL till the disposal of the appeal. Notice has been issued, and pleadings are to be completed. The matter is pending.

- ii. CA 11304/2016- GSPC Gas filed a case against GAIL claiming RTP before PNGRB, and the case was held in favour of GAIL. GSPC Gas filed an appeal against the order before APTEL, and the PNGRB order has been reversed. Now, GAIL has pressed an appeal before the Hon'ble Supreme Court, which is pending.
- iii. CA 4989/2019- GSPCL filed a complaint against GAIL before PNGRB alleging restrictive practice while booking pipeline capacity on Reasonable Endeavour (RE) Basis. PNGRB, while disposing of the complaint filed by GSPCL for booking of capacity on RE Basis, held that the practice adopted by GAIL while booking standard typical carrier capacity is discriminatory and amounts to restrictive trade practice in as much as it offers bundled services to its customers without requiring them to execute standard GTA on Ship or Pay basis and puts such restriction on other gas suppliers. PNGRB directed GAIL to cease RTP and imposed a civil penalty of INR 1 lac on GAIL. GAIL challenged the said order before APTEL. APTEL, vide order dated 28.11.2014, dismissed the appeal of GAIL. GAIL then preferred an appeal before the Hon'ble Supreme Court. The Hon'ble Supreme Court, vide order dated 31.01.2016, set aside the order of PNGRB and remanded it back to PNGRB for fresh determination, considering the affiliate code of conduct. However, the PNGRB once again held RTP against GAIL. GAIL challenged the order before APTEL, vide the order dated 28.02.2019; the matter was referred back to PNGRB for redetermination as per the PNGRB Act. However, GSPCL filed an appeal in the Hon'ble Supreme Court against the APTEL order, wherein notice was issued, and the status quo was to be maintained. The matter is pending.

- iv. GIPCL- GIPCL had filed a complaint against GAIL before CCI, alleging abuse of its dominant position in the market. However, CCI declined the complaint. GIPCL appealed against that order before COMPAT, which directed an investigation by DGI against GAIL for such abuse. GAIL has filed an appeal against the order before the Hon'ble Supreme Court wherein the direction for investigation has been stayed and is pending before the Hon'ble Supreme Court. Current status -The next date for final hearing will be fixed.
- v. Appeal No 131, 132, & 133 of 2016, Sravanti Energy Pvt. Ltd, Beta Infratech Pvt. Ltd, Gamma Infraprop Pvt Ltd., had filed a complaint before PNGRB alleging RTP against GAIL, which was decided against GAIL by PNGRB vide order dated 11.04.2016. GAIL challenged the PNGRB order before APTEL. APTEL, vide its judgement dated 27.10.2021, reversed the finding of PNGRB and dismissed the appeal. SLP has been filed against the APTEL Judgment in the Hon'ble Supreme Court of India by Sravanti Energy Pvt—Ltd, & Gamma Infraprop Pvt Ltd., which is pending.

### Dispute Resolution Mechanism

- A. Cases brought for Conciliation during FY 2023-2024:**
  - i. KPIL v. GAIL- There are four different conciliations related to (i) KG Basin, (ii) KKBMPL- IIA, (iii) KKBMPL- IIB, and (iv) KKBMPL- IIIA. KPIL had invoked conciliation. The matter is pending.
  - ii. Vasu Chemicals v. GAIL – The matter was referred to the Samadhan committee but could not be resolved amicably. Vasu Chemicals initiated conciliation. The matter is pending.
- B. Following conciliation cases settled/closed in FY 2023-24:**
  - i. Thermosystems v. GAIL: Settled.
  - ii. Filatex v GAIL: Settled.
  - iii. Rathi v. GAIL: Case closed due to lapse of time.

- C. There are no significant fines levied in FY 2023-24.
- D. There are no non-monetary sanctions in FY 2023-24.

### 6.1.7 Stakeholder Grievance Redressal

(GRI 2-16, 2-25)

GAIL has established comprehensive systems and processes to facilitate structured interactions with its stakeholders, allowing them to express their perspectives and opinions systematically. A well-defined grievance redressal mechanism is in place to address grievances from all stakeholder groups, prioritizing effective and timely resolution. GAIL has established a dedicated grievance cell at various offices to ensure that all complaints are received and investigated thoroughly and impartially. Additionally, we address and resolve complaints received through CPGRAMS portal.

### Investor Engagement and Grievance Management

- Quarterly/ Annual Financial Results:** The quarterly unaudited financial and audited yearly financial results of the Company are announced within the stipulated period. The results are published in leading newspapers like the Economic Times, Business Standard, etc. Further, these are also hosted on the company website at <https://www.gailonline.com/IZFinancialResult.html>.
- NEAPS (NSE Electronic Application Processing System), NSE Digital Exchange Portal and BSE Corporate Compliance & Listing Centre:** NSE and BSE have developed web-based applications for corporates. Periodical compliances like financial results, shareholding patterns, corporate governance reports, etc., are filed electronically on NEAPS, NSE Digital Exchange Portal and BSE Listing Centre.



- **Website:** The company's website, [www.gailonline.com](http://www.gailonline.com), contains a dedicated section, 'Investor Relations,' which has updated relevant information for shareholders.
- **Annual Report:** Annual Report containing inter-alia Standalone Audited Financial Statements, Audited Consolidated Financial Statements, Auditors' Report, Directors' Report, Management Discussion and Analysis, Corporate Governance Report is circulated to our members. Copies of the Annual Report are also laid in Parliament. The same is also uploaded on the website the Company, which can be accessed at the following link- <https://gailonline.com/IZAnnualReports.html>
- The Chairman's Speech/Communiqué made during the AGM is hosted on the Company's website for shareholders' information.
- **News Release, Presentations, etc.:** The Company regularly organizes Investor meetings to communicate with institutional investors, analysts, etc. Official news/press releases, presentations, and transcripts of conference calls made to investors/ analysts are hosted on the company's website from time to time and are shared with stock exchanges.
- **SCORES (SEBI Complaints Redressal System)**
  - The Company provides resolution of Complaints received from shareholders through SEBI's web-based complaints redressal system, i.e. SCORES.
- **Letters to Investors:** Regular reminders are sent to the Shareholders for claiming unpaid/unclaimed dividends/Shares.
- **Green initiative:** Sending important communication to shareholders through email - In terms of the Green initiative launched by the Ministry of Corporate Affairs to allow the service of documents to the members through electronic mode, the Company, for the last few years, has been sending various communications/documents like Annual Report, Notice of AGM, NACH intimation etc. through e-mail to those shareholders who have registered their email id with the DP/ R&TA.
- Designated email ID: The Company has a designated email ID for investor servicing: [shareholders@gail.co.in](mailto:shareholders@gail.co.in)
- The annual report is sent to all eligible shareholders on their registered email as received from CDSL and NSDL on the record date.
- To comply with the provisions of the Income Tax Act, 1961 and to give a fair chance to all eligible shareholders w.r.t. exemption from deduction of TDS on dividend, communication is sent to shareholders to allow them to submit necessary documents (Form 15 G, Form 15 H, Form 10 F, declaration- Resident shareholders, NRI, FPI, FII, AIF, etc.).

#### 6.1.8 Grievance Redressal Mechanism

##### (GRI 2-16,2-25)

At GAIL, our top priorities are addressing stakeholder concerns and providing prompt responses. Through our grievance redressal procedure, stakeholders can submit complaints or grievances, allowing us to address any issues promptly and enhance our services. To streamline this process, we have introduced an online platform called "SAMADHAN" where stakeholders (Vendors, Suppliers, Contractors or Service Providers) can submit their grievances conveniently. Additionally, our web portal, <https://gailonline.com/onlineComplaints.html>, facilitates the reporting and managing of system violations, including corruption, forgery, cheating, misappropriation, favours, negligence, procedural anomalies, and misuse of delegated authority. Stakeholders can also email their concerns to the unit head at any of our locations to 'OIC Sampark' at respective sites.

GAIL also redresses and resolves the Community-related complaints received on the CPGRAMS portal as per the grievance procedure. CPGRAMS is a Government of India Portal aimed at providing the citizens with a platform for redressal of their

grievances. Via the CPGRAMS, 214 public grievances were received during FY 2023-24.

Grievances/complaints received through CPGRAMS in various heads in FY 2023-24 :

	Stakeholder Type : Internal (I) /External (E)								
	Environment		Labour Practice		Human Rights		Society		
	I	E	I	E	I	E	I	E	Total
Grievances received in FY 2023-24	NIL	01	NIL	09	07	03	Nil	194	214

### 6.1.9 Vigilance at GAIL

GAIL, its Subsidiaries, and Joint Ventures (JVs), which are under the purview of CVO, GAIL, follow guidelines and circulars of the Central Vigilance Commission (CVC) in dealing with bribery or corruption. As per the guidelines of the CVC, GAIL has adopted the provision of an Integrity Pact (IP) in procurement in its Tenders. The IP provides an independent platform for monitoring compliance with established Procedures, Policies, and Guidelines of the Govt. of India and CVC in Tendering and Resolution of complaints, if any. GAIL has a panel of three Independent External Monitors (IEMs) to monitor IP implementation in its Tenders.

### Whistle Blower Policy

GAIL has adopted the whistle-blower policy. The policy applies to GAIL Employees and Directors. The Policy provides a channel for employees to report genuine concerns about unethical behaviour or fraud and safeguards a Whistle-blower from any victimization.

Link for Whistle Blower Policy-

[https://gailonline.com/pdf/others/Circular\\_Whistle Blower Policy\\_12.02.2019-english.pdf](https://gailonline.com/pdf/others/Circular_Whistle Blower Policy_12.02.2019-english.pdf)

### Fraud Prevention Policy

GAIL has framed a Fraud Prevention Policy that applies for the detection, prevention, and reporting of fraud or suspected fraud. The Policy applies to fraud or suspected fraud in connection with Business Transaction(s) with GAIL committed by Director(s), Employee(s), Trainees, Apprentices, Ex-employee(s) working as Advisor(s), Person(s) engaged on ad-hoc/temporary/Contract basis, Vendor(s), Supplier(s),

Contractor(s), Customer(s), Lender(s), Consultant(s), Service provider(s), any outside agency(ies) or their representative(s), employees of such agencies and any other parties.

Link of GAIL Fraud Prevention Policy-<https://www.gailonline.com/pdf/others/FraudPreventionPolicyRev01withSOPonFPPRev00.pdf>

### Vigilance Activities at GAIL

GAIL's Vigilance Department reviews the internal processes, carries out regular surprise checks and periodic inspections, undertakes detailed intensive inspections and examines CAG / Internal Audit paras for corruption, fraud or conflict of interest, if any. The observed lapses are analysed, and systemic improvements are suggested to ensure non-occurrence. Efforts are made to bring continuous system improvements to provide greater transparency and automate processes to reduce manual intervention. There has been a renewed focus on sensitizing employees to various aspects of contract management, for which customized and specialized training is regularly organized at different locations of GAIL.

Periodic vendor meetings, customer interactive sessions, vigilance awareness workshops, and engineer-in-charge coaching sessions are organized to promote vigilance awareness and address complaints effectively. Numerous awareness workshops are conducted at GAIL locations to educate stakeholders, including employees, clients, contractors, and suppliers. During FY 2023-24, Thirty-Nine (39) surprise/regular inspections were carried out on various contracts, processes, and files related to GAIL facilities. Additionally, the Vigilance Department conducted 17 intensive inspections of contracts and projects.

#### Highlights of Vigilance Awareness Week (VAW):

The corporate Vigilance Department of GAIL is ISO-9001:2015 certified for having adopted a Quality Management System in compliance with the requirements of ISO.

During the year, various steps focused on preventing corruption and bringing systemic improvement to ensure greater transparency, fairness, efficiency and accountability were undertaken. Specialized trainings were organised at GAIL locations to sensitize the employees to various aspects of contract management. Vigilance Awareness Week (VAW) 2023 was observed at Corporate Office and site Offices from 30<sup>th</sup> October to 5<sup>th</sup> November 2023, under the guidance of Central Vigilance Commission (CVC) on the theme “Say no to corruption; commit to the Nation”; “भ्रष्टाचार का विरोध करें या राष्ट्र के प्रति समर्पित रहें”.



Launch of Jagrook Magazine during Vigilance Awareness Week 2023



Vigilance Awareness Week 2023 observed at GAIL Corporate Office

**A Summary of vigilance cases handled during the year 2023-24 is as follows:**

Complaint/ detailed investigations	Opening balance (as of 01.04.2023)	Complaints received during the year	Total	Complaints disposed during the year	Closing balance as of 31.03.2024 (under investigation)
Complaints	20	103	123	108	15
Detailed investigation	3	14	17	14	3

During the period, based on the investigations/surprise check into the cases and review of systems and procedures, the following significant systemic improvements have been suggested/implemented:

1. E-Vigilance Module - Online Modules for Preventive Vigilance functions – (a) Scrutiny of Annual Property Return (APR) and, (b) Surprise Inspection Module and (c) Periodic Inspection Module (d) Scrutiny of Audit Reports (e) Training Program & Workshop have been developed and implemented.
2. Review of C&P procedure for inclusion of item-wise Bid Evaluation Criteria for item-wise procurement/bid evaluation methodology.
3. Systemic improvement by including separate SOR line items for laying of the pipeline works through open cut and HDD in future tenders.
4. Detailed policy for store management, documentation retention, and standardisation of documents for services and procurements in JVs.
5. Implementation of SOPs for Operation & Maintenance, Policy for rotation of officials posted at Sensitive Positions, Review of Gas Sales Agreement as per prevailing industry practice, policy for acting against defaulting DPNG customers, auditing of all DPNG customers at regular intervals in CGDs / JVs.
6. Monitoring of critical Spares and inventory through auto alerts for Annual Rate Contracts for Procurement of essential inventories.
7. Introducing a Policy on standard BEC for engagement of services like acupuncture, Sujok therapy, etc., and defining Delegation of Powers for approving such services.
8. Installation of Automatic Meter Reading (AMR) facility at commercial/industrial customers for JVs / Subsidiary.
9. Introduction of a clause in the C&P procedure and DoP for exceptional cancellation of tenders after the opening of price bids.
10. Implementation of Integrated Quality Management System (IQMS), Standard Operating Procedures (SoPs) and Code of Practice (COP) for Key Operational activities, Automation of Data Collection and Analysis of Billing, Standardization of Meters/EVCs and other Equipment for CGDs & JVs / Subsidiary.
11. Review the threshold value for limited tendering in JVs and modify the clause for insufficient competition per the parent organization/ DoE manual.
12. Corporate HR guidelines will be subsumed in the C&P procedure for Civil/AMC tenders involving manpower supply / itemized services.
13. Implement a system reminder to alert concerned EIC(s) at least 15 days before the expiry of the labour license and labour insurance.

## 6.2 Risk Management at GAIL

(GRI 3-3, GRI 403-2 a)

Risk management is a continuous process of risk identification, analysis and management. We map and manage financial and non-financial risks through Enterprise Risk Management (ERM) while adhering to all regulations and keeping up with our industry counterparts. Training on ERM is provided to all the stakeholders.



The components of Risk Management are defined by the Company's business model & strategies, organizational structure, culture, risk category and dedicated resources.

The Risk assessment of several variables (such as fuel prices, energy supply security, and climate change) that may impact our company's growth is researched and analyzed through Enterprise Risk Management. The risk management process comprises resource allocation, risk communication and business continuity planning. Risk management criteria are a part of the employees' performance appraisal review.

When an environmental or human health threat is uncertain, and the stakes are high, the precautionary approach enables our decision-makers to act across all GAIL's operating units.

#### Risk Management Framework:

Risk management at GAIL aims to protect and add value to the organization and its stakeholders by supporting GAIL's objectives through improved

decision-making, planning, and prioritization based on a comprehensive and structured understanding of business activities, volatility, and project opportunities/threats.

Our risk management framework provides a consistent and controlled environment for future activities. It ensures that risk management function operates an integral practice across GAIL, enabling management to make informed decisions that reduce uncertainty.

The risk management process adopted by GAIL has been tailored to the business processes of the organization. Broadly categorizing, the process consists of the following stages/steps:

- Scope, Context, Criteria
- Risk Assessment (Identification, Analysis and Evaluation)
- Risk Treatment (Mitigation Plan)
- Monitoring and Review
- Communication and Consultation
- Recording and Reporting

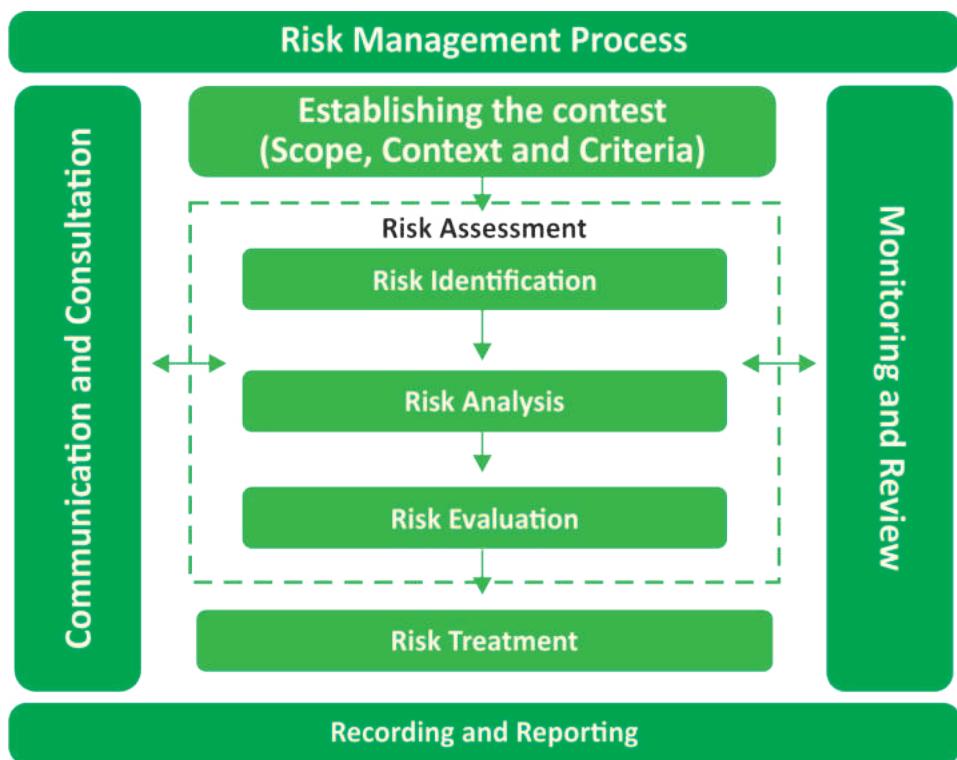


Figure 1 - Risk Management Process

### 6.2.1 Overarching Management Approach

(GRI 3-3, GRI 201-2, GRI 2-11 a, b)

Significant corporate risks for GAIL encompass market, logistics, strategic, joint venture/subsidiaries, and financial aspects. GAIL's Risk Management Department implements the Risk Management Policy & Framework on both the corporate and business levels to enhance our approach to risk management and satisfy the demands of a changing business environment. Our Company's risks are reviewed, reported and mitigated using the Risk Management Policy, which also helps promote sustainable Corporate growth.

The Enterprise Risk Management (ERM) framework provides the Board with an unbiased view of the entire management system, facilitating comprehensive risk management at GAIL and offering an integrated approach for periodic reviews of organizational risks. Furthermore, it provides a greater comprehension of the opportunities for enhancing corporate processes related to operations. All Business verticals, including the zonal marketing offices, have adopted the ERM. The highest governing body responsible for judging the effectiveness of GAIL's risk management procedures is the Board of Directors.



**Figure: Risk Assessment Process**

Establishing and implementing a practical Risk Management framework throughout the organization are overseen by the Board through its Audit Committee, Risk Management Committee (RMC), and Corporate Level Risk Steering Committee (CLRSC).

At the unit level, the Unit-Level Risk Steering Committee (ULRSC), led by unit OICs/Functional Heads, conducts quarterly mapping and

monitoring of unit-level risks, including social and environmental concerns. Additionally, these units are responsible for designing and overseeing mitigation measures. The CLRSC chaired by Director (BD) and comprises Executive Directors and other committee members, evaluates various existing and potential risks across short, medium, and long-term horizons. The CLRSC convenes quarterly. The Board Level Committee of RMC, chaired by an independent director, meets bi-annually. The Audit Committee and Board of Directors reviews Risk Management on an annual basis.

### Risk Management and Strategic Initiatives

(GRI 201-2 a i, ii, iii,)

GAIL's effective risk management strategies enable the achievement of organizational objectives while ensuring compliance with legal, regulatory, and societal standards. These strategies enhance our ability to respond and adapt to a dynamic environment.

The risk management assessment process comprises three key steps: identification, analysis, and evaluation of potential risks impacting business operations. This process facilitates the monitoring and strategic management of our company's operations. Unit risk owners must submit quarterly risk register review reports via the online Risk Management System by the 10<sup>th</sup> day after the quarter's end and an annual risk database review report by the 15<sup>th</sup> of June following the financial year-end.

The Company evaluates various risks, encompassing commercial, financial, and non-financial factors such as energy supply security, fuel prices and climate change. Risks are assigned a "Risk Rating" based on their potential impact and likelihood of occurrence. "Risk Velocity" is determined by the time between an incident's occurrence and its effect on GAIL. Our focus on environmental impact includes continuous efforts to reduce or neutralize greenhouse gas emissions and achieve zero waste disposal. Various units within GAIL identify and mitigate climate change risks, while HSE groups coordinate environmental and safety hazards. The Social and CSR-related



risks are managed under the supervision of the CSR group, ensuring identification, evaluation, and proper management through effective mitigation plans.

According to the Risk Management strategy, the Corporate Level Risk Steering Committee (CLRSC) reviews the status of all Top Corporate Level Residual Risks, including economic, environmental, and social risks on a quarterly basis. This status is discussed in the Risk Management Committee before being presented to the Audit Committee & Board annually for approval.

## 6.2.2 Key Risks and Mitigation Measures

### (GRI 201-2 iii, iv, v)

GAIL Corporate Level Risk Steering Committee has identified risks and mitigation strategies to improve operational performance. Accordingly, we are taking the necessary steps to resolve/consider the identified risks. The list of Top Corporate Level risks is as follows:

- i. Risk of delay in Project Execution due to delay in obtaining Right of Use (RoU)/Land.
- ii. Underutilization of gas transmission pipelines resulting in loss of revenue.
- iii. GAIL's Restructuring Risk. [Challenges due to Monetization of GAIL's Pipeline Assets and Creation of Transport System Operator (TSO)].
- iv. Inadequate controls to protect the systems against malicious attacks may result in data loss and operations disruption.
- v. Risk of reduction in the profit margin of Petrochemical due to lower industry demand, lower price and high input cost.
- vi. In terms of adverse movement of crude oil price/LNG prices, the market risk of LNG sold in domestic market.
- vii. Risk of significant leakage:
  - a) Explosion/high fatality in case of leakage from LPG/Natural Gas pipeline under high population density region.
  - b) Explosion/high fatality in case of

Petrochemical & GPU/C2- C3 Recovery Plants leakage.

- c) Explosion/high fatality in case of leakage in GAIL CGD NG pipelines

viii. Risk of Third-Party Damage & Encroachment.

ix. Risk of unfavourable Regulatory changes.

x. Shutdown of ONGC facilities and reduction in APM/Non-APM Gas allocation for GAIL's internal consumption.

## Threats, Risks, Challenges and Mitigation

### a. Petroleum & Natural Gas Regulatory Board (PNGRB) Regulatory Framework

During the FY 2023-24, PNGRB has notified various Amendments & Regulations regarding Petroleum and Petroleum Products Pipelines. PNGRB has also issued multiple orders and decisions in relevant matters. The details of the regulations, amendments, authorizations, orders, and decisions are available on the official website of PNGRB ([www.pngrb.gov.in](http://www.pngrb.gov.in)) and have varying implications for GAIL's business. These regulations, amendments, authorizations, orders, and decisions of PNGRB are appealable before the PNGRB Bench, Appellate Tribunal, and Courts. As on date, few of the above are under various stages of appeals. The timing and content of any final changes in regulations made by PNGRB are not in GAIL's control. However, regular interactions with PNGRB on sectoral issues, participation in public consultation exercises conducted by the Regulatory Board, and making logical submissions to the Regulator help GAIL anticipate or minimize risks associated with any sudden or unforeseen regulatory changes. During the year, PNGRB has notified various Amendments & Regulations regarding Natural Gas Pipelines and CGD networks. In respect of Natural Gas Pipelines, based on regulatory provisions, PNGRB, by integrating the nine (09) interconnected Natural Gas pipelines of GAIL, has determined an integrated tariff, duly apportioned into zonal tariffs, with effect from 01<sup>st</sup> April 2023.

During this period, PNGRB has also notified the Unified Tariff Regulations, which will be effective from 01<sup>st</sup> April 2023. Under this, the Unified tariff is calculated as the weighted average zonal tariff (as approved by PNGRB) for all the constituent natural gas pipelines comprising the National Gas Grid System (NGGS). After that, the same is apportioned into Zonal Unified tariff over three zones, with the first zone covering a distance from the gas source to 300 km, the second zone being more than 300 km and up to 1,200 km, and the third zone being more than 1,200 km. Under this, all customers across the country connected to pipelines comprising the NGGS shall pay a single zonal unified tariff as applicable to them based on their location. However, the constituent pipelines forming part of NGGS shall be entitled to approve zonal tariffs based on actual volumes transported. Hence, a Unified Tariff is revenue-neutral for Pipeline entities.

#### **b. Natural Gas Prices**

GAIL currently markets Natural Gas purchased from domestic and international sources. GAIL earns a marketing margin on the sale of domestic Natural Gas. Further, the Government of India, in its notification dated 24<sup>th</sup> December 2015, applicable from 18<sup>th</sup> November 2015, has put a ceiling on the marketing margin for domestic gas supply at INR 200 per 1000 SCM. Regarding purchase of imported LNG mainly from PLL in Dahej, Gujarat, the purchase and selling prices of Re-gasified Liquefied Natural Gas (RLNG) are based on international crude price indices.

Further, GAIL also directly imports LNG from various suppliers worldwide and gets it Regasified at PLL's regasification terminals at Dahej, Gujarat and Kochi, Kerala; KLL's regasification terminal at Dabhol, Maharashtra; Shell Energy India Pvt Ltd.'s terminal at Hazira, Gujarat and Dhamra LNG Terminal at Odisha. Such LNG imports are either under a long-term agreement over three years, a medium-term agreement up to three years, or under spot cargo purchases. Under long-term & medium-term import, the selling price is primarily based

on the purchase price. However, for spot cargo imports, the selling price is dependent upon the demand and supply scenario and customer affordability. Import of LNG spot cargo is based on a thorough assessment of the affordability & requirements of the end consumers and the availability of LNG in the international markets.

GAIL is also undertaking hedging transactions to mitigate the price and index risk.

#### **c. LNG Portfolio**

GAIL has been exploring opportunities to enter into long-term LNG contracts with the primary objective of meeting the demand of a growing Indian economy and ensuring the nation's energy security.

As a part of system enhancement, GAIL has migrated from e-mail based system to web based portal for undertaking LNG/Ship Chartering/Ship Services enquiries.

During FY 2023-24, GAIL signed two Numbers of 10-year LNG supply agreements from 2026: 1 MMTPA from VITOL, Singapore and 0.5 MMTPA from ADNOC Gas, UAE. Further, GAIL will offtake 4.5 MMTPA from the renewed LNG SPA signed between Qatar Energy LNG and PLL. Supplies under this LNG SPA will commence in 2028 and last for 20 years. Furthermore, GAIL has successfully onboarded and chartered the long-term LNG vessel GAIL Urja and entered a 14-year Time Charter Party Agreement with M/s Cool Company Ltd, Norway, for a new build LNG carrier. The time charter for the LNG carrier will commence in early 2025, and GAIL can extend the charter by two additional years beyond the firm's 14-year period. GAIL has five LNG carriers in its fleet, and this will help the Company meet the requirement of transporting US-contracted LNG volumes to India.

There is a market risk of LNG in terms of adverse movement of crude Oil price/LNG prices, shortage of LNG cargos, expected increase in domestic gas volumes, and risk of LNG contract default by upstream supplier(s). The risk is mitigated through hedging and back-to-back contracts regularly. GAIL has

been taking mitigation measures like imposing downstream supply cuts within the contractual frameworks, sourcing replenishment volumes wherever necessary from spot markets, etc. The Company is also scouting the market to contract long-term LNG volumes with prominent producers/traders.



"GAIL Urja" LNG Vessel

GAIL successfully concluded World's first Ship-To-Ship (STS) with backhaul and India's first Ship-To-Ship transfer of LNG Cargo. The operation involved Ship to Ship (STS) transfer in Gibraltar between two vessel chartered by GAIL. One of the vessel was on its loaded passage from USA and carried out the STS operation and transferred LNG cargo into another Q flex vessel chartered by GAIL from Qatar Gas on its return voyage from Europe. This innovative optimization has resulted in testing of Proof of Concept and has successfully demonstrated effective way(s) to reduce carbon emissions in shipping along with saving in Shipping length and reducing Shipping cost in specific situations. GAIL also received "Innovation Award" for the reduction in LNG Shipping cost & emissions through Ship to-Ship (STS) transfer of LNG with backhauling.

#### d. Power including Renewables

India is increasing its Renewable Energy capacity at fast pace, to reduce carbon emissions. The grid's stability has become a significant concern with an increase in the Renewable Energy portfolio. Natural Gas-based power plants can balance grid stability as gas plants can respond more quickly to load changes than coal-based plants, reducing emissions. However, Natural Gas-

based power plants have a few structural issues that require resolution through Policy intervention. GAIL has been working on a case-to-case basis and is in close coordination with MoP&NG and the Ministry of Power to increase/revive the off-take of natural gas by the power sector.

#### e. Polymer, Liquified Petroleum Gas (LPG) and other Liquid Hydrocarbons (LHC)

GAIL also markets petrochemicals, LPG, and other LHC products. The prices of these products are influenced and determined by global and domestic factors affecting demand and supply. GAIL has developed a range of market-acceptable products to ensure steady consumption of petrochemical products. It has optimized its portfolio by having production facilities at Pata (UP) and through its subsidiary BCPL's plant at Dibrugarh (Assam). LPG marketing is decided in close coordination with the PSU Oil Marketing Companies.

There is a risk of reduction in the margin of Petrochemicals due to lower selling price & high input cost and risk of unviable operations due to higher cost of feed-stock.

Continuous measures are taken towards managing margins across GAIL's polymer business by:

- Sourcing feedstock at lower prices
- Polymer grade optimization.
- Coordination with Zonal Offices to ensure enhanced polymer sales.
- Periodic monitoring of international price benchmarks, viz. rupee-dollar exchange rate, import landed price, etc. and taking suitable action.
- Export of Polymers

#### **f. Foreign Exchange Fluctuation Risk**

GAIL primarily imports LNG, capital goods and stores & spares for various new projects and Operation & Maintenance installations. GAIL has an approved Foreign Currency & Interest Rate Risk Management Policy to manage foreign exchange exposure, which was reviewed during the FY. GAIL's foreign currency's short-term and long-term exposure is being monitored as per the approved Policy.

#### **g. Commodity Price Risk**

GAIL has a Commodity Price Risk Management Policy to manage the price risk of Natural Gas. The price risk of Natural Gas used for internal consumption and for selling to various downstream customers is being monitored as per the approved policy. As and when the opportunity arises in the market, GAIL has undertaken various derivative transactions to hedge the price risk arising out of fluctuation in the prices of imported Natural Gas.

#### **h. Natural or Man-made Calamity Risk**

Various risks are associated with Natural Gas transportation and distribution, like blowout of Natural Gas pipelines, earthquakes, tsunamis, cyclones, floods, terrorist activities, and other extreme climate events. These risks are being mitigated right from the designing stage of these projects. However, such natural or man-made risks are emergent and cannot be eliminated. If such an event occurs, it may incur significant liabilities for the Company. To mitigate the impact of such

incidents, the Company has an Emergency Response and Disaster Management Plan (ERDMP) in place.

GAIL has procured the Standard Fire and Special Perils Policy (SFSP) and add-on coverage for earthquake and terrorism for the fiscal year 2023-24. GAIL has secured a substantial risk insurance policy for FY 2024-25 for the first time. This Policy has been taken from M/s New India Assurance Co. Ltd. (acting as the primary insurer) for a total insured amount of INR 1.57 lakh Crores. The extensive insurance coverage surpasses the SFSP, offering additional protections such as machinery breakdown and pipeline risks, including line pack on a first-loss basis.

#### **i. Risk Management Framework (RMF)**

Risk management is an ongoing process, and the Company has established a comprehensive Enterprise Risk Management (ERM) framework with the vision to integrate risk management with its overall strategic and operational practices.

The components of Risk Management are defined by the Company's business model & strategies, organizational structure, culture, risk category and dedicated resources. Risk management is a continuous and evolving process that integrates with the culture and strategy of the company.

The Company has formed a Risk Management Committee (RMC) of the Board, and its role is as specified in SEBI LODR Regulations, 2015. The primary objective is to ensure sustainable and stable business growth supported by a structured approach to Risk Management. The ERM framework includes designing, implementing, monitoring, reviewing, and constantly improving the organization's risk management procedures. The ERM framework at GAIL is designed after incorporating the requirements of ISO 31000:2018 (Risk Management – Principles and Guidelines) and recommendations of the Committee of Sponsoring Organizations (COSO) of the Treadway Commission.

07



## Business Growth

 FY 2023-24, GAIL has achieved a Gross Turnover of INR 1,30,284 Crores

 Credit rating of 'AAA' at the Domestic Level and the International Level 'Baa3' by Moody's

 GAIL is committed to increasing the share of Natural Gas in the country's energy mix from 6.7% to 15% by 2030

## Business Growth

### 7.1 Business Growth

(GRI 3-3, GRI 2-6, GRI 415-1)

#### Global Oil and Gas Sector

During this financial year, the Oil & Gas sector experienced fluctuations due to multiple factors, such as global demand dynamics, geopolitical conflict and supply disruptions. The Oil and Gas companies had to adapt their operations and strategies to navigate the uncertainty caused by price volatility, which influenced revenue streams and profitability. Consumers were also adjusting their energy consumption habits due to the high prices. This led to rationalizing of production levels by the Oil & Gas sector.

According to various long-term estimates on the energy consumption mix, Natural Gas which currently act as a transition fuel will remain the highest-growing fossil fuel in the long-term future as coal and oil are expected to peak in the short to mid-term.

#### India Gas Sector Developments

With increasing awareness of urban pollution and a ban on polluting fuels, industrial and commercial customers are gradually adopting Natural Gas. The government has committed to increasing the share of Natural Gas in the energy mix and has committed to a target of raising gas consumption from 6.7% to 15% by 2030. To achieve this, the government is implementing policies and initiatives under the "One Nation One Grid" framework, which aims to provide the necessary infrastructure for gas transportation and distribution across the country. Several key initiatives and policies have been implemented to enhance the country's gas infrastructure and utilization and make India a Gas Based Economy.

The aim is to increase the share of Natural Gas 15% of primary energy basket, which is almost a 2.7 times increase from the current level. Significant efforts would be needed from all the

stakeholders, as well as massive investment in the entire gas value chain, to achieve this target. Further, the government needs to introduce policy reforms to boost this sector.

India's domestic gas production was 98 MMSCMD and the shortfall is met from import of LNG (~90 MMSCMD). Further, the domestic gas production is not increasing at a rate which is commensurate with the growth in demand. As a result, India, is now the world's fourth-largest importer of LNG, with LNG imports growing at a CAGR of 6.3% from FY 2014-15 to FY 2023-24. Further, direct use of LNG in the transport sector is anticipated, especially for long-haul vehicles. GAIL has also set up a dedicated Retail LNG team and approved an INR 650 Crores investment plan, aiming to capture major market share in the next 5-6 years.

Hence the growth in LNG import is expected to continue due to limited increase in domestic natural gas production and the government's aim to increase natural gas's share in the energy mix.

### 7.2 Economic Performance

In FY 2023-24, GAIL achieved a turnover of INR 1,30,284 Crores. Our focus on operational excellence and strategic investments in key sectors drove robust financial performance, enhancing shareholder value. The company's Profit Before Tax (PBT) increased this year, reaching INR 11,555 Crores compared to INR 6,584 Crores in the previous year. The Profit After Tax (PAT) showed an increase of 66% from INR 5,302 Crores in FY 2022- 23 to INR 8,836 Crores in FY 2023-24. Market capitalization (BSE) of the Company increased from INR 69,203 Crores on 31<sup>st</sup> March 2023 to INR 1,19,108 Crores on 31<sup>st</sup> March 2024 due to an increase in share price from INR 105.25 per Share to INR 181 per Share. During the FY 2023-24, there was no buyback of shares.

The main segments of GAIL's business, which contribute over 90% of the company's total turnover, can be summarized as follows:



GAIL (India) Limited

## Sustainability Report 2023-24

New India New Energy

No	Product/ Service	NIC Code	% of total Turnover contributed
1	Solid, liquid and gaseous fuels and related products- Crude petroleum and natural gas (NG Trading)	99611912	82
2	Transport via pipeline of Natural Gas (NG Transmission) Transport services via pipeline of other goods not elsewhere classified (n.e.c) (LPG Transmission)	99651312	08
3	Plastics in Primary form (Petchem)	99611715	06
4	Solid, liquid and gaseous fuels and related products not elsewhere classified (n.e.c) – Liquid Hydrocarbons (LHC)	99611919	03
5.	Electricity (Wind and Solar Power) & others	99611970	01

**Table: Physical Performance**

The Physical performance of GAIL for FY 2023-24 is as follows:

Particulars	UoM	2022-23		2023-24	
		Quantity	Revenue from Operations* (INR Crores)	Quantity	Revenue from Operations* (INR Crores)
Natural Gas Marketing	MMSCMD	94.91	1,35,290	98.45	1,14,590
Natural Gas Transmission	MMSCMD	107.28	6,661	120.46	10,292
LPG Transported	TMT	4,335	722	4,396	732
Polymers Sales	TMT	399	4,917	787	7,753
Liquid Hydrocarbon Sales	TMT	929	5,570	998	5,076

\*Including intersegment revenue

**Table: Economic Value Generated\* (INR Crores)**

No	Economic Value Generated	FY 2021-22	FY 2022-23	FY 2023-24
1	Total Revenue (net of ED)	93,772	1,46,974	1,32,804

\*Economic Value Generated and Distributed calculation methodology is different from other reported data

**Table: Economic Value Distributed\* (INR Crores)**

No	Economic Value Distributed	FY 2021-22	FY 2022-23	FY 2023-24
1	Employee Wages and Benefits	1,951.2	2,017.3	2,387.2
2	Operating Costs	78,347.8	1,40,186	1,18,356.8
3	Payments to providers of capital	4,344.7	3,772.3	48,17.6
4	Payments to Government	3,226.3	1,521.3	2,718.1

\*Employee wages and benefits including transfer of funds to Capital Works In Progress + contribution to PF & Other fund (Prior Period) & Welfare + Other income from deputation

### 7.3 Business Initiatives

(GRI 2-6b)

During FY 2023-24, GAIL has undertaken significant initiatives to explore new avenues for expansion and growth. GAIL has taken the following initiatives to promote gas markets in new cities and create new market opportunities:

- Small-scale LNG initiative by strategically setting-up liquefaction skids to cater to off-grid customers. This initiative aligns with the Indian government's push for cleaner fuels and promoting LNG as a transportation fuel.
  - After NCLT approved GAIL's Resolution Plan on 13.03.2023, GAIL successfully acquired JBF Petrochemicals Ltd (JBFPL). JBFPL became a wholly owned subsidiary of GAIL and has been renamed as GAIL Mangalore Petrochemicals Limited (GMPL). The acquisition of JBFPL offers GAIL an opportunity to add a new product, Purified Terephthalic Acid (PTA), to GAIL's existing petrochemical portfolio. GAIL is looking forward to reviving JBFPL's business operations and is committed to turning it around into a thriving manufacturing entity.
  - GAIL is setting up ~500 KTPA PDH-PP at Usar, wherein hydrogen shall be co-produced with Propylene.
  - GAIL is setting up a 60 KTA Polypropylene (PP) plant at Pata and 50 KTA Isopropanol (IPA) unit at Usar.
  - Pipeline projects continue to be a major thrust area for the company in building Natural Gas infrastructure in the country. During FY 2023-24, approximately 2,321 km of Natural Gas pipeline including significant additions to the Jagdishpur-Haldia and Bokaro-Dhamra Natural Gas Pipeline (JHBDPL) network were commissioned; notably, the Bokaro-Angul Mainline and the Dhamra-Angul Mainline, including spur lines to Jamshedpur, Ranchi, Cuttack, and Bhubaneswar. This development will expedite the expansion of the CGD network in these cities. Moreover, 3,880 km of pipeline projects as a part of the National Gas Grid & other small connectivity are under different stages of project execution.
  - In line with the Government of India's National Biofuels Policy (2018), opportunities are being explored to set up 1G ethanol and Compressed Bio Gas plants. The company is also exploring replacing conventional grid electricity with renewable energy at its process plants to reduce emissions.
- Key Digital Management Initiatives at GAIL**
- SAS Data Analytics tool to work faster, stay agile and give the organization a competitive edge
  - Three Business Analytics Modules, i.e., Margin Optimization, Price Forecasting and Production Planning for Advanced Data Analytics
  - E-bidding for LNG Cargo
  - CBG Portal
  - E-investment of GAIL Employees Provident Fund Trust
  - Bank Communication Management Module
  - Bharat Bill Pay System (BBPS) was implemented in the CGD business to enable customers to make payments of PNG bills smoothly through mobile payment application.
  - Digitalization of Travel Bill claims reimbursement through Mobile application & PRMS claim through the Golden retirement portal
  - Crude Oil Sale- Crude Oil Production & Sales Process for E&P Business
  - Auto Clearing- Functionality developed for Auto-posting of TDS & Auto-clearing of NG customers' invoices
  - Implemented LNG Tanker business in SAP
- 7.4 Financial Management Improvement Initiatives in FY 2023-24**
- (GRI 201-4)**
- GAIL implemented various financial management initiatives during FY 2023-24:**
- The company effectively managed its liquidity needs by carefully planning cash flow and utilizing a balanced combination of borrowings and internal accruals.
  - GAIL secured new borrowings at highly competitive rates, ensuring that the overall cost of funds remained manageable whenever required.
  - The government has not provided any financial assistance to the GAIL during FY2023-24.



GAIL (India) Limited

## Sustainability Report 2023-24

New India New Energy

### Financial Management Improvement Initiatives in FY 2023-24

#### (GRI 201-4)

GAIL implemented various financial management initiatives during FY 2023-24:

- The company effectively managed its liquidity needs by carefully planning cash flow and utilizing a balanced combination of borrowings and internal accruals.
- GAIL secured new borrowings at highly competitive rates, ensuring that the overall cost of funds remained manageable whenever required.
- GAIL has not received any financial assistance from Government during FY2023-24.



Implementation of e-BG through Swift platform

### 7.5 Business Outlook

#### (GRI 2-1, 2-6)

GAIL has been reaffirmed with the highest domestic credit rating of 'AAA' and a stable outlook by ICRA, CARE, and India Ratings. This signifies India's highest domestic long-term credit rating, indicating a very low credit risk for the company.

The international rating agency, Moody's International, Singapore, has assigned GAIL a Long-Term Corporate Issuer Rating of 'Baa3' with a stable outlook, equivalent to India's sovereign rating. Additionally, Fitch Ratings has assigned GAIL a long-term issuer rating of 'BBB-' with a stable outlook equivalent to India's sovereign rating."

#### 7.5.1 Business Segment wise Performance

GAIL is dedicated to creating value for its stakeholders by seeking new growth

opportunities and leveraging its capabilities. The company aims to increase natural gas consumption in India and explore new uses for natural gas and LNG. GAIL has initiated several projects in low-carbon sectors, including small-scale LNG, hydrogen transportation, biofuels, and renewables.

The details of each business segment of GAIL are described below:

#### 7.5.2 Natural Gas Marketing

Natural Gas (NG) trading continues to be one of GAIL's core businesses. During FY 2023-24, GAIL clocked a sales figure of 98.45 MMSCMD against 94.91 MMSCMD during 2022-23. Revenue from Natural Gas Marketing in FY 2023-24 was INR 1,14,590 Crores as against INR 1,35,290 Crores in FY 2022-23. The share in the country's Domestic Gas Market is ~48%.

Sector-wise details of Natural gas marketing are as follows:

**Fertilizer Sector:** GAIL supplied around 67% of the gas consumed in the Fertilizer sector in the country during FY 2023-24. During the year, GAIL commenced supplies to various fertilizer plants, including Matix Fertilizers & Chemicals Ltd, Panagarh, Hindustan Urvarak & Rasayan Limited (HURL), Gorakhpur, Sindri and Barauni.

**Power Sector:** GAIL supplied around 43% of the gas consumed by gas-based power plants in the country during FY 2023-24. Over the past few years, the Company has successfully collaborated with various power producers to operationalize their stranded units.

### 7.5.3 Natural Gas Transmission

GAIL has expanded the network of Natural Gas pipelines to 16,243 km spread across the length and breadth of the country. The average gas transmission through GAIL's network during FY 2023-24 was 120.46 MMSCMD vis-à-vis 107.28 MMSCMD in the previous financial year. Revenue from the Natural Gas Transmission segment in FY 2023-24 was INR 10,292 Crores as against INR 6,661 Crores in FY 2022-23.

#### **7.5.4 Liquefied Petroleum Gas (LPG) Transmission**

GAIL owns and operates a 2,040 km LPG pipeline network comprising the Jamnagar-Loni Pipeline (JLPL) and Vizag-Secunderabad Pipeline (VSPL). JLPL and VSPL networks achieved a throughput of 4.396 MMTPA during FY 2023-24 as against 4.335 MMTPA in FY 2022-23. Revenue from LPG transmission in FY 2023-24 was INR 732 Crores as against INR 722 Crores in FY 2022-23.

### **7.5.5 Petrochemicals**

GAIL has a nameplate polymer production capacity of 810 Kilotons per Annum (KTA) at the Pata complex. GAIL's subsidiary, Brahmaputra Cracker & Polymer Limited (BCPL), where GAIL holds 70% equity, has a capacity of 280 KTA. The marketing rights of the BCPL plant are with GAIL, taking the total marketing portfolio to 1090 KTA.

GAIL's Pata Petrochemical complex has achieved Polymer production of 777 MT during FY 2023-24. Revenue from this segment was INR 7,753 Crores as against INR 4,917 Crores in FY 2022-23. GAIL contributes 15% to the country's total petrochemical production and holds an 11.1% share in the country's total petrochemical sales.



## Inauguration of Poly-Propylene Warehouse, GAIL-India, by Shri Rajeev Kumar Singhal, Director (BD)



GAIL (India) Limited

## Sustainability Report 2023-24

### New India New Energy

#### 7.5.6 Liquified Petroleum Gas (LPG) and Other Liquid Hydrocarbons (LHC)

GAIL has five (05) Gas Processing Units (GPUs) at four locations in the country with a total LPG & LHC annual production capacity of 1.4 million MT. During FY 2023-24, total liquid hydrocarbon production from GPUs was 1 million MT, as against 0.93 million MT in FY 2022-23. Revenue from Liquid Hydrocarbons in FY 2023-24 was INR 5,076 Crores as against INR 5,570 Crores in FY 2022-23.

#### 7.5.7 Exploration & Production (E&P)

Considering the prevailing scenarios within the Oil & Gas sector, GAIL has demonstrated resilience in upstream activities by maintaining cautious investments.

GAIL has Participating Interest (P.I.) in 13 E&P blocks, of which 10 are in India, 02 blocks in Myanmar and 01 Shale Gas acreages in Eagle Ford Basin, Texas, USA (through a wholly-owned subsidiary – GAIL Global (USA) Inc.). These blocks hold an acreage of 2,668 KM as per (P.I.) in various consortiums. Out of these, GAIL is an Operator in three on-land blocks viz. (i) CB-ONN-2010/11 and (ii) CB-ONHP-2017/12 in Cambay Basin awarded during NELP-IX and OALP-I bidding rounds respectively and (iii) RJ-ONHP-2021/1

in Barmer-Sanchor Basin of Rajasthan awarded during OALP-VII bid round.

Revenue from Operations of INR 1,033 Crores has been generated from E&P activities during FY 2023-24 as against INR 1,134 Crores in FY 2022-23.

#### 7.5.8 Renewable Energy

GAIL is committed to reducing its carbon emissions and implementing renewable projects. It has a total installed capacity of 135 MW of alternative energy, out of which 118 MW is for Wind energy projects and 17 MW is for Solar energy projects, including small solar units. The power generated from these plants helps to reduce the carbon footprint and optimise power costs. Revenue from Operations of INR 53.33 Crores has been generated from Power Generation activities during FY 2023-24 as against INR 64 Crores in FY 2022-23.

#### 7.5.9 City Gas Distribution

- i. GAIL (including CGD JVCs/Subsidiaries) is currently authorized to operate in 72 Geographical Areas (GAs) throughout India, including major metro cities such as Delhi, Mumbai, Hyderabad, Bengaluru, Kolkata, etc. These City Gas Distribution (CGD)



Floating station for filling CNG in boats at Varanasi

networks together cater to around 65% of the total 125 Lakh domestic PNG (DPNG) connections in the country. Out of the total of 6,500 CNG stations in the country, GAIL and its CGD JVCs/Subsidiaries operate 2,600 CNG stations, representing a share of around 40%. This year, GAIL and its CGD JVs and Subsidiaries have provided more than 11.05 Lakh domestic PNG connections and set up 422 CNG stations.

- ii. GAIL Gas Limited (a wholly-owned subsidiary of GAIL) executes and operates CGD projects in 16 GAs, including Bengaluru. Currently,

GAIL Gas Limited has 06 JVs, and these JVs are implementing CGD projects in 09 GAs. GAIL Gas Limited and its JVs have connected more than 9.75 Lakh households through PNG and has set-up 570 CNG stations for providing clean fuel for vehicles. During FY 2023-24, GAIL Gas Limited and its JVs have provided 1.1 Lakh domestic PNG connections and set up 122 CNG stations.

- iii. Bengaluru remained a major focus area for GAIL for CGD expansion. 44 CNG stations were set up, and around 37,000 domestic PNG connections were provided in the Bengaluru GA during FY 2023-24.



Investor and Analysts visit at Vijaipur to showcase on ground status of projects such as PEM Electrolyser Plant, SSLNG facility

## **7.6 Industry Events and Engagements**

GAIL engages with industries and partners through various events and engagements.

### **7.6.1 Engagement with Investors**

Investor Relations (IR) plays a crucial role in today's dynamic business environment by helping companies manage investors' expectations effectively. The main goal of the Company's investor relations activities is to foster trust and confidence among stakeholders such as shareholders, investors and analysts through transparent disclosure of information and bilateral communication.

GAIL is receiving growing emphasis from the investor community and has been responsive to their queries in a transparent and compliant manner. GAIL also arranges site visits for analysts

and investors to provide first-hand insights into project development, aiding them in better understanding the company's operations.

In the FY 2023-24, the company undertook several significant investor relations and engagement initiatives, including:

- a) Hosted the Investors' & Analysts' Meet 2024
- b) Conducted earnings calls immediately following the announcement of financial results for Q1 FY'24, Q2/H1 FY'24, & Q3 FY'24.
- c) Participated in 12 Domestic Investor conferences and 02 International Investor conferences/non-deal roadshows organized by top brokerage houses

All these meetings/conferences were attended by Top Management/Senior Executives of the



GAIL (India) Limited

## Sustainability Report 2023-24

### New India New Energy

Company. Besides organizing such meetings and arranging earnings calls, the Company also arranged office meetings with Investors as needed.

GAIL's efforts to disseminate information to investors and analysts have been well-received and acknowledged by the investor and analyst community, demonstrating the company's commitment to transparency and stakeholder engagement.

In line with SEBI (Prohibition of Insider Trading) Regulations, 2015 & SEBI (Prohibition of Insider

Trading) (Amendment) Regulations, 2018, a Structured Digital Database System is already in place at GAIL's Intranet for

- (i) Obtaining the necessary disclosures from Designated Person(s) w.r.t. Immediate Relatives,
- (ii) Sharing of Unpublished Price Sensitive Information (UPSI) for furtherance of duties.

The investor presentation(s) are shared with stock exchanges and hosted on GAIL's website.



### 7.6.2 Initiatives for Advocacy of Natural Gas (GRI 2-28)

India seeks to reduce carbon emissions and transition to a cleaner and more sustainable energy system. Hon'ble Prime Minister of India has stated that analogous to the seven horses driving the chariot of the Sun god, India's energy map is envisioned to have seven drivers, with one key driver focussing on accelerating efforts to move towards a gas-based economy.

Industries can convert to Natural Gas as a fuel or feedstock to produce various products, helping reduce their carbon footprint. Various pipeline projects are progressing towards developing a National Gas grid in the country, which will enable gas availability to far-flung areas, including the Eastern and North Eastern parts of

the country. For this, the government has taken several steps, including providing grants for the development of pipeline projects and the revival of anchor load customers such as fertiliser plants. In addition to the pan-India presence of the NG pipeline network, the government is also making efforts to develop CGD infrastructure in India to enhance the availability and reach of Natural Gas to end consumers. An emerging growth area for GAIL is the marketing of Biogas produced from anaerobic fermentation of organic waste. As a significant step towards promoting the Biogas economy, MoP&NG launched the SATAT (Sustainable Alternative Towards Affordable Transportation) initiative on 1<sup>st</sup> October' 2018 to extract economic value from Biomass waste for the production of Compressed Bio Gas (CBG) and its usage as an alternative fuel (similar to CNG) for transport vehicles. Further, MoP&NG has

issued policy guidelines for synchronising CBG produced by various plants and its utilization in CGD networks on a pan-India basis. GAIL has been mandated to operationalize the CBG-CGD Synchronization Scheme, wherein Biogas/CBG would be supplied co-mingled with domestic gas at a Uniform Base Price to all CGD entities for use in CNG (T) and PNG (D) segments. Enabling policy frameworks and systems/mechanisms to accelerate the biogas economy's development in the overall gas supply scenario is continuously evolving. Setting-up of CBG plants shall help to bolster the domestic supply.

As far as renewables space is concerned, Natural Gas has the potential to mitigate the challenge of lack of Round The Clock (RTC) availability of renewable resources and balancing the grid. Natural gas can be a flexible energy storage medium to relieve congestion during peak demand periods and balance the grid.

The expanding CGD network and availability of Natural Gas will help reduce emissions and promote a clean mobility agenda.

Contributing to the Hydrogen economy, CGD infrastructure may also be used to blend Hydrogen into Natural Gas for end use. After establishing the blending proportion in the CGD network through pilot projects, the optimum level of hydrogen blending in the CGD network can be initiated subject to technical limits. Further, for creating future hydrogen infrastructure, ROU of gas pipeline infrastructure can be leveraged considering synergies such as the nature of fuel & end consumer.

Over the years, GAIL has participated in industry events organized to propagate Natural Gas as a better environmental fuel and endorse the market opportunities available for Natural Gas in India. GAIL interacts with various Indian industry associations, including FPI, CII, FICCI, CSE, TERI, NITI Aayog, etc. GAIL also engages with think tanks, government bodies, global associations like the International Gas Union, ADB, World Bank etc. for Natural Gas advocacy and market development in India. GAIL also regularly interacts with PNGRB, the regulatory body, to update them on the current status and industry viewpoint.



GAIL was honoured with the prestigious "FIDI Oil & Gas Awards 2022" in two categories:  
 (i) "Best Natural Gas Transportation Company of the Year Award" & (ii) "Best Managed Project of the year Award" in New Delhi



### 7.6.3 Partnerships with Coalitions and Associations

#### (GRI 2-28)

GAIL is a member of several reputed industry organizations and associations, which provide a forum for discussing industry issues and bringing industry voices to the government's attention to develop more inclusive policies and reforms.

This lays a solid foundation for the expansion of the public good. During FY 2023-24, we paid a membership fee of INR 1.75 Crores to various trade associations and think tank groups to create a positive and nurturing environment for businesses and stakeholders. We also regularly communicate with PNGRB, the regulatory body, to inform them of the latest events and industry outlook.

GAIL is a member of the Federation of Indian Petroleum Industry (FICI) and part of the Governing Council. FICI has many specific executive committees in GAIL's interest, and they have member representations from GAIL. FICI functions as an oil industry interface with the Government, regulatory authorities and public and representative bodies of traders in India to work on issues such as optimization of resources, promoting Safety, tariffs, Investments, a Healthy Environment and Energy conservation, among other matters related to the industry.

GAIL is an active member of the Standing Conference of Public Enterprises (SCOPE), the apex body representing India's entire spectrum of Public Sector Enterprises (PSE). It helps its member PSEs to voice their concerns on various platforms. C&MD, GAIL is the Chairperson of SCOPE, and Director (HR), GAIL is the Governing Council member of SCOPE.

GAIL is an active member of Federation of Indian Chambers of Commerce & Industry (FICCI), the apex body representing India's industries. CMD, GAIL is a member of the FICCI Executive Committee and Co-Chair of the FICCI Hydrocarbon Committee. The Hydrocarbon Committee endeavours to deliberate on issues related to the country's energy security and supplement various efforts of the Government

of India and other bodies engaged in this area through its intellectual input.

CMD, GAIL is also a member of the Oil Industry Development Board (OIDB).

GAIL is a member of the Chemicals & Petrochemicals Manufacturers Association (CPMA), the apex forum representing the Indian Petrochemical Industry. Established in 1993, the Association offers its members a platform to collectively present their ideas, voice concerns and offer suggestions on relevant issues. It provides a linkage between the industry, the Government and the society. It interacts with the policy makers and industry associations to develop and maintain harmonious and conducive business conditions.

GAIL is a member of The Energy and Resources Institute (TERI)-Council for Business Sustainability (CBS) (TERI-CBS), an industry-led consortium of sustainability practitioners. GAIL has conducted a two (02) day Residential training programme on ESG for It's Sustainability Coordinators at sites at TERI Gual Pahari Campus.

GAIL is one of the three full time members of the International Group of Liquefied Natural Gas Importers (GIIGNL) in India. GIIGNL offers GAIL a forum for exchanging information and experience among industry counterparts to enhance LNG import activities' safety, reliability, efficiency and operation of LNG import terminals.

In addition, to the associations mentioned above such as SCOPE, FICI, OIDB, GIIGNL, CPMA, FICCI, GAIL is also a member of various other reputed industry organizations and associations, which provide a forum for discussing industry issues and bringing industry voices to the government's attention to develop more inclusive policies and reforms. These include :

- Confederation of Indian Industry (CII)
- All India Management Association (AIMA)
- PHD Chamber of Commerce and Industry (PHDCCI)
- Indian Biogas Association (IBA)
- Indian Federation of Green Energy (IFGE)
- International Swaps & Derivatives (ISDA)
- US-India Strategic Partnership Forum (USISPF)

- Natural Gas Society (NGS)
- Institute of Directors (IOD)
- Indian Centre for Plastic in Environment (ICPE)
- International Gas Union (IGU)
- International Federation of Training & Development Organization (IFTDO)
- Society for Human Resource Management (SHRM)
- Indian Society for Training & Development (ISTD)
- National Institute of Personnel Management (NIPM)
- All India Organization of Employers (AIOE)
- Institute of Company Secretaries of India (ICSI)
- British Safety Council (India) LLP (BSC)
- India Myanmar Chamber of Commerce (IMCC)
- Coal Gasifiers Association (CGA)
- Quality Circle Forum of India (QCFI)
- Society of Petroleum Accountants (SPA)
- Pipeline Operators Forum (POF)
- Project Management Associates (PMA)

## 7.7 Hawa Badlo: Driving Change Towards a Cleaner, Greener Future

Air pollution severely threatens human health and the environment, necessitating urgent action from all stakeholders. Recognizing this challenge, GAIL launched the Hawa Badlo initiative for a cleaner and greener India. Hawa Badlo initiative represents a significant step towards combating air pollution and promoting environmental sustainability. Since its inception in 2016, Hawa Badlo has emerged as a pioneering campaign dedicated to raising awareness about the detrimental effects of air pollution and climate change while fostering a culture of responsibility and sustainability. Hawa Badlo seeks to mobilize responsible citizens for cleaner air and a greener India, encouraging proactive participation in environmental conservation efforts.

Hawa Badlo employs diverse methods to engage and educate the public, including events, short films, contests, campaigns, and digital initiatives, ensuring maximum outreach and impact. By partnering with national and international

organizations such as TERI, UN, WMO, and Art for The World, Hawa Badlo amplifies its reach and implements innovative solutions to combat air pollution. Through impactful content such as short films, web series, and digital campaigns, Hawa Badlo effectively communicates its message, inspiring action towards cleaner air and a greener environment.

Several campaigns executed recently under Hawa Badlo have resonated with millions nationally and internationally. The #TogetherForCleanAir campaign garnered over 90 million digital reaches, urging individuals to unite for cleaner air and a greener future. The #HawaBadlowithLIFE campaign showcased eco warriors inspiring masses towards an eco-friendly lifestyle, reaching over 10 million people digitally.

Additionally, the “Interactions” short film global campaign, organized in collaboration with Art for the World, aimed to raise awareness on biodiversity conservation and climate change, with an estimated global reach of over 300 million viewers by 2024.

As the initiative continues to expand its reach and impact, it sets a precedent for corporate entities to prioritize environmental sustainability and contribute towards building a better world for future generations. Through strategic partnerships, innovative campaigns, and sustained efforts, Hawa Badlo has become one of the longest-running campaigns deployed by a Public Sector Enterprise (PSE), setting a benchmark for Corporate Social Responsibility and Environmental stewardship.



08



## Operational Excellence

During FY 2023-24, no information security breaches, cyber security incidents, or IT incidents occurred at GAIL.

Highest Ever Single Day C2C3 Production of 4338 MT on 20<sup>th</sup> January 2024 at C2C3 Unit, Pata

## Operational Excellence

(GRI 3-3)

GAIL has adopted a proactive approach to sustainability and acknowledges the significance of continuous improvement in promoting operational excellence. The company has become more resilient by integrating sustainability into core business practices.

GAIL is committed to enhancing its sustainability efforts by continuously improving processes and systems for better efficiency, quality, and customer satisfaction.

### 8.1 Our Approach

GAIL is dedicated to ethically generating value in the long term. It focuses on enhancing scale, efficiency, and profitability through innovation and identifying the best opportunities for long-term success. By staying ahead of the curve and anticipating changes in the market, GAIL continues to thrive and grow while ensuring that its operations are aligned with its sustainability goals.

GAIL has developed improvement strategies to achieve operational excellence and optimize operations, including task automation, process simplification, new technologies, staff training, procedure modifications etc.

GAIL has a standardized and comprehensive approach to Operation & Maintenance (O&M) of its installations' that is reviewed regularly to ensure compliance with National and International standards and guidelines. GAIL also involves certified Subject Matter Experts (SMEs) in reviewing the O&M philosophy as a part of our commitment for ongoing development.

We have implemented a three-tier investigative process known as Root Cause Analysis (RCA) on all incidents for in-depth analysis, and our unwavering commitment to safety is reflected in our zero-tolerance policy for infractions.

We take safety very seriously and have a zero-tolerance policy towards breaches. This

mechanism enables the Company to implement corrective measures that prevent recurring breaches, ensuring effective and secure operations.

### GAIL's Leadership Responsibility

(GRI 416-1)

GAIL's top leadership takes keen interest for attaining operational excellence. Our collaborative and consultative approach has resulted in developing short and long-term sustainability strategies & plans by involving stakeholders and expert bodies. Department heads at GAIL sites are responsible for implementing sustainability plans.

### 8.2 Integrated Management System (IMS)

(GRI 3-3)

GAIL has implemented an Integrated Management System (IMS) to improve business operations.

This system integrates various management systems (Asset, Quality, Environment, Energy and Occupational Health & Safety Management) into a comprehensive, streamlined system.

IMS provides comprehensive insights into key business processes, optimizes resources, and promotes operational excellence, focusing on quality and efficiency.

The Integrated Management System approach encompasses the following elements;

1. Asset Integrity Management System
2. Quality Management System
3. Environment Management System
4. Energy Management System
5. Occupational Health and Safety Management  
(The Occupational Health and Safety Management system is covered under the Health and Safety chapter)



## 8.2.1 Asset Integrity Management System (GRI 3-3)

GAIL has an Asset Integrity Management System (AIMS) used in business operations. It ensures the dependability of assets like pipelines, storage tanks, and processing facilities while managing the risks of their Operation & Maintenance.

AIMS is a structured approach that increases operational efficiency by optimizing asset utilization (by regularly tracking and updating records of assets), reducing risk, ensuring efficient operations, managing inventory, reducing maintenance costs, and enhancing safety while adhering to relevant regulations.

## 8.2.2 Pipeline Integrity Management System

The integrity of a pipeline network is determined at the design and construction stage, as well as ongoing maintenance and monitoring efforts throughout the pipeline's life to ensure safe and reliable operations.

GAIL's gas pipeline networks comprise predominantly carbon steel pipelines of sizes ranging from 4" to 48" diameter and up to API 5LX 80 steel grades, in adherence to quality specifications and codes such as PNGRB Technical Standards & Specifications, including Safety Specifications for Natural Gas Pipelines, 2009 and ASME B 31.8, Gas Transmission and Distribution Piping Systems for LPG PPPL (Petroleum Product Pipeline) T4S regulations 2016 and ASME 31.4, which are all positive indications of a well-designed and constructed pipeline network. The pipes are underground and feature a Three-Layer Polyethylene (TLPE) coating on the exterior, reinforced by an Impressed Current Cathodic Protection (ICCP) system to avoid external corrosion.

Assets are developed and built by applicable rules and industry-specific standards to ensure continuous functioning. The GAIL's gas network is monitored 24 hours a day, seven days a week via advanced communication and telemetry systems. The monitoring is done from numerous

Regional Control Rooms at each network's headquarters and the National Gas Management Centre (NGMC), a centralized control facility in Noida.

GAIL has a robust Pipeline Integrity Management System (PIMS) as per PNRRGB Regulations, British Standards (BS), Oil Industry Safety Directorate (OISD), and ASME B31.8S / API 1160. The Integrity Management system comprises a 3-tier governance mechanism with:

- i. Central Integrity Management Group (CIMG) at the Corporate O&M level,
- ii. Regional Integrity Management Groups (RIMG) at all Pipeline headquarter level.
- iii. Maintenance base at sites

PIMS is designed to manage the entire Pipeline Integrity Management process, from data collection to analysis and reporting. It integrates many tools, such as In-line Inspection (ILI), Direct Assessment (DA) and Hydrostatic Testing (HT), which helps to identify and prioritize the areas that require inspection, maintenance or repair. To achieve this, various web applications and databases have been developed to help analyze and manage pipeline integrity data. The software tools aid in monitoring the pipeline's condition and performance over time, ensuring that the pipelines are safe and reliable while reducing the risks associated with pipeline failures.

GAIL's various initiatives for the Pipeline Integrity Management system are:

- Installation and Commissioning of New Natural Gas close loop calibration facility for USM/TFM/RPD, for meter size: 2" to 6", at the Dibyapur Compressor Station

### Pipeline inauguration and Foundation stone laying - Prime Minister Event

- Hon'ble Prime Minister inaugurated GAIL's VAPL-Vijaipur - Auraiya-Phulpur Natural Gas pipeline (36"X352 km) and laid the foundation stone of the Nagpur - Jabalpur Natural Gas pipeline (317 km) of the Mumbai - Nagpur - Jharsuguda Natural Gas pipeline (1,755 km) on 5<sup>th</sup> October 2023

- Laying of Foundation Stone of Krishnagiri to Coimbatore Section (901 km) of KKBMP-II on 2<sup>nd</sup> January 2024
- Laying of Foundation Stone of Nagpur-Jharsuguda section of MNJPL & Inauguration of Dhamra-Angul Pipeline (412 km) on 3<sup>rd</sup> February 2024



Inauguration of the New LNG Truck and Fueling Station

- Sultanpur-Jhajjar-Hisar Pipeline (135 km) on 2<sup>nd</sup> March 2024
- Inauguration of Barauni-Guwahati Pipeline (727 km) on 9<sup>th</sup> March 2024



Laying of Foundation Stone of Krishnagiri to Coimbatore Section of Kkbmpl-II

#### **Major Achievements for the FY 2023-2024:**

- Highest ever RLNG Sale - 69.94 MMSCMD, Total Gas Sale - 111.85 MMSCMD and total Gas Handled - 138.17 MMSCMD achieved on 11<sup>th</sup> October 2023
- Highest Ever Single Day Gas Processing of 45.73 MMSCMD on 15<sup>th</sup> December 2023 at GPU Vijaipur
- Highest Ever Single Day C2C3 Production of 4,338 MT on 20<sup>th</sup> January 2024 at C2C3 Unit, Pata
- Highest-ever sale of 98.45 MMSCMD by Natural Gas.
- Highest ever daily LPG dispatch of 9,060 MT in JLPL.



- Highest ever Annual LPG transmission of 3.219 MMTA & Annual LPG Receipt of 3.214 MMTA for FY 2023-24 in JLPL.
- Integrity assessment through ILI of Approximately 1,600 Km Pipeline Network completed during FY 2023-24.
- Commissioned the 8-inch diameter, 51 Km Haridwar-Rishikesh-Dehradun Pipeline (HRDPL) on 15<sup>th</sup> October 2023.
- MoU signed among Oil & Gas CPSEs (GAIL, BPCL, HPCL, IOCL & ONGC) for optimizing the pipeline crossing permissions on 7<sup>th</sup> July 2023

### 8.2.3 Total Quality Management

GAIL has introduced a Total Quality Management (TQM) system in their operational sites to increase operational efficiency. TQM is a management technique that strives to optimize the quality of products and services via continuous improvement involving employees and stakeholders. GAIL TQM department is focused on achieving or exceeding customer expectations, one of the Company's primary goals, thus improving customer satisfaction.

GAIL's TQM system facilitates continuous improvement by incorporating customer feedback. Through analysis and implementation of this feedback, GAIL strives to enhance customer satisfaction by optimizing its products and services.

As a part of Customer Value Management, GAIL ensures customer satisfaction by conducting Customer Satisfaction surveys to gather customer feedback. GAIL is dedicated to enhancing customer satisfaction and standardizing business processes by implementing a Quality Management System that aims for continuous and sustainable improvement through effective practices and innovation. To improve customer satisfaction, various tools are implemented across GAIL's operational sites. These tools effectively collect customer feedback on product quality and services.

Quality Management Systems and Energy Management Systems have been implemented

and established throughout numerous Pipeline Units, Process Plants, Corporate Offices and Zonal Marketing Offices. GAIL's Quality Circle (QC) projects actively engage the employees, resulting in high employee morale and increased productivity.

#### Customer Satisfaction Index (CSI)

GAIL actively conducts surveys to collect & analyse the feedback obtained from customers about the company's products or services using SAP. In FY 2023-24, a total of 150 customers were surveyed. A total of 69 customer concerns were received, and all have been resolved. GAIL's Customer Satisfaction Index of 91% is an outstanding achievement that reflects the dedication and hard work of GAIL's employees.

GAIL effectively mitigates customer complaints through pre-defined grievance redressal mechanisms.

#### Quality Circles Projects

Quality Circles Projects are a strategic approach to enhance efficiency in operations and boost employee engagement by involving cross-functional departments in identifying and resolving quality-related issues.

Employees are encouraged to form small groups of 3-4 persons to undertake improvement/modification projects within their work area of processes, services, procedures, and work systems to promote teamwork and collaboration. These projects result in enhanced product quality and customer satisfaction.

GAIL offers motivational schemes for QC projects, including the CMD Trophy award for the best QC projects in-house. Besides, the Quality Circle Forum of India (QCFI) also promotes the concept of quality in India. It encourages industries to participate in various competitions at the (i) Regional Level, (ii) National Level, and (iii) International Level.

The CMD Trophy event for the following best QC teams was organised at the Corporate Office, New Delhi on 15<sup>th</sup> June 2023:

- QC team - Atal-2 (Gandhar) - Uninterrupted supply of LPG from GAIL Gandhar was awarded 1<sup>st</sup> prize.
- QC team - Spartans (Vijaipur) - Enhancement of Gas Processing of GPU Vijaipur was awarded 2<sup>nd</sup> prize.
- QC team - Karmath (Pata) - Eliminating reactor disturbances after lining up of regenerated CO<sub>2</sub> bed in LLDPE-2 Plant was awarded 3<sup>rd</sup> prize.
- QC team - Suchalan (Chhainsa) - Integrity & Reliability improvement of starting sequence of GTC was awarded.
- QC team – Spark (Samakhiali) - Find out & Work out (increase the reliability factor of the Jockey Pump) was awarded certificate for best presentation.

In FY 2023-24, a total of 192 QC projects were registered and 132 QC projects were completed.

#### **Quality Management System ISO 9001**

GAIL TQM department implemented ISO 9001: 2015 (QMS) standards across its Pipeline Units, Process Plants, Corporate Offices and Zonal Marketing Offices. This Quality Management System standard specifies how an organization can demonstrate its ability to consistently provide products and services that fulfil customer and regulatory requirements.

#### **8.2.4 Environment Management System (EMS)**

(**GRI 3-3, GRI 413-1, GRI 416-2**)

GAIL has implemented an Environmental Management System aligned with ISO 14001:2015 standards. This demonstrates GAIL's commitment to Environmental responsibility.

Our robust environmental policy ensures that we operate sustainably and comply with all relevant regulations.

GAIL's proactive approach to environmental stewardship includes regularly monitoring and improving environmental performance. This proactive strategy uses the Plan-Do-Check-Act methodology to reduce non-compliance risk and improve environment practices.

Additionally, it addresses various environmental issues, including air emissions, water usage and quality, waste management and operations' impact on biodiversity. GAIL EMS helps to meet regular requirements, reduce costs and enhance GAIL's reputation as a responsible business entity in the gas industry. The Company undertakes various measures before initiating any project:

1. EIA (Environment Impact Assessment)
2. SIA (Social Impact Assessment)



GAIL was recognized with the prestigious International “Asian Oil and Gas Awards 2023” for the categories “Midstream Project of the Year” and “Innovation Award” at the event held in Kuala Lumpur, Malaysia

3. RRA (Rapid Risk Assessment)
4. PESO Clearance (Petroleum & Explosives Safety Organization)
5. HAZOP (Hazard & Operability Study)
6. Market Study
7. CRZC (Coastal Regulatory Zone Clearance)
8. CMP (Construction Management Plan )
9. Adopting new technology for construction projects

For FY 2023-24, GAIL did not face any penalties/action taken by regulatory authorities (such as Director of Factories, PESO, PNGRB, Central and State Pollution Control Board etc.) on environment compliances.

GAIL did not conduct EIA for Natural Gas Trunk Pipelines in the current fiscal year since it is not required as per legislation.

#### Environment Protection Initiative

**Visakhapatnam Secunderabad Pipeline (VSPL)** is the second largest LPG pipeline which has been conceptualized to protect the environment by safe transportation of LPG through underground pipeline of 578 km from Vizag-Secunderabad via Rajahmundry, Vijayawada and Suryapet. Following are the key environmental benefits of the VSPL:

- Reducing Diesel consumption on road transportation
- Eliminating tanker movement
- Reducing road congestion and accidents.
- Reducing air pollution during transportation by tankers.
- Reduction of firewood consumption in AP, Telangana & Karnataka.
- Zero waste generation
- Safer in comparison to road transportation

Further, the Following EIA studies for CGD pipelines were conducted during the year 2023-24:

- A total of 26 EIA studies were carried out for 26 Numbers of CGD Projects in different GAs IDs across various states in India.
- A total of 07 Numbers of EIA studies were carried out for Last Mile Connectivity (LMCs) Projects under different GAs IDs across various states in India

#### 8.2.5 Energy Management System (EnMS)

([GRI 3-3](#), [GRI 302-4](#))

Enhanced energy performance can significantly benefit an organization by optimizing its use of energy sources and assets, thereby reducing costs. We have implemented an EnMS that helps reduce overall energy usage by investing in and developing new innovative solutions across the value chain, to minimise environmental impact and carbon footprint.

GAIL's EnMS is being digitalized, enhancing operational efficiency, reducing unplanned downtime, and increasing equipment reliability, thereby modernizing its infrastructure.

All major GAIL sites are accredited with ISO 50001 EnMS certification. It helps the GAIL to improve its energy performance by making better use of its energy-intensive assets.



Figure: Energy Management Process

### 8.2.6 Responsible Compliance Management (GRI 2-27a)

GAIL has a robust, well-established Internal Legal Compliance Management System (LCMS) that ensures that the company complies with all applicable rules, standards, policies and codes of conduct. It directly contributes to successful operations, favourable interactions with regulators, attracting high-quality operators and personnel, reduced costs from accidents or incidents and improved productivity and performance.

GAIL ensures effective communication and training for all personnel. It also monitors compliance activities and facilitates reports for stakeholders. The system's periodic audit activities provide measurements to achieve goals for regular improvement.

While auditing or inspecting the facility, our internal audit teams or HSE teams conduct an audit to verify and identify any scope of improvement from the compliance. Interviews, reviews, knowledge sharing sessions, and regulatory framework updates are done to

promote effective employee involvement and build a 'Beyond Compliance culture'. Before starting each project, GAIL's Board of Directors prioritize HSE compliance; subsequently, a Board-level audit committee conducts an assessment.

Our commitment to stringent compliance ensures that none of our products or services are prohibited in any market. GAIL maintained a perfect compliance record in FY 2023-24, incurring no penalties.

As per PNGRB's Integrity Management System Regulations, all the four GAIL's LPG pipelines (JLPL, VSPL, GPU Vijaipur-IOCL Bottling Plant, and GPU Gandhar-IOCL Bottling Plant) were awarded IMS conformity certificates on 30<sup>th</sup> June 2023.

### 8.2.7 Information System and Digitalization (GRI 3-3)

GAIL, a leading Indian Natural Gas company, GAIL, a leading Indian Natural Gas company, leverages IT to drive business growth innovation and improve productivity, efficiency, and customer experience, gaining a competitive advantage and reducing costs.



Director (Projects) speaking at a session at IEW 2024

GAIL has implemented robust cybersecurity measures to protect its IT systems and data from cyber threats and attacks. This involves running a 24-hour Security Operations Centre (SOC) with

advanced security software, conducting regular security audits and providing ongoing training and education to our employees. The IT data centres are ISO27001:2013 certified.

GAIL implemented a comprehensive Crisis Management Plan to address Cyber Attacks and Cyber Terrorism. To ensure efficient control, GAIL established an Incident Handling Team consisting of a Crisis Management Cell (CMC) and a Level-II Incident Resolution Team.

During FY 2023-24, no information security breaches, cyber security incidents, or IT incidents occurred at GAIL.

GAIL has always been at the forefront of technological changes to become a digitally empowered organization. It has implemented and adopted new technologies that meet stakeholders' needs and improve transparency in business operations.

GAIL's Digital Strategy aims to address mission-critical services, operations, maintenance, planning, and sustainability through new digital technologies.

GAIL's approach towards Digital Transformation aims to deliver an increase in revenue, mainly through increased production and workplace safety, resulting in better operational efficiency in the coming year.

During FY 2023-24, several new initiatives and activities were taken for responsible information systems and digitalization, such as:

- Email Phishing and SMS Phishing Campaigns are conducted regularly to create awareness among employees
- Cyber Security Training to employees through GAIL Training Institute, Noida
- Training & Awareness lectures were conducted for the employees
- Regular Cyber Security Advisories were sent to employees.



Training Session of Employees at GAIL Training Institute Noida



### **Vigilance Awareness Week 2023 at the Lucknow and Pata**

The Vigilance Department examines complaints received from various sources. Based on the examination and investigation of complaints/cases, appropriate action against the concerned officials/ vendor/ supplier is recommended to the Disciplinary Authority. Regular surprise checks/ inspections are also conducted to detect system gaps/ lapses/irregularities or corruption.

All 5 (five) Directorates (HR, Finance, BD, Marketing & Projects) were examined during the year, and 36 actions against the concerned officials were recommended to the Disciplinary Authority.

09



## Energy and Environment



During the year, GAIL successfully planted a total of 1,85,633 trees.

## Energy and Environment

(GRI 3-3-a, b, c)

Energy and the Environment are central to our planet's sustainability and future generations' well-being. Energy is essential for powering industries, transportation, and households, improving quality of life, and fostering economic development and technological advancements. Energy security also plays a critical role in national security, reducing dependence on foreign sources. Conversely, the environment is essential for human health, providing clean air, water, and vital resources. It supports biodiversity and ecosystems that offer crucial services such as pollination, water purification, and climate regulation. The synergy between Energy and Environmental stewardship is critical for sustainable development and the well-being of all life on Earth.

GAIL's commitment to environmental stewardship is fundamental to its core values. This is evident in its proactive approach to analysing operations

and current controls to identify opportunities for improvement and implement effective strategies. GAIL assesses its impact across the value chain and sets high standards.

Mission LiFE is an initiative launched by GOI to promote responsible consumption and conservation practices among individuals and communities. The idea of Mission Life is to encourage sustainable and eco-friendly lifestyles to combat environmental degradation and climate change.

GAIL takes proactive steps to minimise its environmental footprint while striving for operational excellence and also incorporated Mission Lifestyle For Environment (LiFE) elements to promote environmentally friendly activities among employees.

At GAIL, to support Mission LiFE, the following theme-wise initiatives were followed:





GAIL (India) Limited

## Sustainability Report 2023-24

New India New Energy

### Save Energy

GAIL is focusing on operational decarbonisation, which includes adopting the latest technologies and initiatives to reduce its direct in-house GHG emissions through energy transition, energy efficiency, electrification, carbon capture & utilisation, offsetting etc.



### Save Water

GAIL ensures that its operations have no adverse effects on the supply and quality of water resources throughout the various sites. GAIL has proactively evaluated and mitigated any water-related risk to make its operations resilient. It encourages and supports innovative water-saving ideas across sites, such as reduced freshwater consumption, rainwater harvesting/collection system, monitoring and management of waste-water discharge, wastewater treatment and recycling based on its Environmental Policies and national, local, and regional guidelines.



### Say no to single-use plastic

GAIL is committed to avoiding the consumption of Single-Use Plastic in all its operations and offices by creating awareness. Education and awareness about the impacts of plastic pollution further motivate various stakeholders to adopt eco-friendly practices. Together, these actions can lead to a cleaner and healthier planet.



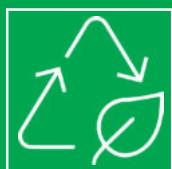
### Reduce Waste

GAIL ensures that waste materials are disposed off to minimise their environmental and human health impact. GAIL follows effective waste management practices that involve reducing, reusing, recycling, and responsibly disposing of hazardous and non-hazardous waste at all sites.



### Adopt healthy Lifestyles

GAIL regularly conducts training and awareness events at its various sites to create awareness amongst the people by promoting the use of bicycles for short distances, which will save fuel and help create a cleaner, greener and healthier environment. Further, GAIL ensures the availability of open gyms, recreational facilities, and sports facilities in its townships to lead a healthy lifestyle and solicit employees to participate in Yoga Day, Walkathons, Marathons, etc.



## Reduce E-Waste

GAIL has an effective waste management system that includes e-waste disposal, which is done with the utmost care and responsibility by engaging authorised vendors.



## 9.1 Governance and Policy on Energy and Environment

(GRI 3-3-f)

GAIL follows operations that take a holistic energy conservation and environmental protection approach through its Sustainability Policy. All Officer-In-Charge (OICs) / HoDs are responsible for achieving the company's sustainability goals, including risk and performance management. Our sustainable development policy prioritises economic, social, environmental and governance factors while balancing development and ecosystems. We follow site-specific Standard Operating Procedures (SOPs) and operating guidelines to minimise adverse environmental effects.

## 9.2 Biodiversity Management

**GRI 304-1a, GRI 304-2a, b, GRI 304-3a, GRI 304-4a)**

GAIL recognizes that effective biodiversity protection requires a variety of methodologies and players. Biodiversity management is important to environmental management, as it protects and conserves natural resources that support life on Earth. We seek to maintain, improve, and protect biodiversity and ecosystems in accordance with regulatory requirements. We avoid working near IUCN I-IV protected areas and World Heritage sites and follow the mitigation hierarchy (avoid, minimize, restore, offset). We avoid creating or altering ecologically sensitive areas such as national parks, wildlife sanctuaries, biosphere reserves, wetlands, biodiversity hotspots, forests, and shoreline management zones. The Company conducts Environmental Impact Assessment before any

new project/construction activity begins. Our Environment Management Plan (EMP) defines how we manage green-belt and biodiversity at GAIL sites. Our plant settings provide dense greenbelts with different regional flora and fauna. We perform regular surveys and studies on the environment and ecology surrounding our units to address issues and sustain the ecosystem. Our contributions coincide with Sustainable Development Goals (SDGs) 14 and 15, aiming to positively impact the lives of living creatures underwater and on land.

GAIL protects biodiversity by avoiding setting up project sites within 10 KM of protected habitats. Pipelines in green cover areas are laid by utilising less than one-third of the Right of Use (RoU) designated for passing through forests. We have also contributed to CAMPA (Compensatory Afforestation), for the pipelines laid through forest areas.

### 9.2.1 GAIL's Biodiversity Initiatives at various sites

- **Pata:** GAIL Gaon township boasts a diverse biodiversity, featuring a Butterfly Park, a Mini Golf course, and 160 acres of green cover, promoting bird and butterfly diversity and theme-based plantations. GAIL Pata has ~500 acres of land (around 33% of total area) that accounts for Greenbelt size. In FY 2023-24, 1,54,834 trees were planted at the operational site and in the residential area.
- **Vijaipur:** GAIL Vijaipur has ~321 acres of land (> 30% of total area) that accounts for greenbelt size. 6,331 trees were planted at the operational site and in the residential area.

### 9.2.2 Celebration of World Environment Day

As a part of our company's commitment towards improving the environment and sustainable living, we observe World Environment Day every year on June 5 and conduct various activities in line with this vital flagship event. World Environment Day is an important day to generate awareness and encourage actions to protect our planet. This year's World Environment Day campaign focused on land restoration, de-desertification and drought resilience under the slogan "**Our land. Our future. We are #Generation Restoration.**"

The Prime Minister, Shri Narendra Modi, has launched the 'Ek Ped Maa Ke Naam' #एक\_पेड़\_माँ\_के\_नाम Campaign on the occasion of World Environment Day. Shri Modi planted a Peepal tree at Buddha Jayanti Park in Delhi.



World Environment Day Celebration at GAIL's Sites 2024



### World Environment Day Celebration at GAIL's Sites 2024

## 9.3 Energy Management

(GRI 302-1, GRI 302-2- Refer Performance & Standards)

GAIL believes that effective Energy Management may reduce greenhouse gas emissions, mitigate climate change, lower energy costs, and increase the overall energy efficiency of buildings and operations. Our commitment to energy management flows through implementing energy-efficient practices & technology that align with Original Equipment Manufacturer (OEM) recommendations. All major installations of GAIL are ISO 50001 certified and adhere to its Energy Management System framework.

### 9.3.1 Central Government Approved Energy Saving Initiatives

(GRI 302-1, GRI 302-2- Refer Performance & Standards)

GAIL is a Public Sector Enterprises (PSE) under the administrative control of the Ministry of Petroleum & Natural Gas (MoP&NG). GAIL's Pata plant is a designated Consumer under the Bureau of Energy Efficiency (BEE) Perform, Achieve and Trade (PAT) Cycle IV. We have achieved the target of Specific Energy Consumption (SEC) reduction of

6.17 % in PAT-IV (w.r.t baseline year FY 2016-17)

### 9.3.2 Site Wise Energy Saving Initiatives: Energy Saving Initiatives at Pata

- i. Replacing 71 low-efficiency motors with higher-efficiency class motors. This upgrade resulted in saving 2,06,486 kWh of energy during the fiscal year 2023-24.
- ii. Replacing 125 old air conditioners with new 5-star efficiency-rated ACs. This upgrade resulted in saving 82,001 kWh of energy during the fiscal year 2023-24.
- iii. Upgraded the lighting system by replacing approximately 282 old high-wattage lamps, including HPMV and fluorescent lamps that range from 56W to 400W, with new LED fixtures that use less power. This transition has resulted in 48,095.92 kWh of energy saving during FY 2023-24.

The primary advantages of these initiatives encompass substantial energy savings and a notable reduction in electricity costs.

### Energy Saving Initiatives at Hazira

Conventional light fittings across the plant were replaced with LED floodlight and lamps. LEDs are

much more energy-efficient and have a longer lifespan than conventional lighting solutions, contributing to substantial energy savings.

As a result of these upgrades, the station has remarkably reduced energy consumption, saving approximately 3,45,217 kWh annually. This decrease in energy use translates directly into financial savings, amounting to INR 33.48 Lakhs per year. These improvements lower operating costs and support environmental sustainability by reducing the overall energy demand and associated emissions.

#### Energy Saving Initiatives at Gandhar

In FY 2023-24, 33 air conditioners were installed and commissioned under a buyback scheme aimed at replacing older units with 5-star rated, energy-efficient AC models. This initiative resulted in significant environmental benefits, with a total energy saving of 10,208 kWh and offsetting 8 tCO<sub>2</sub>e annually. Additionally, the project yielded substantial financial savings, amounting to INR 0.98 Lakhs per annum. The total project cost, including taxes, stood at INR 14.2 Lakhs. This comprehensive effort enhances energy efficiency and contributes positively to sustainability goals while providing economic benefits.

In the fiscal year 2023-24, 02 electric tow trucks, each with a capacity of 02 tons, were procured for material handling. The total project cost, including taxes, stood at INR 11.18 Lakhs.

#### 9.4 Emission Management

GAIL is committed to achieving a low-carbon economy by controlling emissions from its operations. As responsible corporate citizens, we play an essential role in contributing to the GoI's commitment to fulfilling its emission targets in alignment with the NDC and the Paris Agreement.

We oversee and regulate these emissions in line with World Business Council for Sustainable

Development (WBCSD) Greenhouse Gas Reporting Standards, ISO 14064-2018, and American Petroleum Institute (API) - 2022, which provides a comprehensive GHG emissions methodology for the Oil and Natural Gas Sector 2021. To enhance emission control, GAIL has implemented a range of initiatives to reduce GHG emissions. These initiatives are organised into key focus areas.

##### 9.4.1 Reducing Methane Emissions

A critical environmental problem in the gas industry is methane emissions. Methane is a vital GHG that contributes much more to global warming than carbon dioxide. Methane emissions occur at various stages, including Natural Gas Production, Processing, Transmission, and Distribution.

Leaks and vents from equipment like Compressors, Storage Tanks, Valves and Pipelines can release methane into the atmosphere. Natural Gas Processing and LPG plants also vent out minuscule quantities in some processes, causing methane emissions.

We follow specific practices to reduce the production-related GHG emissions, such as:

- Conducting regular LDAR programmes.
- Monitoring and tracking our energy consumption
- Setting internal targets to reduce the energy consumption

##### 9.4.2 Reducing Other Air Emissions

At GAIL, we manage emissions using a cloud-based monitoring system linked to our emission analysers. The online data is transmitted to Central Pollution Control Board (CPCB) and State Pollution Control Board in real time through web-based server systems. Several initiatives for emission management have been taken across all our locations throughout the year to reduce air emissions.

#### 9.5 Responsible Water Management

Water is a finite resource essential for all life on

earth, economic development and ecosystem health. Responsible Water Management is critical to protecting this essential natural resource. It requires a coordinated effort from all stakeholders to promote sustainable and equitable water management practices that balance social, economic and environmental objectives. Rainwater Harvesting is an essential component at the design stage of any construction activity. At GAIL, we believe in addressing water scarcity and ensuring water security.

As a responsible Corporate entity, we take pride in using water judiciously and raise awareness among our employees, community and society. We are working to develop effective technology and water conservation methods through innovation. To measure the impact of our operations, we have conducted an assessment of water-stress sites & evaluated the risk and opportunity of our operations at these sites. Our assessment also helps in the visualisation of future demand.

Water Performance (Million m <sup>3</sup> )	2021-22	2022-23	2023-24
Total Water consumption	22.19	17.59	22.49
Total Waste water generated	2.31	1.86	2.20
Total Waste water discharged	1.64	2.20	1.42
Water recycled/reused	0.72	0.70	0.74

In FY 2023-24, we have withdrawn 22.49 million m<sup>3</sup> of water, out of which 19.95 million m<sup>3</sup> of water is sourced from surface water (having TDS < 1000 mg/l), 1.78 million m<sup>3</sup> from irrigation department / municipal body, 0.63 million m<sup>3</sup> of water from third party water and only 0.13 million m<sup>3</sup> of water from Fresh groundwater. Water consumption at water stress area locations of GAIL is around 7.62 % of total water consumption.

Water Withdrawal by Sources (Million m <sup>3</sup> )	2021-22	2022-23	2023-24
Fresh Surface Water (Lakes, Rivers etc.)	19.59	14.90	19.95
Fresh Groundwater	0.28	0.15	0.13
Third Party Water	0.63	0.63	0.63
Desalinated Seawater	-	-	-
Municipal Water Supplies	1.69	1.81	1.78

We ensure that our operations have no adverse effects on the supply and quality of water resources throughout our various sites. We have proactively evaluated and mitigated any water-related risk in the future to make our operations resilient. At GAIL, we conduct water audits through third parties to monitor the water demand. GAIL encourages and supports innovative water-saving ideas across sites via various initiatives such as reduced freshwater consumption, rainwater harvesting/collection system, monitoring and management of

wastewater discharge, wastewater treatment and recycling based on our Environmental Policy and national, local and regional guidelines.

GAIL ensures compliance with all applicable rules and regulations about Water Management. Water discharge is monitored continuously on real time basis via Effluent Quality Monitoring System (EQMS). Details of effluent discharged, with respective parameters, are being recorded and further shared with CPCB/SPCB servers on a timely basis. Majority of GAIL's facilities are Zero Liquid Discharge. Wastewater generated at



sites is treated through Effluent Treatment Plant (ETP), and the treated water is discharged to avoid any adverse effect on nearby water bodies. The treatment includes physical, chemical and biological treatment like adjusting pH, removing Suspended Solids and reducing Biological Oxygen Demand (BOD), Chemical Oxygen Demand (COD), Phenols, Oil & Grease, Cyanides, Chromium, etc., to below permissible limits. The treated water is used for horticulture activities. The remaining water is discharged outside the premises and is regularly monitored to comply with the Central Pollution Control Board (CPCB) / State Pollution Control Board (SPCB) effluent norms.

#### GAIL's Water Management Initiatives/Approach to reduce water footprint

- **Pata:**
  - » During FY 2023-24, Rain Water Harvesting Structures were installed at major buildings on plant premises, and 9,75,215 m<sup>3</sup> of rainwater was harvested.
  - » During FY 2023-24, about 1,30,828 m<sup>3</sup> of treated water recycled for horticulture use
  - » The Zero Liquid Discharge (ZLD) project is being implemented to reduce fresh water consumption. The Project Management Consultant (PMC) has been appointed, and further actions are being taken to implement the project.
- **Gandhar:** Rain Water Harvesting Pond within the plant premises to collect natural run-off and recharge groundwater. This surface water is temporarily used for raw water purposes as well.

#### 9.6 Responsible Waste Management

(GRI 306-3, GRI 306-1a, GRI 306-4, GRI 306-5- Refer Performance & Standards)

GAIL has a well-defined Waste Management system that aims to minimise both hazardous and non-hazardous waste. Additionally, we follow 3R

strategy of Reducing, Reusing, and Recycling, thereby accelerating progress towards our waste reduction goal. To explore more ideas for waste reduction at the source or through small changes in operation, we carry out Environment Audits through internal and external agencies (SPCB / 3<sup>rd</sup> party Audits), which also help map our waste management compliances per the regulations. As per the audit for the reporting year, no adverse impact on business operations or products related to waste management was found.

Extended Producer Responsibility (EPR) is applicable to GAIL under Plastic Waste Management Rules 2022. GAIL Pata is registered as a **Brand Owner** of Plastic Raw Material with the CPCB, **Importer** of Plastic Packaging Material and **Producer** with the UPPCB under Plastic Waste Management Rules 2022.

EPR is being fulfilled by procurement of EPR certificates, as per annual EPR targets provided by CPCB / UPPCB applicable to GAIL, Pata as a Brand Owner, Importer and Manufacturer of polymers. As per Pollution Control Board (PCB) norms, battery waste is being recycled through authorised agencies. Also, the e-waste is disposed as per laid down procedures to authorised e-waste agencies.

##### 9.6.1 GAIL's Waste Management Initiatives & Approach / Initiatives towards a circular economy

(GRI 306-1a, GRI 306-2a, b, c)

GAIL aspires to implement the concept of a circular economy by enabling access to innovative, resource-efficient technologies.

- **Pata:** GAIL's Petrochemical Complex, during its industrial operations, generates different types of hazardous/non-hazardous wastes.
- We comply with all the applicable rules and regulations for environmentally sound management of these wastes. Further, GAIL Pata maintains a record of Hazardous Waste in Form-3 as per Hazardous & Other

Wastes (Management and Transboundary Movement) Rules, 2016. GAIL Pata regularly submits Form-4 (Hazardous Waste Return) and Form 10 (Manifest for Hazardous Waste Disposal) to UPPCB, Lucknow.

The following measures have been taken for the management of solid wastes generated at GAIL Pata:

- a) A dedicated Waste Management Procedures is in place to serve as a ready reckoner for all the waste-generating units regarding handling, intermediate storage location, and waste disposal in an environment-friendly manner that meets statutory requirements. Designated intermediate storage locations have been provided for each category of waste.
- b) Disposal of wastes is being done through Authorized Recyclers / Treatment Storage and Disposal Facility (TSDF).
- c) Accounting and tracking of waste is carried out from generation to disposal.
- d) E-waste awareness and collection drives are organised regularly at township premises.
- e) 3200 Tons of waste/scrap sent for recycling.
- f) 80 Tons of organic waste processed in Organic Waste Convertors and used in-house for horticulture purposes during the year.
- g) Domestic organic waste is converted into compost in the Organic Waste Convertor plant installed at the township and plant premises. The compost generated is used in gardens and greenbelt.
- **Gandhar:** GUP Gandhar is carrying out timely and suitable disposal of both hazardous and non-hazardous waste i.e. Disposal of O&M Scrap, Disposal of Slop Oil, Reuse of Mercaptan Drums, Disposal of Biomedical Waste, E-Waste etc.
- a) GAIL Gandhar has taken authorization of GPCB for Hazardous Waste Management. Waste Management is carried out as per the statutory guidelines.
- b) E-waste and used batteries are channelized to dealers, manufacturers, registered recyclers/importers/re-conditioners, or designated collection centres.
- c) Biomedical Wastes generated at First Aid Centres are segregated in colour-coded bins and disposed at the Common Biomedical Waste Treatment Facilities.
- d) All the scraps are segregated at sources and sent to scrap yards for temporary storage; from the scrap yard, the waste is sold to recyclers.
  - **Kandla:** LPG Pumping Station is disposing the Used oil through authorised recyclers.
  - **Abu Road:** No hydrocarbon/hazardous chemical is produced at the LPG booster pumping station. The - metallic and plastic waste generated from maintenance activities is stored at scrap yard and then the scrap is disposed through vendors. Lube oils are sold to authorised recyclers only. Battery Waste is recycled through authorised agencies.
  - **Mansarampura:** Used oil is being disposed of through authorised recyclers. Muck received during basket filter cleaning and pigging activities is disposed at a designated place inside the plant. Bio-degradable canteen waste is disposed through landfilling.

Waste Management procedures were published by Pata plant and shared with all O&M personnel across GAIL to serve as a ready reckoner concerning overall waste management at the unit / complex. This aims to develop a waste management system that can reduce the adverse effects of waste on health, environment and aesthetics, such as incorporation of every identified waste stream generated and its classification under different waste categories as per the existing Waste Management Rules. This led to the incorporation of a designated intermediate Waste Storage Area for all waste streams and methodology for handling inside the unit / complex.



## 9.7 Research and Development Initiatives

Research & Development (R&D) initiatives are necessary for sustainable growth. For a clean-energy marketing company like us, it is essential to find new avenues of business growth that will help us improve our Environment Management System. R&D and innovation are integrated into business processes with the participation of employees at GAIL.

The collaborative R&D works are being carried out in the thrust areas of Pipeline Asset Monitoring and Integrity Management; Natural gas utilisation/Biogas, Polymer, Catalyst development; H<sub>2</sub>/Fuel Cell/Battery, CO<sub>2</sub> Utilisation and Waste management, etc. GAIL R&D has awarded four (04) nos. of new projects in the thrust areas of Pipeline Integrity Management, Catalyst development for Synthetic Natural Gas (SNG), Proton Exchange Membrane (PEM) electrolysers and Fuel Cells.

The major research initiatives undertaken during the reporting period were as follows:

GAIL emphasises leveraging the outcome of R&D-led innovation to accelerate the decarbonisation of existing business operations. In this aspect, GAIL constantly engages with various research institutes to conduct research in the identified thrust areas. This year, the major initiatives focused on developing low-cost catalyst materials for Hydrogen production and storage, catalysts for e-fuels, Proton Exchange Membrane (PEM) fuel cells and developing low-pollution emission cookers.

A copyright was filed jointly by GAIL and IIT-Madras on a new software developed titled:

*"AC Induced corrosion rate estimator for underground buried pipelines"*. The software has been developed as part of an R&D Project on "Quantification of AC - induced corrosion rate in buried pipelines - measurement and physical process model".

GAIL is pursuing a Research project with IIT Kanpur on recovering value-added chemicals

and fuel from Petrochemical oil sludge using a bubbling fluidised bed pyrolysis process to mitigate oily sludge disposal problems while recovering value-rich chemicals and fuels. In addition, a project with IIT Madras to treat wastewater using the hydrate process seeks to develop an optimised hydrate-based wastewater treatment system that shall be as energy efficient as RO-based wastewater purification.

### E-methane production:

Strong collaboration between energy supply and mobility is a pre-requisite for India's transition to renewable energy. Considering the vast network of NG pipeline available in India, producing e-methane (power-to-methane) or synthetic natural gas is one option for sector coupling in India. In the e-methane production scheme, renewable Hydrogen can be used for direct hydrogenation of CO<sub>2</sub> captured from Direct Air Capture (DAC) methods or CO<sub>2</sub> obtained from a concentrated CO<sub>2</sub> source. Thus, in e-methane generation, achieving additional utilisation of the greenhouse gas (CO<sub>2</sub>) that contributes to the climate protection target is possible. Product selectivity in the CO<sub>2</sub> hydrogenation reaction is governed by the catalyst's electronic structure. Different reaction pathways can be obtained by modifying the catalyst's electronic structure through doping and alloying of transition metals. Therefore, developing highly efficient and stable catalysts is the need of the hour for this process.

Under this initiative, GAIL is developing high-efficiency and robust Ni-supported catalysts using various structured supports: Al<sub>2</sub>O<sub>3</sub>, SiO<sub>2</sub>, MgAl<sub>2</sub>O<sub>4</sub>, ZrO<sub>2</sub>, TiO<sub>2</sub>, La<sub>2</sub>O<sub>3</sub> and CeO<sub>2</sub>. This project is being pursued in association with CSIR-IIP Dehradun. The success of the present research work also provides an opportunity for converting one of the major constituents and potent GHGs, CO<sub>2</sub>, in Biogas into pipeline-quality biomethane (CH<sub>4</sub>, 90 vol.% min.) by these methanation processes.

### Hydrogen Production:

Clean hydrogen is expected to be crucial in

decarbonising the energy value chain. However, significant research challenges in electrolyser technology must be overcome to reduce the cost of Hydrogen. In this aspect, polymer-based PEM water electrolysis, i.e. PEMWE technology, is most attractive as it shows markedly enhanced performance in terms of low ohmic resistance, high current density and operating pressure, as compared to conventional Alkaline Water Electrolysis (AWE) technology. However, the large-scale deployment of PEMWE devices is obstructed mainly by the lack of active, stable and low-cost electro-catalysts.

Therefore, our research efforts in this area are focused on investigating low-cost but active earth-abundant metal-based catalysts, especially transition metal (TM) based ones. Accordingly, GAIL targets the synthesis of high-efficiency, non-noble metal oxide-based electro-catalysts using defective and metal-doped oxides that work with low over-potential and under high current densities in acidic conditions. This project is being pursued in collaboration with the Centre for Nano and Soft Matter Sciences (CeNS), Bengaluru.

#### **PEM Fuel Cell:**

Proton Exchange Membrane (PEM) fuel cells are promising technology as the next generation of power sources for transportation, stationary and portable applications due to their advantageous characteristics, such as low operating temperature, high power density, and easy scale-up. Current technological barriers to the broader deployment of PEM fuel cells include the durability and cost of Pt-based catalysts.

In this aspect, GAIL is collaborating with CeNS Bengaluru to develop an indigenous scalable synthetic protocol for Pt-based catalysts for PEM Fuel cells.

In addition, GAIL is also carrying out collaborative research through the Centre for High Technology (CHT) in association with IOCL and High Energy Battery Pvt Ltd, Trichy, for the indigenous development of a 01 kW PEM fuel cell. The main

objective of this project is to use a deficient quantity of Platinum loading ( $0.4\text{mg}/\text{cm}^2$ ) in an electrocatalyst. In addition, this project also aims to develop a lab-scale prototype SPEEK-based membrane as an alternative to Nafion and hydrogen generation through Sodium Borohydride Hydrolysis using a Cobalt-based catalyst.

#### **Chemical Storage of Hydrogen:**

Safe, practical, and affordable storage of hydrogen, as well as its ease of transport, remain challenges to a prosperous hydrogen economy. Liquid Organic Hydrogen Carriers (LOHCs) represent an extremely attractive and desirable option for the chemical storage of hydrogen for bulk storage.

In this direction, GAIL is pursuing a research project in collaboration with CSIR-NCL to develop cost-effective transition metal catalysts for the hydrogenation/dehydrogenation of amines and alcohols as liquid Organic hydrogen carriers, leading to practical and affordable hydrogen storage.

#### **Solar cooking system:**

To participate in the Government's initiative under a clean cooking mission, GAIL is targeting the development of two prototypes of a 01 kW solar PV cooking system using an inductive heating mechanism and a thermal energy storage-based cooking system suitable for rural applications. This initiative is being pursued with CSIR-Central Mechanical Engineering Research Institute (CMERI), Durgapur and CSIR-Central Electronics Engineering Research Institute (CEERI), Jaipur Centre.

In addition to collaboration with various research institutes, GAIL has also partnered with other central Oil and Gas PSE's to set up a Center for Excellence for Oil, Gas and Energy (CoE-OGE) in IIT-Bombay for capacity building of Oil & Gas executives through extensive training and to develop cost-effective and feasible solutions through mission mode approaches for the



challenges faced by Oil & Gas industries.

Apart from these initiatives, GAIL has filed 02 Indian patents during the year. Further, 12 patents were granted during the year. So far, GAIL has been granted a total of 32 patents (29 under Indian Category and 3 under Foreign Category) for novel concepts, products and processes.

#### **9.7.1 Expenditure on Research and Development Activities**

GAIL allocates an adequate budget under R&D/ Innovation initiatives to carry out collaborative research works with various research institutes

and execute various innovation activities involving technology upgrades at various GAIL facilities.

GAIL consistently allocates and spends nearly 2% of PBT for R&D Innovation initiatives. During the FY 2023-24, the total R&D expenditure is INR 250.20 Crores. This includes INR 20.36 Crores on collaborative research projects and INR 229.84 Crores on innovation initiatives. Research initiatives at GAIL are carried out in thrust areas, which are identified based on their ability to serve our current business requirement and present a future business potential.

	2023-24	2022-23	Details of improvements in environmental & social impacts
R&D (Revenue expenditure on Collaborative Research works)	INR 20.36 Crores (8.14 %)	INR 12.39 Crores (7%)	Our collaborative R&D efforts are mainly focused on Pipeline Asset Monitoring and Integrity Management; Natural Gas utilization/Biogas, Polymer, and Catalyst development; CO2 Utilization and Waste management; H2/Fuel cell/Battery etc.
Capex (Innovation activities)	INR 229.84 Crores (91.86%)	INR 168.32 Crores (93%)	Innovation and developmental projects are being implemented at various GAIL sites through technology renewal and modernization works, which benefits in terms of improved process/efficiency/safety and/or cost minimization.
<b>Total</b>	<b>INR 250.20 Crores</b>	<b>INR 180.71 Crores</b>	

#### **9.7.2 Initiatives to promote low carbon technology, including CO2 utilization, clean energy, etc**

Low-carbon technology for the De-Carbonization of the Natural Gas value chain is an essential cornerstone of our sustainable business operations. In this aspect, GAIL is developing robust catalysts for e-fuels (e-methane), earth-abundant and cheap low-cost catalyst materials for hydrogen production and storage, PEM fuel cells and the development of solar cookers.

#### **9.7.3 Start-up Initiatives taken by GAIL**

GAIL's Start-Up Initiative 'Pankh' sees investment in innovative or high-growth potential Startups as an opportunity to derive long-term benefits

in terms of gaining technical know-how/ competitive advancement on new technology and access to relevant technology and benefit to the society upon the success of such entities. Under this initiative, an initial Corpus of INR 100 Crores has been created for funding new & promising startups working in focus areas. GAIL adopted a portfolio approach for its investment to reduce the risks involved. Investment in Startups is spread across diverse areas like AI, Logistics, Electric Mobility, Nutrition, Rural Development, Health, Pipe Inspection, Energy, Renewable Energy, Environment, Bio Products, IOT, Industry 4.0 (process improvement), Fintech sector with credit line for products for social cause etc.

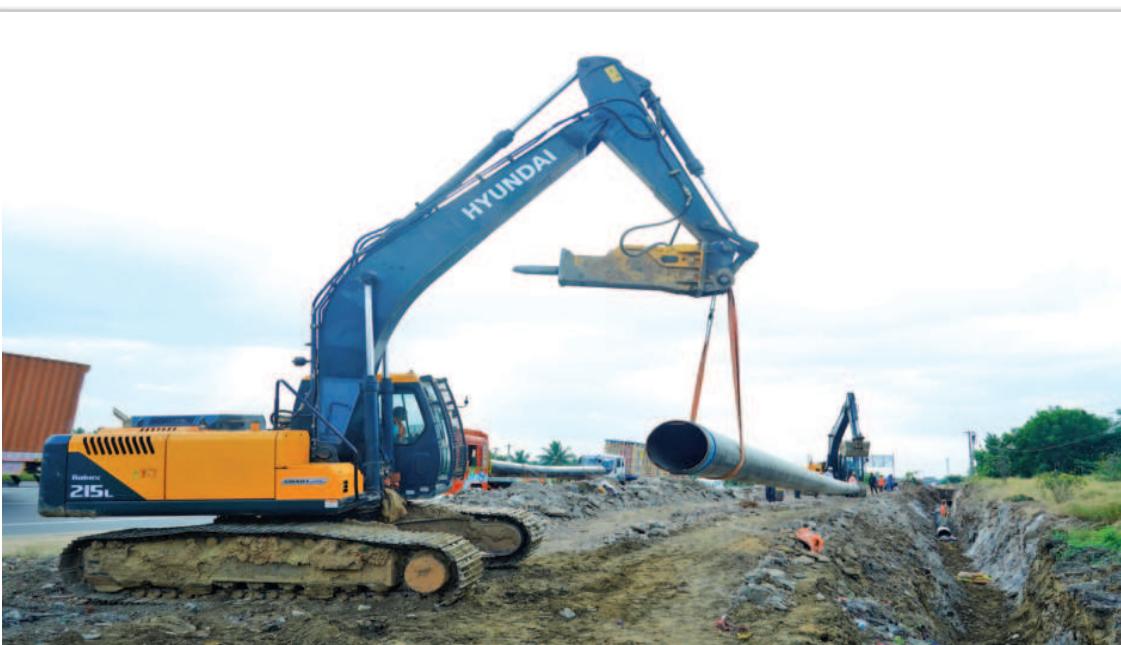
During FY 2023-24, GAIL has signed an investment agreement with one (1) Startup with a financial

commitment of INR 1 Crore. Cumulatively, GAIL has supported 35 startups with a total investment commitment of INR 70.69 Crores and a total disbursement of INR 65.39 Crores. The valuations of some of these startups based on the current market trends have appreciated many folds. In FY 2023-24, 04 Numbers of GAIL-supported Startups have raised funds at a higher valuation than the valuation at which GAIL made the initial investment.

M/s Orxa Energies commercially launched its performance, heavy-duty e-bike under the brand name Mantis in Nov 2023, and it has become the first Indian EV OEM to achieve the milestone of 'successful patenting of its own ABS technology' for two-wheeler.



Heavy-duty E-bikes by GAIL-supported M/s Orxa Energies



Laying of Natural Gas Pipeline

10



## Climate Change



Net Zero strategy aims to achieve a 100% reduction in Scope 1 and Scope 2 emissions by 2035 and a 35% reduction in Scope 3 emissions by 2040 from the baseline year of 2020-2021.



GAIL has an installed capacity of 118 MW of wind power and 17 MWp of Solar Power.



The total renewable energy generated by GAIL during FY 2023-24 is around 201 Million Units.

# Climate Change

Climate change is one of the most critical problems affecting ecosystems, businesses, and communities worldwide. Despite efforts to reduce emissions, global greenhouse gas emissions have continued to rise over the past few decades.

As a responsible corporate, we acknowledge the urgent need to combat climate change and are dedicated to contributing to its mitigation. The following are some of the increasingly common effects of accelerated climate change that nations are already experiencing:

**Temperature Rise:** Global temperatures have been increasing steadily, with each successive decade since the mid-20<sup>th</sup> century warmer than the previous one. This trend is attributed primarily to human activities, particularly the emission of greenhouse gases like Carbon Dioxide and Methane. Global warming has led to more frequent and intense heatwaves, changes in precipitation patterns, melting glaciers and ice caps, and rising sea levels.

**Extreme Weather Events:** There has been a noticeable increase in the frequency and intensity of extreme weather events, such as hurricanes, cyclones, floods, droughts, and wildfires, which are linked to climate change. These events devastate communities, economies, and ecosystems, highlighting the urgent need for adaptation and resilience measures.

While progress is being made in certain areas, the current status of climate change underscores the need for accelerated and concerted action at all levels of society to mitigate its impacts, adapt to changing conditions, and build a more sustainable and resilient future.

## 10.1 Climate Change and Sustainable Development

(GRI 3-3)

According to the World Meteorological Report, the global average temperature has risen to

1.4 degrees Celsius above pre-industrial levels. To limit the temperature, increase it to within 1.5 degrees Celsius, the carbon budget plays a crucial role by allowing a specific amount of carbon dioxide emissions over a certain period. According to the IPCC Sixth Assessment Report, the remaining global carbon budget, which provides a 50% probability of limiting global warming to 1.5 degrees Celsius, is estimated at 300 GtCO<sub>2</sub>. In the last two centuries, anthropogenic activities have increased atmospheric carbon dioxide concentrations by 50%, leading to climate change. As of April 2024, atmospheric CO<sub>2</sub> concentration stands at 426.57 ppm, nearing the critical threshold of 430 ppm, beyond which the climate system faces escalated risks, according to NOAA GML (Mauna Loa Observatory).

## Natural Disasters in India

Recent floods in Northern India and Cyclone Biparjoy in Gujarat have caused significant loss of life and economic damage. The heavy toll on infrastructure, including the energy sector, underscores India's vulnerability to natural hazards due to its geographical features.

India with 764 instances of natural disasters recorded since 1900 ranks third globally, after the US and China. From 2001 to 2022, India experienced 361 natural disasters, impacting 100 crore people and causing nearly 85,000 deaths. Floods account for 41% of these events, followed by storms. The economic impact is substantial. Of the \$ 284 billion in global economic losses from natural disasters in 2022, \$275 billion were attributed to such events. Since 1900, India has incurred \$150 billion in financial losses, with floods causing \$ 92.1 billion and storms \$ 44.7 billion. Cyclone Biparjoy alone is estimated to have caused economic losses of about INR 830 Crores (\$100 million). The recent North India floods have affected Himachal Pradesh, Uttarakhand, Punjab, Uttar Pradesh, Rajasthan,



Jammu & Kashmir, and Delhi, with expected economic losses between INR 10,000-15,000 Crores. Himachal Pradesh alone faces damages between INR 3,000-4,000 Crores because of roads, transformers, electric substations, and water supply schemes affected by floods (SBI Research, Swiss Re, Sigma 2023).

**During COP28, Prime Minister Narendra Modi addressed the summit and emphasized India's commitment to balancing ecological sustainability with economic growth. He highlighted India's achievements in reducing carbon emissions and expanding renewable energy. PM Modi noted that despite having 17% of the global population, India contributes less than 4% to global carbon emissions. He reaffirmed India's goal to reach 'Net-Zero' by 2070 and mentioned the country's progress in achieving non-fossil fuel targets ahead of schedule, with plans to reduce emissions by 45% before 2030.**

**PM Modi also proposed hosting COP33 in India in 2028 and introduced the 'Green Credit' initiative to incentivize environmentally friendly actions. He called for global cooperation, especially from developed nations, to provide technological and financial support to developing countries to combat climate change effectively.**

India is committed to achieving 50% non-fossil-based installed energy capacity by 2030, as per the MoEFCC report. The nation now has 186.46 GW of installed non-fossil fuel-based energy resource capacity, comprising 7.48 GW of nuclear power and 178.98 GW of renewable energy. Furthermore, 55.13 GW of capacity is being put out to bid, and 114.08 GW is being implemented. In May 2024, the Ministry of New and Renewable Energy (MNRE) reported that 42% of India's installed electrical generation capacity came from non-fossil fuel sources. India has succeeded in creating an additional carbon sink of 1.97

billion tonnes of CO<sub>2</sub> equivalent, according to the Forest Survey of India (FSI), Dehradun.

The Sustainable Development Goals (SDGs) are 17 global goals set by the United Nations in 2015 to end poverty, protect the planet, and promote peace and prosperity for all by 2030. They address various issues like health, education, gender equality, climate action, and sustainable economic growth. GAIL's climate change actions are aligned with the following specific SDGs, indicating our commitment in supporting these goals.

No	SDG	Linking with Climate Change
1.	<b>SDG 7: Affordable and Clean Energy</b> 	An immediate increase in renewable energy technologies and improved energy efficiency is essential for India to reach its Paris Agreement goals, as stated under its NDC. Cleaner fuels, compared to conventional high-carbon emitting ones, will serve as a transition platform to achieve a Net-Zero emission target.
2.	<b>SDG 09: Industry, innovation and infrastructure</b> 	Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation. GAIL is in the business of expanding Natural Gas pipeline infrastructure and contributing to development of National Gas grid in India.

No	SDG	Linking with Climate Change
3.	<b>SDG 11: Sustainable cities and communities</b> 	Make cities and human settlements inclusive, safe, resilient and sustainable. GAIL is supplying Natural Gas, which is a cleaner fuel, as CNG and PNG in various cities across India.
4.	<b>SDG 12: Responsible Consumption and Production</b> 	The production of goods and services today depletes natural resources, causes environmental degradation, including soil, water and air pollution, and generates huge amounts of GHGs, contributing to climate change throughout their life cycle.
5.	<b>SDG 13: Climate Action</b> 	Climate Action (SDG-13) is crucial in addressing the growing climate change concerns. GAIL recognizes the importance of reducing greenhouse gas emissions and promoting sustainable practices to achieve the climate goals of the Paris Agreement.

## 10.2 Vision and Action Pertaining to Climate Strategy

GAIL is committed to contributing significantly to India's Nationally Determined Contributions (NDC) and advancing towards carbon neutrality. To contribute to achieve the NDC target, GAIL aims to install 1.7 GW of renewable energy capacity by 2030. This ambitious goal underscores GAIL's dedication to sustainable energy development and environmental stewardship.

- Quality of Life:** We strive to transform the lives of the people we touch by providing sustainable, improved and environment-friendly products and services.
- Net Zero Target and Roadmap:** GAIL has set a GHG Emission Reduction target and developed a roadmap.
- Natural Gas and Clean Energy:** We promote superior, sustainable, environmentally friendly, and efficient energy sources,

including Natural Gas and Clean Energy sources.

- Value Creation for Stakeholders:** We aspire to fulfil the aspiration of our broader stakeholder community, including employees, customers, partners and society, by creating sustainable value. We are accountable for delivering superior results, generating value, and creating economic opportunities for underprivileged sections of society.
- Environmental Responsibility:** We promote the highest operational safety standards, employee health and a cleaner environment. We continually strive to minimise our impact on the environment and the community.

As the world faces increasing impacts of climate change, adaptation and mitigation strategies have become crucial. GAIL has responded to these challenges by initiating various projects to



GAIL (India) Limited

## Sustainability Report 2023-24

### New India New Energy

address both aspects. The primary objective is to achieve net-zero emissions, thereby significantly aiding India's NDC while setting a global standard for the fossil fuel sector. This will be accomplished through a climate risk management process for adopting advanced technologies, substantial investments in renewable energy, and improvements in operational efficiency.

GAIL's proactive and collaborative sustainability efforts, coupled with its commitment to achieve net zero targets, are expected to foster innovation and encourage the development of effective climate change solutions.

#### 10.2.1 Adaptation

GAIL is developing various adaptation strategies to address climate-related physical and transition risks. For physical risks, GAIL is continuously enhancing the resilience of its assets and infrastructure against extreme weather events through robust design and management systems, as well as implementing advanced monitoring systems to detect and respond to climate-induced disruptions. For transition risks, GAIL is diversifying its energy portfolio by investing in a low-carbon economy, aligning its operations with regulatory frameworks and standards,

and adopting energy-efficient technologies to reduce its carbon footprint and ensure long-term sustainability in a transitioning energy market.

GAIL is actively implementing Renewable Energy projects to reduce the impact of climate change by investing in large-scale Solar power plants, Wind energy farms, and Hybrid renewable systems that combine solar and wind technologies to enhance energy production efficiency and reliability.

Enhancing capacity for water storage, improving water evacuation systems at sites, and designing plants to withstand extreme weather conditions are key measures that will help tackle climate change-related risks.

Furthermore, GAIL strives to incorporate mitigation measures during the design phase of construction, and all its coastal sites in India are equipped with flood mitigation systems. GAIL also has a Crisis Management Plan in place to facilitate the safe shutdown of its operations when necessary.

The Emergency Response and Disaster Management Plan (ERDMP), the Incident Reporting System (IRS) and Evacuation Standard Operating Procedure ensure effective management of any possible disaster at GAIL.

#### 10.2.2 Mitigation

Climate Change Risk	Types of Risk	Rationale	Mitigation Measures
Physical Risk	Extreme weather conditions, Sea level rise, and Biodiversity loss	The supply chain can be disrupted, and assets may sustain damage as a result of extreme weather conditions	Key strategic initiatives include creating alternative supply networks, improving location-specific ERDMP (Emergency Response Disaster Management Plans) that include Preparedness, Mitigation, Planning and Restoration (PPMR), building assets that are resilient to climate risks and prioritising digitalization for real-time monitoring, improving emission accounting, early leakage detection, and enhancing energy consumption.

Climate Change Risk	Types of Risk	Rationale	Mitigation Measures
Physical Risk	Regulations, Reputation and non-compliance	Risk of Legal implication/reputation loss/penalties in case of non-compliance to applicable Regulatory compliances	Necessary measures are taken to comply with all the relevant conditions mentioned in the License / Consent/ Authorization / applicable rules & regulations.  Compliance with timely consents/licenses/ authorization renewal is ensured and tracked through a SAP-based application.  Review of compliance status is carried out on a monthly/quarterly basis in DSRM/MRM.
Transition Risk	Market	Climate change is a significant concern, and the shift to clean energy may adversely impact the demand for Oil and Gas products. Customer initiatives to reduce emissions may reduce demand and impact prices as well.	Investing in alternative green fuel sources such as Ethanol Blended Petrol, Biofuels, Green Hydrogen and Renewable Energy sources is also important.
	Technology	The rise in GHG emissions and global warming has led countries and corporations to adopt Net Zero Targets, creating additional financial burdens for adopting clean technologies and transitioning to green energy.	GAIL is actively working towards reducing GHG emissions through various decarbonization levers such as Electrification of existing natural gas-based equipment, Renewable Energy projects, CO2 valorisation, Compressed Biogas (CBG), Green Hydrogen, Energy Efficiency projects, and Afforestation, among others. GAIL is actively investing in climate-resilient assets and infrastructure to withstand extreme weather conditions and implement emergency disaster management preparedness at different sites and locations.

### 10.3 Net Zero Strategy

GAIL has adopted a science-based approach and methodology to develop a comprehensive Net-Zero strategy roadmap. The Net Zero Action Plan has been developed on the basis on three strategic elements of Decarbonisation namely:

- Avoidance
- Mitigation and
- Offsetting

To accelerate our journey toward Net Zero, we have identified the following strategic pillars:

- a. Operational Decarbonisation
- b. Energy Transition
- c. Carbon Capture Utilization and Storage (CCUS)
- d. Offsetting

GAIL will continue to explore innovative solutions and partnerships to achieve our decarbonisation goals.

GAIL's science-based Net Zero ambition and action plan involved an in-depth assessment of GAIL's GHG footprint across operational boundaries (Scope 1 and Scope 2) and the value chain (Scope 3). GAIL has also evaluated global target-setting approach and best practices in carbon reduction across the Oil & Gas sector. Furthermore, GAIL engaged with stakeholders to review its growth plans and assess organisational readiness toward Net Zero.

Based on the assessments, we have developed a clear carbon abatement roadmap with short, medium and long term targets across Scope 1, Scope 2 and Scope 3. Our Net Zero strategy

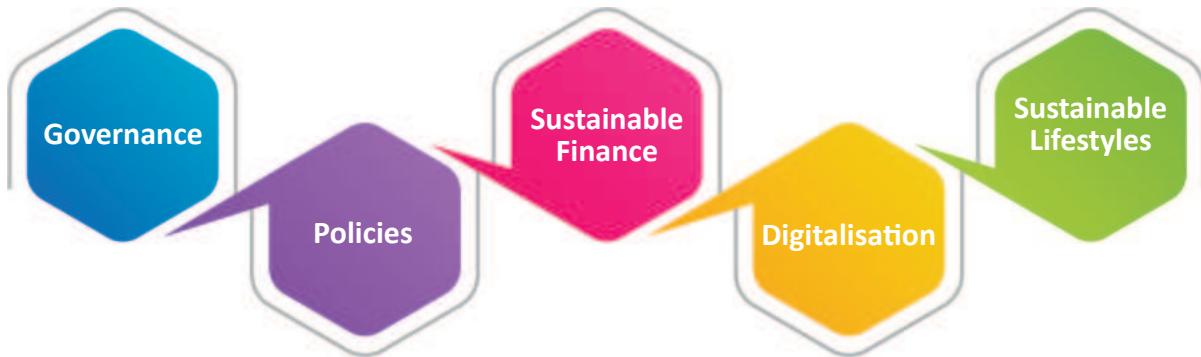


aims to achieve a 100% reduction in Scope 1 and Scope 2 emissions by 2035 and a 35% reduction in Scope 3 emissions by 2040. We have also explored decarbonisation levers, energy transition opportunities and green financing options to accelerate our transition to Net Zero.

As a first step towards achieving Net Zero target, GAIL has decided that all the new Projects to be implemented in future, shall preferably be 'Net Zero by Design'. This shall help to substantially reduce the overall emissions. Further, our plan to reduce our carbon footprint has divided these pillars into levers for detailed working areas.

Net Zero Strategic Elements	Net Zero Pillars	Net Zero Levers	Coverage of Scope 1, 2, 3 Emissions
Avoidance	New projects shall preferably be 'Net Zero by Design' by utilizing suitable Pillars and Levers		1, 2, 3
Mitigation	Operational Decarbonisation	<ul style="list-style-type: none"> <li>• Energy Efficiency Improvement</li> <li>• Electrification of existing NG based equipment</li> </ul>	1
Mitigation	Energy Transition	<ul style="list-style-type: none"> <li>• Renewable Energy (RE)</li> <li>• Green Hydrogen</li> <li>• Bioenergy - Compressed Bio Gas (CBG), Ethanol</li> <li>• Battery Energy Storage System (BESS)</li> </ul>	1, 2, 3
Mitigation	Carbon Capture Utilization and Storage (CCUS)	<ul style="list-style-type: none"> <li>• CO2 Valorization</li> <li>• Direct Sale</li> <li>• Value-added Products</li> </ul>	1,
Offsetting	Offsetting	<ul style="list-style-type: none"> <li>• Afforestation</li> <li>• Offsetting by Carbon Credits, Green Credits, Renewable Energy Credits</li> </ul>	1, 2, 3

## Key Enablers

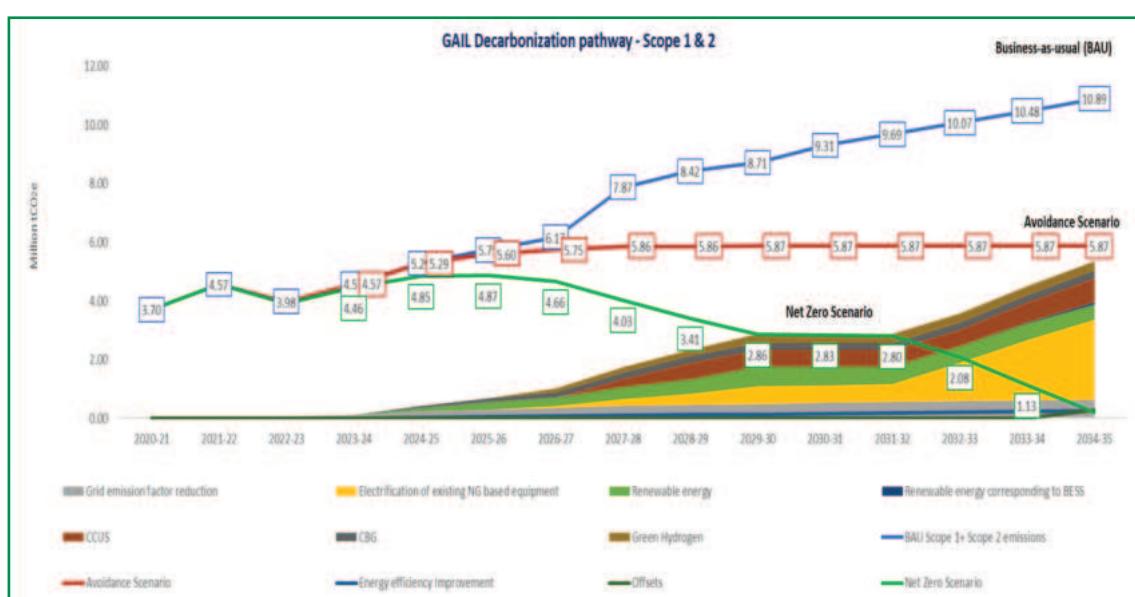


### Projected GHG Emission Scenarios in Strategic Roadmap to Achieve Net Zero

For the estimation of projected emissions, an analysis of the baseline emissions was carried out. GAIL has been reporting its GHG emissions since 2011. Time Series data has been analysed and maximum possible emissions observed in the last 03 years were taken. In addition to these baseline numbers, projects planned by GAIL to be commissioned in the coming years were also accounted in GHG emissions calculations.

The projections for Scope-1 & 2 were divided into three scenarios as detailed below:

- In the Business-as-usual (BAU) Scenario, projections have been made considering no interventions by GAIL to curb Scope-1 & 2 emissions.
- In the Avoidance Scenario, it is considered that the new Expansion Projects should preferably be “Net Zero by Design” so that the Baseline emission do not increase further. This ‘Avoidance Scenario’ shall help to limit the emission to a large extent.
- In the Net Zero Scenario, which is the desired scenario, the impact of all the decarbonization levers in emission reduction have been accounted to reflect a gradual reduction in emissions to “Zero”.





## 10.4 Net Zero Action Plan

### 10.4.1 Operational Decarbonization

Operational Decarbonisation includes the technologies and initiatives undertaken or planned by GAIL to reduce its direct operational GHG emissions (Scope 1 and Scope 2) through energy efficiency, fuel switch, electrification etc.

**Energy Efficiency:** Energy efficiency is one of the most significant measure for optimising energy demand in the Net Zero Emissions (NZE) scenario, alongside closely related measures such as electrification, digitalisation and material efficiency. GAIL has identified several projects, including the Waste Heat Recovery project at Gandhar, the Flare Gas Recovery unit, and the venting-to-fuel unit at Vijaipur, as well as the use of portable compressors and other small-scale efficiency improvements. These initiatives are expected to lead to ~4.6% reduction in total operational GHG emissions by 2030.

### Installation of modern and new energy-efficient equipment

At GAIL sites, there is a continuous effort to replace old and low energy-efficient equipment with alternatives to enhance reliability and safety. Major initiatives in this direction include:

- The replacement of 15 inefficient Gas After Cooler (GAC) motors with energy-efficient IE-3 motors leading to an approximate reduction of 98 tCO<sub>2</sub>e in GHG emissions.
- The installation of 199 energy-efficient 5-star rated air conditioners reduced 94 tCO<sub>2</sub>e in total GHG emissions during the year.
- The switch from 398 inefficient light bulbs to energy-saving LEDs, which resulted in a reduction of 55 tCO<sub>2</sub>e in GHG emissions.
- GAIL plans to Electrify existing NG Based Equipment of 686 MW capacity by 2035.

The various initiatives planned or undertaken are as follows:

#### Vijaipur Plant:

- i. Measures are being taken to reduce natural gas venting during pipeline repair and

maintenance. This initiative is expected to save approximately 3 MMSCM of Natural Gas annually.

- ii. GAIL has recently commissioned a 4.3 TPD Green Hydrogen production unit at Vijaipur. A phased approach to blending Green Hydrogen with Natural Gas in gas turbines for power generation is expected to reduce approximately 0.22 million tons of carbon dioxide equivalent emissions.
- iii. Conversion of Gas Turbine drives to Electric Drives in GTCs to abate CO<sub>2</sub> emissions.
- iv. Work under progress for Electrification of 01 No. HVJ Compressor Drive (1.66 MW) in Phase 1 (FY 2024-25 to FY 2027-28).

#### Pata Plant:

- i. Pata exceeded Bureau of Energy Efficiency (BEE) PAT Cycle IV target of 6.1% reduction in Specific Energy Consumption by achieving a significant 22% reduction through innovative projects and conservation efforts.
- ii. A comprehensive Leak Detection and Repair (LDAR) program is being carried out periodically to reduce fugitive emissions substantially.
- iii. Old equipment is being gradually replaced with 5-star rated energy-efficient equipment, such as air conditioners, fans, and coolers to reduce energy consumption.
- iv. Comprehensive surveys and rectification of faulty valves connected to flares have reduced flared gas flow and subsequent loss of hydrocarbon.
- v. Pre-Feasibility Report (PFR) for Electrification of Natural Gas driven equipments at GPU GAIL-Pata (for Lean Gas Turbines and RG Heater) is been prepared.

#### Gandhar Plant:

- i. Implementation of a closed-loop Chiller deriming procedure and development of Standard Operating Procedures (SOPs) for flare minimisation, along with the Ability Based Tariff (ABT) Scheme and summation

- metering at switch yards, have resulted in a reduction of 0.07 MMSCM of Natural Gas flare per instance, minimising plant tripping and subsequent flaring losses.
- ii. SF6 circuit breakers have been replaced with vacuum circuit breakers to avoid SF6 emissions.
  - iii. A comprehensive fugitive emission monitoring and control mechanism is in place, with quarterly monitoring to identify and address fugitive emissions from the process area.
  - iv. In FY 2023-24, out of the total electricity consumed by GAIL Gandhar (14,198,855 kWh), 8,082,538 kWh was offset by Wind energy, accounting for 57%.
  - v. Flare reduction measures by an interconnection from GPU flare header to LP Fuel Gas Knock Out Drum (KOD).
  - vi. Energy savings from Instrument Air compressor
  - vii. Installation of HRSG for Waste Heat Recovery in Feed Gas Turbine

#### **Jhabua Compressor Station:**

- i. Jhabua Compressor Station transitioned from GTG power to Grid power as of February 24, 2024. This shift has resulted in a potential electrical energy saving of approximately 2,928,000 kWh per year due to electrical load optimisation. It has also reduced fuel gas consumption by approximately 5.3 MMSCM per year, leading to a net reduction of approximately 7,073 tCO2e in GHG emissions for FY 2023-24, which is equivalent to installation of two Numbers of 02 MW typical Wind turbines to offset carbon emissions annually.
- ii. 03 Numbers of Siemens make dry, low-emission Gas Turbine Compressors (GTC) installed at Jhabua Compressor Station - These GTCs use process gas as a mechanical seal. Earlier, only an HVJ line was available for seal gas. Due to the distance of the seal

gas tap-off point and low pressure in HVJ, the seal gas line-up was a time-consuming and expensive process. Recently, an in-house modification has been done to use DVPL-2 gas as seal gas (which has higher pressure than HVJ) near the compressors. This modification has resulted in significant time and fuel savings. In FY 2023-2024, the RR DLE GTC ran for more than 135 days, leading to savings of approximately 665 KSCM of fuel gas. This change has also resulted in a reduction of 1,382 tCO2 in Scope 1 GHG emissions.

- iii. Replacement of Old equipment with modern and New age energy efficient equipment - It is a continuous drive at installations of GAIL to identify and replace old and inefficient air-conditioning or lighting systems with new-age and energy-efficient equipment. In this direction, Retrofitting/replacement of conventional HPMV/HPSV lamps & other lighting systems with energy-efficient LED fittings & lighting systems at some of the installations are expected to result in an estimated energy saving of approximately 10,32,471 kWh per year.
- iv. Modification at Jhabua Compressor Station for operation flexibility - A small in-house modification has been implemented to reduce the pressure drop at compressor suction and is expected to save approximately 3,705 SCMD fuel gas.

**Chhainsa Compressor Station:** The Chhainsa Compressor Station situated on the Vijaipur-Dadri Pipeline transitioned from Gas Engine Generator (GEG) power to Grid power in July 2023. This step has resulted in approximate annual electrical energy saving of 18,65,000 kWh.

**Renewable Energy:** GAIL is committed to reducing its carbon footprint. It has already implemented renewable projects, resulting in a total installed capacity of ~135 MW, of which 118 MW is Wind power & ~17 MW is Solar power.. All the solar power generated (except the 5 MW plant at



GAIL (India) Limited

## Sustainability Report 2023-24

### New India New Energy

Ramgarh, Jaisalmer) is for captive use only and consumed internally. Further, power generated from the 19.2 MW installed Wind power capacity in Gujarat is being wheeled through the GETCO network for consumption at the following GAIL installations:

- Hazira
- Gandhar
- Vaghodia
- Samakhiali
- Kandla

The total renewable energy generated by GAIL during FY 2023-24 is around 201 Million Units.

GAIL plans to establish solar PV projects to minimise carbon emissions and support the country's clean energy initiative. The company is examining various opportunities to create a significant solar energy portfolio. The company has set a target to develop 1.7 GW of Renewable Energy by 2030 through organic and inorganic means. GAIL plans to achieve 2,400 MW Renewable Energy corresponding to the requirement of Electrification of NG-based equipment & 870 MW Renewable Energy for Existing Power Consumption by 2035.

The various RE projects planned/undertaken are as follows:

- a. 15 MW Floating Solar in Pata Plant- A Project Management Consultant is being engaged
- b. 10 MW Solar ground-mounted at Vijaipur Plant- work under progress
- c. 1.8 MW Solar ground mounted at Vijapur Plant- work under progress
- d. 7.75 MW Floating Solar in Vijaipur Plant – Tender is under preparation
- e. 100 MW Solar power projects in Uttar Pradesh- Land acquisition is under progress
- f. 170 MW Wind power project in Usar- Tender Floated

GAIL has cumulatively invested INR 720.86 Crores till FY 2023-24 on renewable energy.

**New Renewable Energy addition:** At various GAIL installations, many grid-connected and off-grid solar power plants equivalent to 1,489 KWp have also been installed and commissioned to harness renewable solar energy, as detailed below:

- a. **JLPL Network:** 601 KWp Grid-connected Solar power plants
- b. **Vadodara:** 139 KWp Grid-connected Solar power plant
- c. **Kailaras:** 7.5 KWp Grid-connected Solar power plant
- d. **Khera:** 22 KWp Grid-connected Solar power plant
- e. **Chhainsa:** 348 KWp Grid-connected Solar power plant
- f. **Cherlapally:** 131 KWp Grid-connected (Net metering) Solar power plant
- g. **KKBMPL:** 5 KWp Grid Solar power plant
- h. **Mumbai:** 100 KWp Off-Grid Solar power plant
- i. **Hazira:** 135 KWp Grid-connected Solar power plant

#### 10.4.2 Energy Transition

##### (GRI 302-4, 302-5)

Energy transition includes the technology switch and initiatives taken to replace the existing source of energy i.e. Natural Gas. Presently, Natural Gas is conceived as a comparatively clean transitional fuel. However it is not the clean fuel of the future. Hence, GAIL will need to explore alternate green fuel sources to reduce its emissions. Initiatives taken under the Energy transition will contribute towards the Scope 1&3 reduction. GAIL focuses on energy transition initiatives such as Electrification, Renewable Energy, Compressed Bio Gas, Bio-Ethanol and Green Hydrogen.

- a. **Green Hydrogen:** GAIL started the first program of blending Hydrogen with Natural

Gas into the CGD network of M/s Aavantika Gas Limited, Indore. 2% (v/v) Hydrogen blending in the CGD network has been increased to the current 5% (v/v) Hydrogen blending in the PNG Network. GAIL has also commissioned a 10 MW Green Hydrogen Electrolyzer unit with a production capacity of 4.3 TPD in Vijaipur, using Proton Exchange Membrane (PEM) technology in line with the Government of India's 'National Green Hydrogen Mission'. The purity of hydrogen from this plant shall be 99.999% (by vol.) and will be produced at a pressure of 30 Kg/cm<sup>2</sup>g. GAIL plans to set up an Electrolyzer Capacity of 310 MW, equivalent to a Green Hydrogen production capacity of 45 KTA by 2030.

- b. Ethanol blending: In line with the Government of India's aim to decrease oil imports and achieve 20% blending of Ethanol by 2025, GAIL is considering setting up a 500 KLPD grain-based 1G Ethanol plant in Rajasthan to support this goal.
- c. **Compressed Bio Gas (CBG):** The Ministry of Petroleum & Natural Gas has launched the Sustainable Alternative towards Affordable Transportation (SATAT) initiative to promote Biogas/CBG. GAIL has issued 403 LOIs till March 2024. MoP&NG has granted approval for the supply of Biogas/CBG co-mingled with domestic gas to all CGD entities at Uniform Base Price (UBP) for use in CNG (T) and PNG (D) segments of CGD networks. GAIL has been assigned to operationalise the CBG-CGD Synchronization Scheme for CBG produced by plants in CGD networks. The Cumulative Biogas/CBG sale under the Synchronisation scheme is 11,000 TPA for FY 2023-24. GAIL has committed to setting up CBG plants nationwide, aiming towards Atmanirbhar Bharat. GAIL plans to set up 26 CBG plants by 2030 at different locations with an approximate capacity of 10 TPD for each plant. Presently, GAIL is in the advanced stage of setting up a 5 TPD CBG plant at

Ranchi, which will process 150 TPD of Municipal Solid Waste (MSW) and 15 TPD of Cow Dung. GAIL and TruAlt Bioenergy Limited (TBL) signed a non-binding Term Sheet with the intent to set up 10 Compressed Biogas (CBG) plants with GAIL's equity participation in TruAlt's Joint Venture company Leafinti Bioenergy Private Limited.

- d. **Battery Energy Storage System (BESS)** – GAIL is targeting setting up 1000 MWh capacity of BESS and corresponding Renewable Energy (for BESS) capacity of 100 MW by 2035.

#### **10.4.3 Carbon Capture, Utilization and Storage (CCUS):**

CCUS technology encompasses methods and technologies to remove CO<sub>2</sub> from reaching the atmosphere. The CO<sub>2</sub> is captured from significant emission sources by either storing it permanently or utilising it. CCUS, if deployed within GAIL's operations, can reduce GAIL's Scope-1 emissions. CCUS, if deployed at the consumer's operation, will reduce Scope-3 emissions. GAIL plans to abate ~2,500 TPD of CO<sub>2</sub> Emission through CO<sub>2</sub> Valorisation. These initiatives reflect GAIL's commitment to driving sustainable innovation. Some of the pilot projects undertaken by GAIL include:

- a. CO<sub>2</sub> to Methanol & DME (Dimethyl Ether) - in collaboration with IIT, New Delhi
- b. CO<sub>2</sub> to Polycarbonate Diol - in collaboration with IISER, Tirupati
- c. CO<sub>2</sub> to Syngas - in collaboration with IIP, Dehradun
- d. CO<sub>2</sub> fixation using Micro-Algae

#### **10.4.4 Offsetting**

Offsetting action includes the technology and initiatives that are designed to reduce/remove the carbon emitted from the air to compensate for the emissions. GAIL shall prioritise achieving its Net-Zero targets through nature-based



solutions and offsetting through carbon credits.

**Nature-Based Offsetting:** In the last two (02) financial years, GAIL successfully planted a total of 3,53,487 trees as a part of its nature-based offsetting efforts, including adding 1.5 lakh trees planted by utilising the “Miyawaki Forestry” technique of extensive plantation. GAIL plans to undertake plantation of One (01) Lakh Trees every year.

### Challenges on the Road to Net Zero

- i) Technological limitations - The development and deployment of new technologies like CCUS and Green Hydrogen production are still in their nascent stages and require significant investment and innovation.
- ii) Financial constraints - Transitioning to a Net Zero framework necessitates substantial capital expenditure. Balancing profitability with sustainability goals can be challenging.
- iii) Regulatory and Policy Environment - Navigating the complex regulatory landscape and ensuring compliance with both national and international environmental standards can be demanding.
- iv) Supply Chain Transformation - Decarbonizing the entire supply chain, from extraction to distribution, requires coordinated efforts and collaboration with suppliers and customers.

### 10.5 Key Enablers

#### (GRI 2-24-ii)

GAIL has identified key net-zero pillars to reduce its carbon footprint. Additionally, we have outlined focus areas to achieve our climate ambitions.

**Governance:** GAIL has a dedicated governance structure in place to streamline its journey toward decarbonisation and achieve its Net-Zero targets. The Sustainable Development Committee of the Board is responsible for periodically reviewing the progress made against Net Zero Roadmap.

**Policies:** Government of India's policies related to Green Hydrogen Mission, Bio-fuels, Carbon Credit, Green Credit among others, are aimed at creating an enabling environment for fast tracking clean energy transition projects, to reduce carbon footprint and achieve Net Zero emissions. This strategy includes shifting to renewable energy sources, improving efficiency in all operations, and adopting advanced technologies to reduce emissions. GAIL plans to achieve its Net Zero emission target by aligning with the government policies.

**Sustainable Finance:** Sustainable finance refers to financial services and investments that take into account Economic, Environmental, Social, and Governance criteria to promote long-term economic growth while also contributing to environmental sustainability and social well-being. It can also finance the transition to low-carbon operations, including upgrading infrastructure for higher energy efficiency and reducing emissions. Sustainable finance can be a powerful tool in GAIL's net zero journey. By leveraging green bonds, ESG-linked loans and sustainable investment funds, that are directed toward projects and companies with a positive impact on society and the environment, GAIL strives to evaluate the benefits of securing funds for clean energy projects, such as expanding its renewable energy portfolio and investing in carbon capture and storage (CCS) technologies. Moreover, adopting sustainable finance practices will enhance GAIL's reputation, attract environmentally conscious investors, and align the company with global climate goals, all of which are crucial for achieving net zero emissions.

**Operationalising Internal Carbon Pricing:** Internal Carbon Pricing is a strategy companies use to account for the costs associated with their greenhouse gas emissions. It involves setting an internal carbon price to evaluate financial implication of mitigating those emissions, guide decision-making toward more sustainable

practices and prepare for future carbon regulations. It also demonstrates a company's commitment to sustainability and can enhance its reputation among stakeholders. GAIL is planning to implement ICP within the organisation. This strategic initiative is designed to integrate carbon cost considerations into the company's financial and operational decision-making processes. GAIL aims to incentivise emission reductions, drive sustainable investments, and align its operations with global climate goals by assigning a monetary value to greenhouse gas emissions.

**Digitalisation:** Recent advancements in digital tools and technology have enabled companies to establish real-time and efficient monitoring systems, reducing energy wastage, emission intensity and leakage. GAIL will accelerate its decarbonisation efforts by adopting digital technologies that improve emission accounting, early leak detection, real-time monitoring of emission hotspots, and enhanced energy efficiency.

**Sustainable Lifestyle:** At GAIL, linking change management to sustainable lifestyles involves implementing strategies that encourage individuals and communities to adopt more sustainable practices in their daily lives.

This can include initiatives such as: Awareness Campaigns, Green Infrastructure, Public Transportation, Waste Management, Energy Efficiency, Community Engagement





GAIL (India) Limited

## Sustainability Report 2023-24

New India New Energy



PDH-PP Plant - GAIL, Usar



India's First SS-LNG Facility, Vijaipur



GAIL's 10 MW green hydrogen plant inaugurated in Vijaipur Madhya Pradesh



Shri Sandeep Kumar Gupta, Chairman and Managing Director, GAIL, Site visit

11



## Our Employees



Achieved Training Efficacy  
Score of 93%



Employee Turnover rate for  
FY 2023-24 is 3.83%



A total of 4,827 out of 5,038  
permanent employees received  
training on human rights issues.



The average spent on Training and Development of Full Time Employee  
(FTE) in FY 2023-24 is INR 33,812 per FTE.

## Our Employees

At GAIL, our employees are the backbone of our success, demonstrating unparalleled dedication and expertise. Employees are crucial stakeholders in our growth, enabling us to adapt to technology and business model changes, continuously acquire new skills and maintain relevance. Their commitment to innovation and sustainability drives our mission to provide clean energy solutions for a greener future.

### **11.1 Talent Acquisition and Development**

GAIL is dedicated to motivating individuals through an outstanding work culture, a strong talent pool for Business Development, and excellent career prospects. GAIL has put in place a training system that facilitates professional development at all levels, meets the different requirements of each employee, promotes personal growth and promotes understanding of individual's worth. GAIL's HR recruitment strategy includes an organised and objective assessment process to identify the best talent. As part of the strategic workforce planning, GAIL routinely evaluates and assesses the demand for new entrants and their evolving skill sets to match the emerging needs at various locations and functions. GAIL remains the preferred employer for both fresh recruits and lateral entrants. GAIL aims to build a team of employees who are growth-oriented, highly productive, eager to learn, and keen to grow with us.

### **11.2 Diversity, Equity and Inclusivity in the Workforce**

#### **(GRI 405-1 a (i, ii))**

We are committed to creating a fair, supportive and non-discriminatory environment. We see

diversity as a moral necessity and a key strength, bringing different viewpoints and skills that improve our overall performance.

Diversity, Equity and Inclusion (DEI) have been paramount to GAIL in recent years. The implementation of DEI initiatives at its sites gained momentum in the preceding year. The presence of a diverse workforce is critical in optimizing organisational performance and increasing productivity. To promote diversity, we employ individuals from various communities, genders and backgrounds. We are dedicated to providing equal rights and respect to every employee, regardless of language, race, gender, ethnicity, age, region, caste, religion, or marital status.

The recruitment policy is regularly updated, duly approved by the competent authority, to promote diversity and inclusion. We ensure that no discrimination occurs by adhering to the DEI principles and comply with all applicable government regulations designed to protect and advance diversity.

Our workforce comprises 13,541 male and 452 female contractual workers distributed among our operational locations. The permanent workforce distribution among our units is as follows: 3,889 male and 302 female management employees and 805 male and 42 female non-management employees. This year, GAIL hired 453 apprentices, of which 374 were male and 79 were female. Regarding employee age group diversification, please refer Chapter 16 titled Performance and Standards of the report



Employees and Workers (including differently abled)*						
No	Particulars	Total (A)	Male		Female	
			No. (B)	% (B / A)	No. (C)	% (C / A)
<b>EMPLOYEES</b>						
1.	Permanent (D)	4,191	3,889	93	302	7
2.	Other than Permanent (E)	0	0	0	0	0
3.	Total Employees (D+E)	4,191	3,889	93	302	7
<b>WORKERS</b>						
4.	Permanent(F)	847	805	95	42	5
5.	Other than Permanent (G)	13,993	13,541	97	452	3
6.	Total workers (F + G)	14,840	14,346	97	494	3

\*Including Board Members (Full-time), CVO and Permanent Employee: 5038

Differently abled Employees and Workers						
No	Particulars	Total (A)	Male		Female	
			No. (B)	% (B / A)	No. (C)	% (C / A)
<b>Differently abled Employees</b>						
1.	Permanent (D)	72	64	89	8	11
2.	Other than Permanent (E)	0	0	0	0	0
3.	Total Employees (D + E)	72	64	89	8	11
<b>Differently abled Workers</b>						
4.	Permanent(F)	34	29	85	5	15
5.	Other than Permanent (G)	30	29	97	1	3
6.	Total workers (F + G)	64	58	91	6	9

### 11.3 Employee Benefits and Incentives

(GRI 401-2 a, 404-2 b)

GAIL considers its employees to be vital to its continued success and retaining its position as a market leader in the gas industry. GAIL provides various benefits to its employees as per applicable regulations, including gratuity, post-retirement medical benefits and other terminal benefits. Employee benefits under defined contribution plans include the Provident Fund (PF), the Post Retirement Benefit Scheme (PRBS), the Employee Pension Scheme (EPS) 1995 and others.

To safeguard the welfare of its employees, GAIL has implemented several initiatives:

- All permanent employees of GAIL are covered under the Provident Fund, and the contract labour is covered under the Employees State Insurance Scheme, Workmen's Compensation Act, other statutory benefits/

payments etc. At GAIL, the contractors cover their respective labour under accidental insurance schemes.

- The majority of our policies and initiatives are designed to increase employee productivity.
- Female workers are eligible for Six (06) months of Maternity Leave and Two (02) years of Child Care Leave.
- GAIL also provides incentives to its employees to acquire higher qualifications, to enhance their proficiency and productivity.
- IT systems have been implemented to facilitate workforce management strategies. All workforce-related data is captured and monitored via the SAP ERP system; this data is subsequently analysed methodically to enhance our workforce strategies.
- GAIL provides various monetary and non-monetary benefits to its regular employees, which are as follows:

- i. Wages and Salaries
- ii. Company Leased Accommodation facility
- iii. Residential Accommodation facilities and Bachelor Accommodation facilities at several work centres
- iv. Medical benefits, including OPD and Hospitalization.
- v. Multiple kinds of leave comprising Casual Leave, Earned Leave, Half Pay Leave, Maternity leave, Paternity Leave, Child Care Leave, Special Casual Leave, Disability Leave, etc
- vi. Various kinds of Loans and Advances such as House Building Advance, Conveyance advance including CNG Kit Advance, Children Higher Education Advance
- vii. Superannuation benefits comprising of Contributory Provident Fund including Employee Pension Scheme 1995, Gratuity, Post-Retirement Medical Benefits and Contributory Pension
- xiii. GAIL has a system of compensatory relief called the “Death Relief Fund” for employees and workers in case of untimely death. The Contract workers are covered under the Employee’s Compensation Act, 1923, and the Contractor obtains an Insurance Policy for grant of Death/Disablement Benefits wherever Employees’ State Insurance Act (ESI), 1948 is not applicable. Where the ESI Act is applicable, the contract workers are ensured under the ESI Act.
- x. Death Relief measures include a Financial Assistance Scheme, Relief measures for the dependents of deceased employees, Group Personal Accident Insurance, Employee Depository Linked Insurance, and Group Insurance coverage against Loans and Advances.
- xi. Weekly compensation is provided for temporary disability due to accidents
- xii. Various facilities and amenities have been provided at Company Townships, such as

Sports facilities, Shopping Centres, Schools, Auditorium, Club and other Recreational facilities etc.

- xiii. Training and Developmental interventions for the overall professional and personal development of employees
- xiv. GAIL offers employee benefits that surpass the bare minimum legal obligations. We do not provide our employees with stock ownership under employee benefits.

#### **11.4 Employee Engagement and Empowerment**

##### **(GRI 3-3)**

At GAIL, we believe a dedicated and skilled workforce is critical in driving organizational success. GAIL’s employees are the foundation on which our achievements are built. Their expertise and dedication play a pivotal role in sharpening our competitive edge and fortifying our resilience as a business entity. We strive with our employees to forge a path towards innovation, excellence and enduring success.

The company employs structured learning frameworks and on-the-job training methodologies to enhance employee efficiency. GAIL’s Employee Value Proposition (EVP) is meticulously designed to resonate with internal and external candidates, fostering a memorable impression that facilitates brand recall. Internally, we prioritize aligning assignments with individual interests and talents, complemented by robust training initiatives to perpetually elevate skill sets and foster professional advancement.

Each employees’ physical and mental health, as well as their knowledge, skills, motivation, and interpersonal qualities, make up our human capital. We invest annually in our workers’ training, career growth and compensate them for their hard work. There are multiple mechanisms and platforms for periodic employee engagement apart from grievance redressal.

Feedback related to the Materiality Assessment and Health & Safety was collected from the



employees, but no specific employee engagement survey was conducted in FY 2023-24.

GAIL imparts emphasis on the following areas:

- Attracting, nurturing, inspiring, and retaining diverse talent is a top priority for GAIL, as it strives to remain a talent and innovation-led organization to maintain its competitive edge.
- Planning for employee growth, retention and succession.
- Ensuring respect for human rights.
- A multi-cultural team without any bias.
- Health & Safety of every employee
- Fair employment standards; no forced or child labour
- Fair remuneration to staff members, as per Minimum Wages Act.

## 11.5 Training and Development

(GRI 404-2 b, 404-3 a)

GAIL provides regular training for its employees to enhance their skills and stay current with industry advancements in the Oil & Gas Sector.

GAIL is committed to achieving its vision of Employee development. It works on various aspects such as employee training programmes, on-the-job training, adopting advanced technologies, and providing career opportunities to employees.

GAIL Training Institute (GTI), the training wing of GAIL, has extended its wings to cater to the requirements of human resource development and professional training to the Oil & Gas fraternity, especially in the domain of Gas Transmission and Distribution, City Gas Distribution, Gas Processing, Petrochemicals and LNG. GTI is committed to shaping the future of the hydrocarbon professionals. It is consistently working towards the development of the Human Capital of GAIL and the larger community of Oil & Gas Sector employees.

GTI also intends to make the institution as Centre of Excellence in the business areas such

as Natural Gas, CGD, Liquefied Natural Gas (LNG) and Petrochemicals. The focus area of employee training programs that aim to upgrade skills can be broadly classified into three (03) categories given below: -

### 1. Strategy, Leadership & Business Knowledge Programs

- » Hedging & Risk Management;
- » Domestic & International Business & Economic Scenario;
- » Business Planning & Growth Strategies;
- » Strategic Thinking & Execution;

### 2. Management, Functional & Process Development Programs

- » LNG Industry Development in international scenarios, including shipping
- » Dynamics of Polymer Business in Global Context
- » City Gas, CNG; Commercial & Operational Perspective
- » Emerging Technologies in renewable energy and alternate fuels
- » Contractual Disputes and Arbitration
- » Project Management

### 3. Operational, Technical, IT & Safety Programs

- » Advanced Process Control System
- » Flow Metering

The following are some Key Performance Indicators (KPIs) for tracking the success of Training and Development initiatives:

- Training Efficacy Score (%)
- % Actualization of annual training plan
- Number of sessions delivered as internal faculty
- Number of programs delivered to external organizations
- % coverage of Executives in SMDC exercise.
- Timely conduction of activities like Orientation Programs, Knowledge Sharing Seminar, etc.

### GAIL Training Institute (GTI)

GTI is continually working to continuously sharpen its employees' knowledge, skills, aptitude and attitude by understanding the changes in global business dynamics with the help of the latest technology and resources. GTI rolls out a comprehensive Training Need Assessment (in electronic version) for all employees. Training Needs are assessed with inputs from Employees and their Reporting and Recommending Officers. Based on Training Needs identified through TNA, executives are allotted Functional/ Cross-functional and Behavioural training for the next year. Annual Training Calendar (ATC) is prepared and executed by GTI as per schedule, including the following:

**a) Orientation Programs** - Newly inducted Executive Trainees are given a 4-week orientation program before joining designated work centres. The orientation program covers all the business functions of GAIL. Orientation Program for Lateral Entrants is also organized for the newly joined executives. The module covers sessions on organizational history, overview of various business verticals, functions of major departments and the procedural framework adopted. Apart from these sessions, training programs on DEI principles, which include the importance of equal rights for all employees, non-discriminatory practices, and zero tolerance towards harassment, are also part of the orientation program that all employees undertake when enrolled. All Executive Trainees also undergo a 6-month mentoring process.

**b) Leadership Development** - GAIL realizes that it is imperative to continually strive to develop and enhance the quality of its talent pool and nurture leadership. This would enable it to place competent persons in strategic roles. The Senior Management Development Centre (SMDC) exercise is being conducted in GAIL as part of the Leadership Development Program to objectively assess the potential of its middle to senior-level executives (Chief Manager/ Dy. General Manager). This exercise is a crucial input for developing a pipeline of leaders at GAIL. This

exercise aims to identify the development needs of senior executives and design development programs to bridge the gaps based on the identified seven competencies.

**c) Training in GTI** – GTI, Noida and Jaipur together conducted 292 training programs based on the Training Need Assessment (TNA) of the employees and covered more than 4,565 employees under these training programs during the year.

**d) American Society of Mechanical Engineers (ASME) Accreditation of the Institute** - In addition to its core faculty, GTI has developed various in-house experts to conduct focused programs. The faculty pool consists of specialists with excellent backgrounds in industry, teaching and consulting. They are a highly diversified group of individuals who have graduated from leading Management and Technical institutions, including IITs, NITs and BITS Pilani. Training programs are designed and delivered to participants of external organizations to generate revenue and develop GTI's brand image as a centre of excellence.

**Topics included:** Orientation Program for young executives, CGD Business, ASME B 31.8 & B 31.8S Standards, Project execution, O&M of NG pipelines etc.

GTI has been accredited by ASME as Authorized Training Provider (ATP) for conducting ASME training programs such as ASME B31.8 & 31.8S. Currently, GTI has a pool of 14 certified trainers from across GAIL who are imparting training on ASME B31.8 & B 31.8S standards for internal and external participants.

**e) Collaboration between Industry and Academia** - GTI is providing needful support to various academic institutions through collaboration for knowledge dissemination and summer/ winter vocational training to the students of different universities/educational institutions. Under Industry-Academia collaboration, GAIL is providing support to various Universities for their course in the area of Natural Gas Engineering for the Under-Graduate

Engineering program by providing Subject Matter Experts / Guest Faculty and helping the students to become industry ready, without any financial implication.

**f) Sectoral Development** - GTI has a dedicated faculty base with long experience and expertise in the areas of Natural Gas & LPG Pipeline Construction and O&M, Compressor Stations, Petrochemicals, City Gas Distribution (CGD) and Compressed Natural Gas (CNG), SAP-ERP, Cathodic Protection, Integrity Management, Quality Management, Health, Safety & Environment, etc.

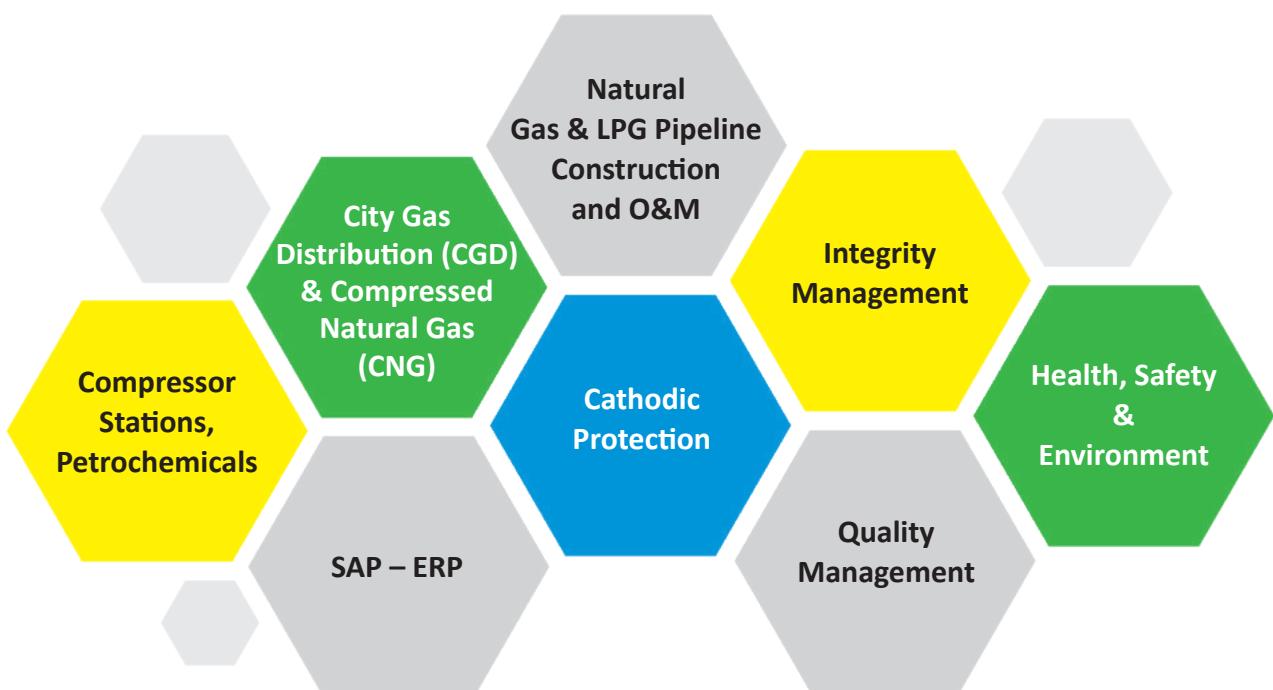
**g) Knowledge Management** - The 16<sup>th</sup> Knowledge and Experience Sharing Seminar was conducted in January 2024, wherein 148 Papers were received in 5 different categories from across the organisation. Papers were short-listed for oral

presentation, of which 20 were presented during the seminar. The Winners and Runner-up were awarded in each category, along with the Overall best paper award.

**h) Strategy-2030** - In line with the global business environment and India's future growth trajectory, GAIL has formulated a Strategy-2030 to capture emerging opportunities in different fields relevant to GAIL. Continuing the journey of providing interventions in line with Strategy-2030 of GAIL, programs were conducted, covering 249 executives, during the year.

#### Developing GTI as a Centre of Excellence (CoE)

GTI has a committed team of experienced faculty members specialising in various areas., as detailed below:



### 11.5.1 GAIL Trainings

(GRI 404-1 a, 404-2, 404-3, 412-2 a, b, 2-24 iv)

An average of 37.4 hours of training and development were provided per Full Time Employee (FTE), with an average of INR 33812 spent per FTE on training and development. Total training expenditure during the year was INR 11.35 Crores.

- During the year, the total expenditure on environmental training and education was INR 50.31 Lakhs.
- GAIL has imparted training on anti-corruption policies and procedures to 18.11% of its employees, including top management.
- A total of 482 permanent employees received training on human rights issues.
- Several internal training sessions on Environment and Sustainability were held. Sustainability training was attended by 14.11% of employees (681 Nos.).

Average Hours of training per year per employee	FY 2023-24	FY 2022-23
Management- Male	38.65	42.80
Management- Female	41.90	40.59
Non-Management- Male	29.83	28.07
Non-Management- Female	41.37	22.82
Permanent Employees Total	37.4	40.01

### Workshop / Trainings to Superannuating Employees

Superannuation / Retirement of an employee brings about a change in an individual's daily routine & mindset. To prepare for the transition, GAIL conducts workshops for its employees who are scheduled to superannuate / retire within the next few months to promote joyful living amongst its employees.

- The Workshop covers four pillars of Joyful Living, i.e., Personal Effectiveness, Mindfulness & Emotional Effectiveness, Financial Freedom, Health & Wellness (Nutrition & Physical Health)
- This workshop has been designed to offer information, ideas and advice on each of the above pillars covering a range of issues. The three-day program consists of presentations by experts in the respective fields. It helps the participants to systematically and effectively plan their post-retirement lives.
- The Workshop covers topics and objectives such as Open to Learn, RPM (Results, Purpose,

Method) of retirement, Ideas that make life fascinating, Mind Map - the journey to Retire, Reduced stress and anxiety, a Greater sense of clarity and productivity, Emotional Effectiveness, Daily Fitness routine and Healthy habits, Healthy plate at age of 50 or above, Home remedies for common health issues like Blood Pressure, Sugar, Thyroid, Arthritis, Reality Check - Current Network, Corpus Management, Goal-based allocation of Funds, Golden rules for effective utilization and prevention of unclaimed fund situation.

- The workshop also covers Finance-related modules in detail. Benefits from GAIL after retirement (PRMS and Superannuation benefits), National Pension Scheme, presentations by different Annuity providers, Sessions on Investment and Finance.

### 11.5.2 Utilising Technology & Training Strategy

GAIL's LMS (e-Learning Management System) ensures that personnel are updated on the most recent Oil & Gas industry developments. The LMS



was deployed at GAIL to increase the flexibility and breadth of the educational experience. Additionally, it functions as a managerial instrument for skill development and training initiatives, encompassing their execution.

The LMS offers a variety of learning materials, including presentations, animations, audio-visuals, and other interactive e-learning experiences. The extensive collection covers critical topics and issues essential to GAIL's operations, such as ASME/API standards, OSID standards, PNGRB rules, SOPs etc.

In 2011, GAIL launched a flagship programme called "SAARTHI", to train newly hired Executive Trainees. During the year, programmes focused on capacity building, in line with GAIL's 2030 strategy, were conducted for 175 Executive Trainees. Additionally, 118 programmes on Skill Management and Lifelong Learning programmes were delivered during the year.

## 11.6 Performance Management System for GAIL Employees

Performance Management procedures were implemented by GAIL not only to provide feedback and evaluations but also with the expectation that they would ultimately assist employees in identifying areas for improvement in performance, receiving recognition for their endeavours, and receiving rewards for their successes. This fosters a constructive culture of dialogue among teams and administrators. GAIL utilizes standardized procedures to assess the performance of its personnel. GAIL provides its employees a performance-linked, well-designed Performance Management System (PMS) framework, that aligns with business objectives and facilitates establishing and monitoring key objectives.

Subordinates and fellow employees may provide remarks and feedback. All GAIL personnel are provided with performance feedback and appraisals on an annual basis.

## 11.7 Leadership and Succession Planning

At GAIL, leadership development has always been viewed as critical and one of the cornerstones of keeping employees engaged, motivated, and prepared to take on higher responsibilities in the future. Leadership Development is a key HR concern and challenge. As GAIL grows and expands, developing leaders who can deliver business growth has been the top priority for the organization.

With the changing business landscape, the Company's strategic direction needs to be proactively supported by way of organization structure and the right manpower placement decision. Here, it is pertinent that diligent and systematic processes like PMS framework, DPC, etc, were implemented to identify the right talent to be deployed for key assignments at domestic and foreign locations.

### 11.7.1 GAIL Succession Planning

At GAIL, Succession Planning Framework applies to senior management executive positions that are no more than three tiers below the Board level. The aforementioned roles comprise the positions of General Manager (E-7), Chief General Manager (E-8) and Executive Director (E-9). In anticipation of forthcoming challenges, GAIL has established an Integrated Leadership Development Framework to streamline the process of career planning and foster leadership growth.

The primary objective of the GAIL Succession Planning Framework is to facilitate executive development. Its purpose is to establish a structured framework to guarantee the availability of a sufficient talent pool/skill set of potential successors, both in terms of quantity and quality. Access to an ample population of qualified candidates will empower the organisation to respond promptly to unforeseen job openings and/or business demands.

The development framework includes a variety of talent development interventions, such as:

**360 Degree Feedback Exercise:** 360 Degree Feedback aims to deliver appropriate feedback to concerned executives through peers, subordinates and superiors. In GAIL, we conduct 360-degree feedback annually as part of the yearly performance review cycle.

**Senior Management Development Centre (SMDC) Exercise:** GAIL prioritises the development of its leadership capabilities. SMDC is a tool for ensuring the organisation has better and more inspiring leadership. For senior executives in the E-5 grade and above, SMDC exercise is conducted. Following the SMDC, executives are given books, e-learning modules and competency-specific training at top Business schools. Women executives in E5 grade and above have also participated in customised management development programmes on leadership.

We continue to conduct SMDC exercises as part of the Leadership Development Program, with a focus on the developmental aspects of individual executives. Almost all senior executives in E5 grade and above have been covered by the programme to date. Additionally, all newly promoted E7 and E8 executives are given a structured Management Development Program.

**Focused Development Programs:** GAIL prepares senior executives at the Executive Director (E9) and Chief General Manager (E8) levels for Board positions through competence building programmes such as Master Class for Directors and Board Room Effectiveness, in which Directors on GAIL's Board have participated. Capability building programmes on emerging areas such as Renewable and Alternate Energy (Solar and Wind Energy), Water Value Chain, Specialty Chemicals Segment and other upcoming areas such as Mobility Future, Industry 4.0 and Automation are being conducted regularly to meet the objectives of GAIL's Strategy-2030 in line with the global

business environment and India's future growth trajectory.

## 11.8 Labour Procedures

As a genuinely socially responsible organisation, GAIL is dedicated to promoting fundamental human rights and implementing responsible labour practices in every facet of its operations. Regarding Labour practices and Human Rights, we adhere to both Domestic regulations and International frameworks (including the ILO convention). In addition, we support eliminating the abhorrent practices encompassing compelled or compulsory labour and child labour.

GAIL is committed to ensuring that all employees can express their concerns openly or anonymously without apprehension of reprisal. Employee or Worker associations and Worker unions are permitted to adhere to our code of conduct and legal regulations.

## 11.9 Human Rights

(GRI 2-19, 2-30, 402-1 b, 406-1, 407-1 a, b, 408- 1, 409-1 a, b, 410-1 a, b, 411)

GAIL strictly adheres to the Laws governing Human Rights. These include the Child Labour Act, Payment of Wages Act, etc. GAIL makes timely payments of salary and benefits, including statutory payments to the regular workmen in terms of the Long-Term Settlement (LTS), which arrives through collective bargaining. Further, GAIL ensures wages and other statutory benefits are paid to contract workers engaged through various contractors. Specific contract provisions have been incorporated into the tenders/work orders, and all contractors are required to abide by them. GAIL also ensures proper working conditions under various statutes. Further, GAIL ensures that there is no labour exploitation and no unfair labour practice exists.

GAIL maintains a zero-tolerance policy towards any act that violates human rights. We have also ratified a zero-tolerance policy to prevent child and forced labour and ensure that such employment does not occur at any of our installations. During the reporting year no incidents of Child Labour, Forced Labour/Involuntary Labour, Wages,



Sexual Harassment, Discriminatory Employment or Other human rights-related issues were reported.

GAIL has a designated focal point responsible for addressing human rights impacts or issues caused or contributed to by the business. In case of any violation, the matter can be brought to the notice of the concerned Officer-In-Charge of the relevant unit, office, or installation.

GAIL plants and offices were assessed by statutory authorities, internal auditor and third party auditor, from time to time, in respect of the following:

- Child Labour
- Forced/Involuntary labour
- Sexual Harassment
- Discrimination at Workplace
- Wages

We adhere to the Presidential Directives and other instructions & guidelines issued by the Government of India to grant accommodations, concessions and other benefits to Scheduled Castes (SCs), Scheduled Tribes (STs), Other Backward Classes (OBCs) and Persons with Disabilities (PWDs).

We recognise workers' rights to join, form, or not join trade unions of their choice without fear of retaliation or harassment. The Right to Freedom of Association and Collective Bargaining is being upheld by providing an option to employees to form or join labour unions or workers associations within the ambit of Statutory provisions and Code of Conduct. GAIL currently has two (02) employee associations which are active: GAIL Employees Association (GEA) and GAIL Karamchari Sangh (GKS). GEA serves as a representative association for non-executives in diverse national offices, facilities, and installations, except the Corporate Office in New Delhi/Noida. GKS is an association of non-executives headquartered at the Delhi Corporate Office As of 31<sup>st</sup> March 2024, 100% of the eligible GAIL employees are members of these associations.

The Industrial Relations Team is responsible for resolving labour disputes. In the preceding fiscal year, no man-days were lost due to labour disputes or other forms of disruption.

GAIL adheres to the minimum wage regulations stipulated in The Minimum Wages Act 1948 at all its facilities in India.

GAIL demonstrates its dedication to labour practices and human rights, which encompasses the implementation of the minimum wage through consistent engagement with employee collectives, collaboration with labour authorities, effective resolution of industrial disputes, systematic documentation and analysis of issues at the work centre level, and enduring agreements with labour unions.

## 11.10 Grievance Redressal System

(GRI 2-25, 406-1 b, 412-1 a)

An Online Grievance Redressal System is in place to ensure speedy disposal and prompt monitoring of employees' grievances. This three-tier Online Grievance Redressal System is a user-friendly workflow application available on 'GAIL Intranet' homepage.

**Step I:** By using the Online Grievance Redressal Mechanism, an aggrieved employee can register their grievance to the concerned HR In-charge, who is expected to settle the same within 10 days from the date of registration of the grievance. On expiry of the stipulated time period, the instant grievance will automatically get transferred to the Corporate HR department for disposal at its end.

**Step II:** If an aggrieved employee is not satisfied with the response given by the concerned HR person in charge, he/ she may take up the matter with the Corporate HR department. For such appeals, Corporate ER Group is designated to respond to the employee concerned within a period of 15 days from the date of receipt of the grievance.

**Step III:** In case an aggrieved employee is not satisfied with the response given by the Corporate HR department, they may prefer an appeal to the Director (HR) by using the Online Grievance Redressal System. The Director (HR) may take feedback from the concerned executive(s) and respond to the employee concerned within 15 days from the date of receipt of the appeal. Such grievance settlement by the Director (HR) will be final and binding to all concerned.

For FY 2023-24, 30 employee grievances were received and 25 were addressed at site. 05 grievances were forwarded to Corporate HR. All 05 grievances were addressed and none are pending. 07 internal stakeholders' grievances were received through CPGRAMS. All 07 internal stakeholders' grievances were addressed and none are pending.

### No unfair employment practices

Policies and regulations, in effect, discourage and rigorously prohibit unfair practices. Employees must follow the rules outlined in the policies outlined below:

- a) CDA Rules
- b) Code of Conduct
- c) Standing Orders
- d) Fraud Prevention Policy
- e) Whistle Blower Policy
- f) Prevention of Sexual Harassment (POSH)

CDA Rules are applicable to all GAIL employees, including those on secondment or deputation to the Joint Venture Companies, Subsidiaries, Government Bodies including autonomous institutions, Regulatory Authorities etc.

Standing Orders of GAIL are applicable to all "Workmen" on the role of industrial establishment in each office of GAIL.

Workers on Deputation and/or Foreign Service shall also be regulated under these Standing Orders as stipulated during their terms of Deputation / Foreign Service.

GAIL has a dedicated policy on the Prevention, Prohibition and Redressal of Sexual Harassment of Women in the Workplace. It applies to all the employees & workers at a workplace, including those enrolled through agents or contractors. It has a dedicated Grievance Redressal System, under which an Internal Complaints Committee at the Central/Site level has been formed to take cognizance of workplace complaints. Awareness sessions are also conducted among the workforce. In FY 2023-24, there were no reports of discrimination and sexual harassment at the workplace.

Periodic meetings are held between employee unions and management at the Unit level and

Corporate level to address employee complaints. In terms of change notification, we adhere to Section 9A of the Industrial Disputes Act of 1947. Contractors must also provide all statutorily mandated social security benefits, including Provident Fund, to contract workers.

Contract workers are covered and benefitted under the Employees' Compensation Act of 1923 or the Employees' State Insurance Act (ESI) of 1948. The Contractor obtains an Insurance Policy on a regular basis for the grant of Death / Disability relief. Contract workers are also covered by the Occupational Safety and Health Administration (OSHA).

We believe that decent employment is a societal right. We have tried to provide suitable working conditions for all our employees, including adequate housing.

All GAIL installations are subject to regular human rights reviews and impact assessments. During the FY 2023-24, no employees were laid off, and no workplace discrimination complaints were filed.

### 11.11 Employee Well-Being

(GRI 403-3, 403-4 b, 403-6 a)

GAIL prioritizes employee well-being, recognizing the inter-connectedness of physical and mental health, ensuring no compromise for the workforce's and community's health. Our company offers a comprehensive health screening program for permanent and contract employees, focusing on maintaining healthy individuals for the organization's long-term success.

In the current financial year, the cost incurred towards the well-being of employees and workers is 0.18% of the company's total revenue.

GAIL's Management and Non-management employees in Health and Safety committees represent our entire workforce. This committee conducts Health and Safety awareness sessions. It includes fitness, yoga, stress management, lifestyle management and nutrition classes. Sporting events such as cycling and badminton are also used to promote a healthy lifestyle. The organization offers a minimum 15-day notice



GAIL (India) Limited

## Sustainability Report 2023-24

### New India New Energy

period (or as mentioned in the standing orders) to ensure employee satisfaction and motivation while implementing significant operational changes.

GAIL's Corporate Medical Cell (CMC) conducts regular health screenings and maintains individual employee health records, ensuring all employees at Corporate Offices and sites have access to a doctor.

HR policies are evaluated often to ensure they are keeping a competitive advantage and aligned with the organisation's objectives, strategy and changing business needs. GAIL policies address Human Resource Acquisition (general terms and conditions of Service, Recruitment policy and procedure etc.), Employee Compensation (Pay

scales, DA, Transfer benefits, etc.), Employee Benefits (Leave rules, Medical attendance, House Building Advance rules etc.), Motivation and Development (Performance Management System, Incentives for obtaining Higher education etc.), General (grievance redressal procedure, CDA Rules) and Other Schemes (Sports Promotion policy, Whistle blower policy, etc.)

Highlighting some of the initiatives taken by GAIL for its employees:

- i. A unique initiative called the Monthly Wellness Hour- "**Spandan**" has been introduced across GAIL. More than 250 sessions aimed at employee wellbeing have been held across various work centres.



Monthly Wellness Program - Spandan at GAIL

- ii. Project **Samanvaya 2.0** was initiated wherein more than 70 HR representatives visited 35 work centres across various sites/plants to understand the pressing HR issues/matters and gather employees' feedback/opinions with an overall aim to improve the effectiveness of HR services and enhance employee experience.

- iii. Launch of GAIL's Youth Engagement platform – '**OJAS**' to promote engagement and development of young executives under the umbrella of 'YOUphoria'- an inter-industry youth engagement initiative for executives

below 35 years of age working in the Oil & Gas PSUs. Under the aegis of OJAS, various Cultural events, Donation drives (Clothes/Food) and Photography / Videography contests have been conducted.

- iv. Launch of "**Townhall Meetings**" between employees and senior officials of HR led by the Director (HR) to create a direct channel for communication and feedback. Physical and Virtual meetings have been held with employees posted at Pata, Vijaipur, Jaipur, Bengaluru, Gandhar, Ranchi, Jhabua, Kochi, Vadodara, Vaghodia, Bhubaneswar, Varanasi,

- v. Noida, Mangalore, Dabhol and Karaikal.
- vi. The 1<sup>st</sup> edition of the Quarterly Security Magazine “**Rakshak**” was inaugurated by the Chairman & Managing Director during Security Awareness Week observed from 13<sup>th</sup> to 18<sup>th</sup> December 2023.
- vi. GAIL hosted the 42<sup>nd</sup> PSPB Inter-Unit **Badminton Tournament** 2023-24 from 26<sup>th</sup>-30<sup>th</sup> December 2023 at Bengaluru with representation from 11 organizations (GAIL, ONGC, IOCL, HPCL, EIL, PLL, HEML, OIL, NRL, BPCL & MRPL) from the Oil & Gas Sector.
- vii. Revision of Working pattern to observe the 1<sup>st</sup> and 3<sup>rd</sup> Saturday of every calendar month as off days for General Shift employees at various Work Centres / Offices of GAIL.
- viii. Provision for allowing **medical check-ups for dependent spouses** of 35 years & above age and dependent parents of GAIL employees once in 2 financial years.
- ix. **Cashless Medicine Facility** launched across all GAIL locations via M/s Apollo Pharmacies.
- x. Review/modification of more than 45 policies has been done, including enhancement of coverage under the Financial Assistance Scheme, review of Conveyance Advance facility, House Building Advance, review

of facilities for Bachelor Accommodation, and regulation of absence on Saturdays to general shift duty employees. Besides, several employee-related policies in the broad areas of Medical Attendance Rules, PRMS, Guidelines for Safety Kits & Liveries etc., were reviewed to keep in sync with the organisation's changing employee needs and evolving priorities.

- xi GAIL Abha' an entrepreneurial platform for spouses of employees, was launched in March 2023. GAIL ABHA, an initiative for Educating, Mentoring and Hand-Holding on Entrepreneurial ventures for spouses of GAIL Employees posted at remote locations of GAIL at Pata & Vijaipur, is being driven by GTI, Noida by engaging team from IIT, Madras.
- xii. GAIL Abha, has been a beacon of empowerment for spouses of GAIL employees in remote plant site locations of Pata and Vijaipur. From the initial participation of over 400 spouses at the two locations, including 100 in Vijaipur, it is heartening to see that by the end of the year, close to 42 ventures, including 13 at GAIL Vijaipur, have blossomed in diverse fields like Edu-Tech, Agri-Tech, Food, Fashion-Tech and many more. Some of these ventures have already registered themselves as a company.



LiFE Marathon at GAIL



On May 23, 2024, Shri Pankaj Jain, Secretary to the Government of India, Ministry of Petroleum & Natural Gas, honoured GAIL ABHA entrepreneurs in Vijaipur. Joined by CMD Shri Sandeep Gupta, Director (Projects) Shri Deepak Gupta, Director (HR) Shri Ayush Gupta, and other senior officials, the event celebrated the success of **GAIL ABHA**. While addressing the participants, Shri Pankaj Jain mentioned that GAIL Abha is not just an initiative of GAIL but a solution to the challenges faced by industry across the nation.

## जभाषा कीर्ति पुरस्कार 2022-23 (सार्वजनिक क्षेत्र के उपक्रमों के लिए)

### प्रथम पुरस्कार गैल (इंडिया) लिमिटेड



GAIL has been awarded the first prize in Region 'A' under the category of Public Sector Enterprise for the Official Language - Kirti Award. The award was presented by the Honorable Union Minister of State for Home, Shri Ajay Kumar Mishra, in the presence of the Honorable Deputy Chairman of Rajya Sabha, Shri Harivansh, to Shri Sandeep Kumar Gupta, CMD of GAIL, at the All India Official Language Conference organized in Pune on the occasion of Hindi Diwas. Shri Ayush Gupta, Director (HR), was also present at the event.

12



## Ensuring Health and Safety for All



HSE Score of 95.75% for FY 2023-24  
against an internal target of 93.5 %.



Various HSE guidelines, such as HSE policy,  
HSE Manual etc., were revised and updated.



Implementation of HSE Score for GAIL's City Gas Distribution  
Networks and Retail Outlets of CNG/LCNG.

## Ensuring Health and Safety for All

GAIL is dedicated towards the organization's Health, Safety and Environment (HSE). It aims to promote physical and mental well-being, prevent occupational illnesses, and address workplace hazards that may impact employee health.

To protect the wellness and health of its employees, GAIL has established clear policies and procedures for Occupational Health and Safety, as well as related procedures.

Having an asset value of around INR 1,09,528 Crores as of FY 2023-24, the organization also fulfils its national obligation towards responsible business conduct by preserving a safe and secure working environment. With the formulation of its Corporate HSE Policy, GAIL has made its commitment towards HSE, evident to all its stakeholders. GAIL promotes the highest levels of safety, employee health, and workplace hygiene to significantly impact the communities and the environment.

### **12.1 Corporate Health, Safety and Environment (HSE) Policy**

(GRI 3-3-c, GRI 403-1b, GRI 403-2a, GRI 403-2c, GRI 403-2d, GRI 403-3, GRI 403-5, GRI 403-7, GRI 416-2)

GAIL's HSE Policy demonstrates the top management's commitment to HSE in a clear and concise manner. In order to promote the highest standards of safety, employee health, and a clean environment, it prioritizes Occupational Health, Safety and Environment in its business areas and for its various stakeholders.

By implementing the latest technology and digitization, GAIL is dedicated to being a leader in Safety, Occupational Health and Environmental protection. To guarantee sufficient safety in all business domains, pipelines & plants and their associated facilities are Designed, Built, Operated

and Maintained in accordance with National and International standards.

In order to establish a good HSE culture inside the company , GAIL encourages the employees to report and halt any unsafe work or behavior, as determined appropriate. GAIL also advocates all of its workers, including contract workers, to adopt safe work habits and behaviours. There is a comprehensive Integrated Health, Safety, and Environment Management System in place that offers a set of policies and processes to fulfil employee and top management commitments to HSE in all business sectors.

### **GAIL's commitment towards Health, Safety and Environment**

**Environment & Health:** Preserve environment and employee health.

**Safety Standards:** Ensure safety of stakeholders and assets with adherence to national and international standards.

**Regulatory Compliance:** Follow all applicable laws and regulations.

**HSE Training:** Maximize resources with systematic training and effective emergency planning.

**Health Monitoring:** Implement risk-based monitoring, frequent medical checks, and hygiene protocols.

**Waste Management:** Ensure proper disposal of biomedical and e-waste.

**Stakeholder Communication:** Communicate HSE policy and performance to stakeholders.



## 12.2 HSE Management System

(GRI 3-3b, GRI 3-3d, GRI 403-1a, GRI 403-1b, GRI 403-2a, GRI 403-2d, GRI 403-3, GRI 403-4a, GRI 403-4b, GRI 403-8)

Health, Safety and Environmental Management System (HSEMS), as part of our HSE philosophy, has been formulated by the Oil Industry Safety Directorate (OISD) Standard on "Safety Management System in the Petroleum Industry". It includes every aspect of the plant and facilities to prevent losses associated with personnel, materials, equipment and the environment. It is an integrated approach to managing workplace safety.

The HSE document provides a set of requirements and guidelines against each element for implementation across GAIL installations. GAIL has also introduced an HSE management system, which has multiple functionalities such as an Incident Management System (safety observation, recording near misses and incidents/ accidents), Risk Assessment, Job Safety Analysis, Management of Change, and Safety Audit/ activity monitoring. All of these are embedded with the various elements of Corporate HSE Policy. Employees can report near-miss incidents and related hazards into the HSE portal.

The Medical Department conducts occupational health check-ups for all employees at various GAIL installations on a yearly basis. Further, the Corporate Occupational Health Committee meets on a quarterly basis to monitor the Occupational Health Programs in GAIL. The effectiveness of the Occupational Health System/Facilities is also evaluated through an Occupational Health Audit undertaken by in-house multi-disciplinary teams.

To improve safety standards in routine Operations & Maintenance jobs and to satisfy the statutory requirements of section 41(G) of the Factories Act 1948, a Safety Committee (or committees) comprising equal representation of management and non-management personnel, including trade unions, have been established. Site-level Safety Committees oversee safety

at GAIL's operational sites. At least once every three months, Safety Committees assess safety / health performance and determine corrective & preventive actions. The Safety Committee has met at various O&M sites across GAIL, to examine a range of occupational health and safety-related topics.

### 12.2.1 GAIL's HSE Score System Implementation

(GRI 3-3-d, GRI 3-3-e, GRI 3-3-f)

In order to ensure continuous monitoring and implementation of the HSE Management System, the HSE performance of sites and safety compliances are measured on a regular basis. To achieve the same, we have an "HSE Score" system. This system aids in the effective monitoring of various elements such as Leadership and Commitment, Employee Participation, Work Permit System, Risk Analysis, Maintenance and Inspection of Critical Safety Appliances/ Equipment, Occupational Health, Emergency Preparedness and Compliance Audit etc.

HSE Score System, duly approved by Functional Directors, enables us to monitor and keep track of the HSE Performance of GAIL Installations to identify the areas of improvement for strengthening the Health, Safety and Environment Management System of GAIL. The HSE Score System has been revised this year, and it comprises various significant aspects/elements of the HSE Management System like Leadership Commitment, Employees Participation, Standard Operating Procedures, Operation and Maintenance, Emergency Preparedness, Safety Audits etc., through pre-defined parameters with specific weightage.

#### Process of HSE Score System Implementation:

- i. In line with the HSE Score Procedure, all applicable GAIL sites submit their Annual HSE Plan and Annual Training Calendar duly approved by the site Officer-In-Charge (OIC)/ Work Station In-Charge (WIC) by 30th April. Based on the approved Annual HSE Plan, the Operation, Maintenance, and Fire & Safety

- In-Charge of the respective site perform activities as per the schedule.
- ii. An online HSE Performance Portal has been provided where the OIC/WIC nominated executive, preferably HOD (Fire & Safety), records the Site's HSE Performance in the prescribed format.
  - iii. Subsequently, HSE Performance inputs are being reviewed by OIC/WIC and finally submitted to the Corporate HSE Department for computation of the HSE Score.
  - iv. Computation of the HSE Score by the Corporate HSE Department is being done on a quarterly basis. Based on the scores earned by the sites, in accordance with the approved guidelines, a quarterly score report is prepared and submitted to the top management for review.
  - v. The exceptions report on Monthly Safety Day observations, along with HSE Performance, is reviewed at the level of Executive Directors & Functional Directors. The HSE Score achieved by the site is discussed on Monthly Safety Day at every site/installation, and necessary actions are taken to improve it.
  - vi. A system is in place to physically verify the HSE Performance of sites through periodic visits of Corporate O&M/HSE officials to various sites, through an existing mechanism of Internal Safety.
  - vii. GAIL obtained an "HSE Score" of 95.75% in FY 2023-24, surpassing the Excellent Target of 93.5%.

#### **Significant Policy Level Initiatives taken in FY 2023-24 are as follows:**

- i. The Occupational Health Guidelines have been reviewed and revised.
- ii. GAIL has developed a Corporate HSE Policy that outlines its HSE commitments. As a part of its goal to promote the highest standards of safety, employee health, and a clean environment, it prioritizes Occupational
- Health, Safety and Environment across all business areas and among diverse stakeholders as an effort to create value through sustainable development.
- iii. The HSE Score System for Pipelines, Process Plants and City Gas Distribution Network facilities is revised in order to assess the HSE Performance for continuous improvement. Different integrity-related aspects were included, such as monitoring significant legal and statutory requirements, monitoring critical Operation & Maintenance parameters etc. The revised system includes various significant HSEMS aspects, such as leadership commitment, employee participation, standard operating procedures, operation & maintenance, emergency preparedness, internal & external safety audits etc., through predefined parameters with specific weightage.
- iv. Health and Safety Practices such as HSE Score have been extended to new business initiatives taken in areas of LNG/CNG transportation by GAIL.
- v. The Work Permit System in SAP is strengthened in compliance with the authorized criteria for fortifying the Work Permit System in GAIL. Work Permit optimization for pipeline projects, emphasis on Job Safety Analysis, creation of a work permit for radiography, modifications to checkpoints, etc., were among the subject advancements. The Mobile Work Permit Application was created and implemented by GAIL's City Gas Distribution Networks to help users recognize potential risks and take preventative action prior to starting any activity.
- vi. An initiative with regard to the Trip Interlock Bypass System is incorporated in SAP for online bypass approval and normalization across GAIL Installations. Accordingly, a Uniform Trip Interlock System has been formulated.



- vii. An Environment, Health & Safety Management (EHSM) Dashboard has been developed, which provides real-time information to Operation & Maintenance In-Charges on performance/parameters w.r.t various HSE Management System Elements to have a glance of HSE Compliances in their respective work area.
- viii. The Board of Directors has accorded approval for the establishment of an Emergency Response Centre (ERC) in Dibiyapur, District Auraiya (U.P)
- ix. A consultant was engaged to create the protocols for ensuring adherence to EHS and to carry out an independent evaluation of GAIL's business divisions' environmental, health, and safety standards.

### 12.2.2 Health, Safety and Environment Performance

#### (GRI 3-3-a)

Health, Safety and Environmental Management Performance of GAIL's installations are measured by the "HSE Score System," which is evaluated on a monthly basis, and the key elements of the HSE Management System indicate the respective level of performance. In accordance with the Petroleum and Natural Gas Regulatory Board (PNGRB) (Codes of Practices for Emergency Response and Disaster Management Plan (ERDMP) Regulations 2010 and its subsequent amendments, incidents are categorized as Minor and Major.

#### An incident shall be treated as Major if any of the following occurs:

- a) Fire for more than 15 minutes
- b) Explosion / Blowout
- c) Fatal incident.
- d) Loss above INR 20.0 Lakhs
- e) Cumulative man hours lost more than 500 hours.
- f) Plant Shutdown / Outage due to the incident

#### Incidents reported during the FY 2023-24 are summarized below:

S. No.	Incident Category	Number of Incidents
1.	Major Incidents	03
2.	Minor Incidents	38

A multidisciplinary committee investigates all incidents to determine the root cause and mitigation actions to prevent the recurrence of any such incident.

### 12.3 Transportation Safety in GAIL:

GAIL uses cross-country pipelines, one of the safest forms of transportation, to move both natural gas and LPG. Road transportation is also used to move hydrocarbons like propane, LPG, and propylene. GAIL has system to detect possible risks, hazards, injuries or harm that may occur during the transportation and distribution by using a Severity categorization in transportation safety evaluation. In order to minimize risk, standard operating procedures and protocols are followed.

The Fire & Safety and Operations department of GAIL constantly offers the necessary support and assistance for the recovery/safe disposal of flammable Liquid Hydrocarbon products in case of accidents near GAIL's plants.

#### 12.3.1 Road Transport Safety

Trucks transporting hydrocarbon tanks are only permitted to enter the facility for loading purposes after a proper physical inspection of the tanks and validation of documentation in compliance with RTO and PESO regulations, among other criteria. The vehicles are inspected before they enter the factories. Some of the most important safety precautions for transportation are as follows:

- Online SAP-based 'Dangerous Goods Authorization' to ensure the safety of hydrocarbon tankers prior to loading by reviewing the safety aspects.
- Physical inspection of hydrocarbon tankers.
- Conduct regular capacity development sessions for hydrocarbon product loading workers to raise awareness of operational hazards and mitigating measures.
- Checking the flow on the arrival of the truck at bay.
- Ensuring that there are no protruding objects in the trucks that could pose damage.

- Regular road safety/personal hygiene training for LHC tankers and truck drivers.
- All hydrocarbon truck drivers are issued with a Transport Emergency Card (TREM) to provide them with emergency management and communication information.
- Drivers are personally instructed to uphold safety standards both inside and outside the plant premises.

## **12.4 Employee Safety: Occupational Health, Training and Emergency Preparedness**

**(GRI 403-5, GRI 403-7)**

GAIL has implemented Health and Safety Practices for both employees and contract workers, primarily utilizing the Health, Safety and Environment Management System.

## **12.5 Occupational Health and Safety at GAIL**

**(GRI 403-2-d, GRI 403-6, GRI 403-7)**

Occupational health guidelines have also been formulated to give thrust on occupational health of the industrial employees at GAIL. The guidelines encompass various aspects including requirements of occupational health infrastructure at sites, occupational health committees, medical surveillance programs, documentation and analysis of health data and bio-medical waste management etc. Medical health check-up is carried out to assess the health of employees. Permanent employees are assessed annually for their well-being by conducting occupational health check-ups. Awareness programs are also periodically organized to ensure improvement in lifestyle related habits. The health score of all the employees is calculated based on the pre-defined parameters and they are motivated for improving the same. Cumulative health index for each of the sites is also calculated based on the health score of individual employees for the analysis and improvement of employees' wellbeing. The Corporate Occupational Health Committee evaluates the effectiveness of GAIL's occupational health programs at a meeting every three months. O&M installations, subject

to the Factories Act 1948, are required to carry out operational health check-ups of routine personnel every year.

GAIL's Corporate Occupational Health Committee monitors programs, evaluates effectiveness through audits and organizes Safety Committee meetings to discuss safety and occupational health aspects at O&M installations.

**The following are some of the highlights:**

- The 35<sup>th</sup> Sustainable Development Committee Meeting was held on 13<sup>th</sup> March 2024 to review the HSE Performance & Emergency Preparedness and for re-accredited eight (08) Emergency Response and Disaster Management Plan (ERDMP) document of GAIL Installations. The Corporate Occupational Health Committee meets quarterly to monitor the occupational health programme.
- 41<sup>st</sup> Safety Council Meeting was organised by OISD and chaired by Secretary MoP&NG. It was attended by C&MDs of various Oil & Gas PSUs on 21.05.2024.
- Visit to Safety Innovation school, Hazira, on 10.05.24 by representative of CO-HSE & GTI, Noida.
- The PNGRB Technical Committee meeting for deliberation w.r.t recommendation of the enquiry committee on TPI inspection modalities and comments for amendment of T4S Regulations for Refineries was held on 17.05.2024 and 28.05.2024. It was participated by CO-HSE and Site O&M Team
- External Safety Audit (ESA) of the Vizag-Secunderabad LPG pipeline was carried out from 15<sup>th</sup> to 19<sup>th</sup> May 2023 by OISD.
- Training Program on 'Safety in scaffolding and working at height' was conducted at GAIL-Pata & PDH-PP Project site-Usar by Third Party.
- 20<sup>th</sup> Annual HSE Workshop on 'Risk and Resilience: Challenges and Opportunities in Effective Safety Management System' held on 26<sup>th</sup> October 2023. Honourable CMD



Inaugurated the Workshop, and the CMD Trophy was awarded to the winning sites for best HSE Performance.

- Employees Engagement Workshop on 'Sustainable Development and Plastic Free Organisation' was organized at GAIL Jubilee Tower, Noida, on 30<sup>th</sup> January 2024, in association with TERI.
- The Occupational Health Audit of LPG Pumping Station, Visakhapatnam and the Environment Audit of Pata were carried out on 7-8<sup>th</sup> March and 27-28<sup>th</sup> March respectively.
- An off-site Mock drill was organized by GAIL Agartala on 26<sup>th</sup> September 2023 at Rokhia Terminal. The Mock drill scenario was 'Gas Leakage from Downstream of KOD Valve No. 8-R-BV-05'.
- The Institute of Engineers, India, awarded best Innovative Safety Management Systems to the following installations:
  - ▶ Gas Processing Unit, Vijaipur,
  - ▶ Gas Processing Unit, Gandhar,
  - ▶ JLPL Mansharampura, Jaipur,
  - ▶ Regional Pipeline Network, Vadodara
  - ▶ Agartala Pipeline Network
  - ▶ Chhainsa Compressor Station
  - ▶ NCR Gas O&M, Noida.
- DBPL NG pipeline was conferred Utthama Suraksha Purushkar for 2023 by M/s National Safety Council, Karnataka Chapter.

#### 12.5.1 Health and Safety Practices for Employees

In line with Management's commitment to strengthen workplace safety, the following safety practices are in place for Permanent Employees in accordance with the HSE Management System of GAIL:

- Job Safety Analysis for all non-routine jobs is being carried out to identify the

hazards / risks associated with the job and their mitigation measures. Routine jobs are regulated through Standard Operating Procedures.

- Mandatory Personal Protective Equipment (PPE) such as Cotton Uniform, Safety Shoes and Helmet, etc. is being issued to all employees. PPE Matrix has been displayed at the workplace. Job-specific PPE are made available to all, and its use is strictly ensured.
- Workplace Noise, Illumination and Environmental Air Quality are being monitored to keep them at prescribed limits as recommended by applicable Rules and Regulations.
- The Medical Service Department has conducted Occupational Health check-ups of GAIL employees for FY 2023- 24 at various GAIL installations.
- Internal Safety & Operational Training have been provided to regular employees in accordance with the Annual Training Planner.
- Case studies on Worldwide Industrial Incidents (which occurred in the past) are circulated on a monthly basis to all employees. Key Learnings from case studies are discussed during Safety Review meetings at Operations & Maintenance (O&M) installations. The 10<sup>th</sup> day of every month is observed as Monthly Safety Day at various O&M installations. On this day, the Officer-In-Charges (OICs) review the safety related aspects of their installation.

#### 12.5.2 Contractor Safety

GAIL is committed to ensuring adequate safety in all spheres of business areas, as per National & International Standards, during Design, Construction, Operation and Maintenance of Plants, Pipelines and associated facilities. GAIL encourages all contract workers to adopt safe working practices and behaviour to create a positive HSE Culture within the organization.



Behaviour Based Safety (BBS) has been implemented at GAIL installations to develop a safe work culture, empowering and enabling all employees, including contract workers, to report any unsafe condition / unsafe act to enhance workplace safety.

Use of Personal Protective Equipment (PPE) such as Cotton Uniform, Safety Shoes and Helmet etc. is compulsory at the site. PPE Matrix is in place to guide the use of appropriate PPEs for the particular job. Job-specific PPE is also made available to all, and its use is strictly ensured.

GAIL complies with the provisions laid down under The Factory Act & Rules and Building & Other Construction Work Act 1996 on Health &

Safety. Some of the significant steps taken in this regard are summarized below:

- Safety Training / Awareness Programs before deployment on the job.
- Use of PPE (Cotton Cloths, Safety Shoes, Helmet etc.) is compulsory at sites.
- Health assessments of workers for critical jobs like Working at Height and Vessel Entry are being ensured before deployment.
- Standard Operating Procedures are also in place. Necessary Safety Information, Data Sheets, SOPs etc. are displayed prominently.
- Non-sparking tools are used during maintenance activity inside plant premises.
- Periodical monitoring of the place to assess the level of concentration of Hydrocarbon and toxic gases, illumination, noise, environmental quality, etc., are carried out, and suitable mitigation measures are taken to bring it to an acceptable level.

## 12.6 Environment, Health and Safety Management System (EHSMS) using SAP (GRI 403-2b)

GAIL has an Online System for reporting Safety Observations (Unsafe Acts / Unsafe Conditions) and Near-Miss at various GAIL sites. The Online System allows the employees to report unsafe acts / unsafe conditions. Contract workers can also report such incidents through their GAIL



National Safety Week was observed this year from 4<sup>th</sup> March to 10<sup>th</sup> March 2024. The Theme for the same was 'Focus on Safety Leadership for ESG Excellence'



Supervisor for necessary corrective actions. GAIL follows OISD, PNGRB guidelines etc., for taking corrective action to address safety related incidents.

SAP-based EHSMS has been put into place at GAIL. Its features include an Incident Management System (which records near misses, incidents and accidents), safety observation and activity monitoring, risk assessment, and job safety analysis.

We have an online method for reporting safety observations (unsafe acts / unsafe conditions) and 'near miss' in the portal using a created interactive form, which is accessible to all employees, including contractual workers, apart from offline complaints. Contract workers can physically submit forms in drop boxes for corrective actions or report such instances to their GAIL supervisor.

The following are the impacts and benefits of the SAP EHSM:

- Establishment of uniform procedures for Incident Management, Job Safety Analysis, Risk Assessment and Change Management across GAIL
- Implementation of a workflow to improve clarity and accountability to transform the compliance approach
- Through a single portal, incident reports for institutions/statutory bodies such as PNGRB, OISD, PESO, Factory Directorate and GAIL are generated.
- GAIL's Work Permit System is being strengthened by linking it with Job Safety Analysis (JSA).
- We are increasing the efficiency of monitoring and analytical reporting by providing OICs/ WICs/ Coordinators with a user-friendly dashboard.

## 12.7 Safety Audits and Observation

(GRI- 403-7)

Safety Audits are conducted by PNGRB approved Third Party Inspection Agencies, External organizations, and Internal staff to ensure the

effectiveness of Emergency Preparedness and HSEMS Guidelines.

There is a team to conduct an Internal Audit (Proactive Safety Audit & Internal Audit-Corporate) to identify enhancement opportunities concerning PNGRB and other regulations, OISD Standards, Governance and other relevant factors. Periodic Internal Audits on Occupational Health, Safety and Environment Management are performed to identify potential improvement areas for enhancement in accordance with a variety of health and safety regulations.

In addition to Internal Audits, Third Party Inspection Agencies conduct External Safety Audits of GAIL's installations in accordance with applicable national codes and standards. All recommendations received during various audits are recorded in the Online Audit Monitoring System to ensure time-bound compliance.

- a) External Safety Audit of Major installations is carried out once a year in line with the Manufacture, Storage & Import of Hazardous Chemical Rules (MSIHC), 1989. During the year 25 ESAs, other than OISD and PNGRB, were carried out.
- b) Technical and Safety Audits of GAIL installations such as LPG Storages and Handling facilities, NG/LPG Pipelines and CGD Networks are being carried out by Third Party Inspection Agencies duly approved by PNGRB to ensure compliance with applicable PNGRB Regulations. During FY 2023-24, 18 Numbers of PNGRB T4S audits were carried out by approved TPIAs for GAIL's installations.
- OISD also conducts Safety Audit of Gas Processing Plants, Petrochemicals and NG/ LPG Pipelines once in 3-4 years to check the conformity with various OISD Standards and Guidelines. During FY 2023-24, OISD has conducted 03 Numbers of External Safety Audits of GAIL installations.
- Compliance Reports on ESA are being

submitted to OISD, PESO & PNGRB periodically.

GAIL has established a structured procedure to carry out Internal Technical and Safety Audit of O&M Facilities. Internal Audit (Proactive Safety Audit and Internal Audit-Corporate) is conducted at least once a year by an in-house team to identify areas for improvement, such as PNGRB

regulations, OISD Standards etc. During FY 2023-24, 25 numbers of Internal Technical and Safety Audits covering Pipelines and Gas Processing Plants were carried out by the Corporate Team. In addition to the above, 02 numbers of Electrical Safety Audit of O&M Installations were undertaken to ensure various compliances about electrical safety.

FY	Numbers of Safety Observation Reported	Numbers of Safety Observation Closed	Numbers of Safety Observation in Progress
2023-24	6,367	5,956	411
2022-23	6,117	5,778	339
2021-22	5,933	5,845	88

## 12.8 Awards and Appreciations

- JLPL-Mansarampura, Chhainsa and GPU Gandhar have bagged the “Safety Innovation Award-2023” presented by the Institution of Engineers (India).



GAIL wins SAP ACE Best Financial Transformation Award 2023 for implementation of Vendor Invoice Management Systems

- GAIL, Bengaluru, receives ‘Utthama Suraksha Puraskar’ from the National Safety Council, Karnataka Chapter.
- GAIL Chhainsa has Bagged the Quality Innovation Award-2023, Organized by the Institutions of Engineers - Safety and Quality Forum.
- Chhainsa QC team “Samadhan” won the Gold Award at the 34<sup>th</sup> CCQC Delhi Chapter.
- Vizag - Secunderabad LPG Pipeline (VSPL) Won the “GOLD Award” at the 8<sup>th</sup> Apex India Occupational Health & Safety Awards 2023 in the Cross-Country LPG Pipelines Sector from APEX India Foundation, Udaipur on 7<sup>th</sup> Oct 2023.



GAIL (India) Limited

## Sustainability Report 2023-24

### New India New Energy

- GAIL-Kochi received ‘Sreshta Suraksha Puraskar’ for Outstanding Safety Performance from the National Safety Council, Kerala Chapter.
- GAIL-Vijaipur won the ‘Prashansa Patra’ Certificate from the National Safety Council, Maharashtra Chapter.
- GAIL PDP-PP project, Usar won the Platinum award in the Petrochemical Project Sector for outstanding achievement in Occupational Health and Safety during “15<sup>th</sup> Exceed OHS Awards and Conference” on 15<sup>th</sup> December 2023
- Kailaras Compressor Station and Pipelines received the ‘Platinum Award’ - Safety Culture Award 2023 by Apex India Foundation.



20<sup>th</sup> Annual HSE Workshop at GAIL Training Institute, Noida



6<sup>th</sup> Strategy Review Meeting



Walkathon 2024 at GAIL Vijaipur



Zumba Healthy Lifestyle activities at Gandhar

13



## Responsible Supply Chain Management

 INR 1,963 Crores of procurement from MSEs in FY 2023-24 is approximately 56.51% of total procurement.

 Procurement from MSEs owned by Woman Entrepreneurs have increased to 6.65% from 3.11% in FY 2023-24

 Procurement through Government e-Marketplace (GeM) in FY 2023-24 is INR 2,704 Crores

 VIM-Center has processed over 100,000 invoices and evolved as a centre of excellence, bringing efficiency to the processes with support from all stakeholders.

# Responsible Supply Chain Management

## 13.1 Our Suppliers

GAIL is committed to ensuring sustainable consumption and production patterns to reduce environmental impact, promote economic efficiency and improve the quality of life for all (SDG 12: Responsible Consumption and Production). At GAIL, Suppliers are key stakeholders as they ensure smooth business operations and significantly contribute to our overall success. We encourage suppliers, contractors and vendors to conduct business ethically and comply with all the relevant national, state and international laws & regulations.

GAIL collaborates with its suppliers to establish a sustainable business practice that delivers mutual benefits. To achieve this, GAIL conducts regular audits and assessments to ensure that select suppliers adhere to the environmental and social criteria. For other remaining suppliers, GAIL adheres to a due diligence process, where suppliers's records are assessed.

GAIL's decision to adopt the 'Atmanirbhar Bharat Mission' as a supply chain revival strategy is intended to promote domestic production and encourage maximum participation from local domestic bidders. This method facilitates the development and expansion of local vendors.

## 13.2 Supplier Governance Mechanisms

GAIL has established various committees to ensure efficient and smooth supply chain operation, such as the Empowered Contracts & Procurement Committee (ECPC), Project Committee, Stakeholder Relationship Committee, Stakeholder Grievance Redressal Committee, Settlement Advisory Committee and Independent External Monitors.

The roles and responsibilities of these committees are:

- a) To align the policies with GAIL's commitments, goals and vision.

- b) Compliance with all the applicable national and international laws & regulations.
- c) To manage and improve the relationship with the stakeholders.
- d) To address the grievances of the suppliers, vendors and contractors.
- e) To give recommendations on settlement proposals that have financial implications of more than INR 25 Lakhs.
- f) Monitor the implementation of the Integrity Pact (IP) in all tenders.

## 13.3 Procurement Practices and Policies

(**GRI 3-3-a, b, c, d, GRI 308-1, 2, GRI 414-2**)

Effective management of purchase policies plays a vital role in improving GAIL's sourcing practices. Efficient and prudent procurement methods assist the organisation in avoiding the risks associated with its operations and enhancing transparency. GAIL assures that all of its suppliers follow the necessary national/international legislations and standards, thereby enabling uninterrupted operations.

All bidders must conform to GAIL's General Conditions of Contracts (GCC), wherein they confirm adherence to all provisions relating to the impact on society, environment, labour practices, and human rights as outlined in the Integrity Pact.

These guidelines mandate adherence to the following standards:

- a) Promoting the rights and welfare of workers.
- b) Ensuring all employees and workers comply with Health and Safety regulations at the worksite.
- c) Commit to protecting the environment in compliance with all applicable environmental laws and regulations.



Additionally, GAIL implements all relevant government policies that contribute to the organization's sustainable sourcing. The procurement policy guides the procurement processes and sourcing strategies to ensure that the services and goods acquired result from transparent processes, time & cost effective decision making and risk management.

The overall governance of Supply Chain Management majorly through these committees:

**Empowered Contracts & Procurement Committee (ECPC):** The Empowered Contract and Procurement Committee oversees and approves all contractual agreements and procurement activities. Its primary goal is to ensure that the procurement process is transparent. The committee also evaluates and mitigates risks associated with contract management and supplier relationships.

**Project Committee:** Oversees and approves Projects exceeding INR 100 Crores and up to INR 500 Crores, subject to DPE guidelines and presence of Government Nominee Director.

Contract Management Document (COMAND) was launched for Engineer-In-Charge (EIC) to improve contract management and execution.

The suppliers are expected to adhere to the Supplier Code of Conduct and compliance based on environmental and social criteria.

- Government e-Marketplace (GeM)
- Open Domestic Tenders
- Limited Domestic Tender
- International Competitive Bidding (ICB)
- Limited International Competitive Bidding (LICB)
- Nomination Order/Award
- OEM/Proprietary Purchase
- Petty Purchase/Works/Services/Hand quotation for petty orders
- Annual Rate Contracts
- Purchase by Boards of Officers

- Emergency Purchase
- Purchase from Government Cooperative commercial outlets
- Quality and Cost Based Selection (QCBS) for Services

### 13.4 Sustainable Procurement

(**GRI 3-3, a, b, d, 204-1a, 308-1, 308-2, 407-1a, b, c, 409-1a, b**)

GAIL's suppliers play a key role in the value chain, with a substantial impact on the company's environmental and social performance. GAIL aims for sustainable procurement throughout its supply chain, acquiring raw materials and goods from local suppliers.

Encouraging suppliers and contractors to meet strict requirements and certifications related to Quality, Environmental Impacts and Health & Safety is an effective way to ensure that suppliers are aligned with the company's sustainability goals and values.

Contractors are prohibited from hiring underage workers. To ensure that human and children's rights are not violated, the organization performs frequent checks at all stages of operations, including its subsidiaries. To avoid the illicit practices or exploitation of underage workers, GAIL strictly prohibits the use of child labour, forced labour, and compulsory labour in its operations and supports the government's legislative action plan on child labour policies. Fully trained security personnel are hired to prevent underage workers from entering the plant or office premises, including exposure to hazardous work.

GAIL has a systematic approach to screening suppliers aiming to identify potential sustainability risks within its supply chain, considering country-specific risks, sector-specific risks and commodity-specific risks. To streamline the process, GAIL implements Supplier Assessment and Development measures aimed at evaluating and improving supplier performance.

### 13.4.1 Implementation of Purchase Preference policy

GAIL provides purchase preference to Micro & Small Enterprises (MSEs) in line with the requirements of various procurement policies to promote and support local vendors. The policy aims to incentivise the growth in local content in goods and services and providing purchase preference to the manufacturers/service providers who meet the specified local content % in business activities. To ensure sustainability in the supply chain, GAIL has implemented the following policies:

Public Procurement Policy for MSE 2012
<b>Policy for Purchase Preference to Domestically Manufactured Electronic Products (DMEP)</b>
<b>Policy to Provide Purchase Preference as per Public Procurement (Preference to Make in India), Order 2017</b>
<b>Policy for Preference to Domestically Manufactured Iron and Steel Products (DMI&amp;SP)</b>
<b>Policy for Purchase Preference to Domestically Manufactured Telecom Products - Works and Services.</b>
<b>No International Competitive Bidding (ICB) tender below INR 200 Crores. In exceptional cases, ICB tenders are to be floated only with the approval of the competent authority.</b>
<b>Preference to MSE owned by SC/ST and women entrepreneurs is being given in line with the Public Procurement Policy for MSE 2012</b>
<b>Adherence to DPIIT's Start-up Policy wherein registered Start-ups are exempted from mandatory requirement of meeting the Technical BEC</b>

Apart from this, GAIL has also introduced the Start-up policy wherein registered Start-ups are encouraged by being exempted from the mandatory requirement of meeting the Prior Experience and Prior Turnover criteria of Technical Bid Evaluation Criteria (BEC) for items/services other than those related to public safety, health, critical security operations and equipment etc. The Public Procurement Policy for MSEs 2012 targets 25% of procurement from MSEs with sub-targets for marginalized communities of 4% owned by Scheduled Castes or the Scheduled Tribes and 3% owned by Women entrepreneurs for the Goods and Services procured.

In FY 2023-24, out of the total eligible value of annual procurement of INR 3,474 Crores towards Goods and Services, the total procurement value from MSEs is INR 1,963 Crores (56.51% of total) compared to INR 1,532 Crores (43.68% of total) in FY 2022-23.

The procurement made from MSEs owned by SC/ ST (Scheduled Caste/Scheduled Tribe) Entrepreneurs was INR 142 Crores (4.08 %) and procurement made from MSEs owned by women entrepreneurs was INR 231 Crores (6.65%), of the total eligible value of annual procurement.

#### Procurement of Goods and Services from small/local producers

GAIL is actively working towards enhancing procurement from MSEs owned by SC/ST entrepreneurs and making a positive impact on marginalised communities. GAIL has adopted a special tie-breaker methodology in tenders issued through the Government eProcurement system of NIC services/works to prioritize procurement from MSEs owned by Women SC/ST entrepreneurs. In cases where there is a tie at the lowest bid position between two or more bidders, the following preference sequence is followed when awarding the contract:



GAIL (India) Limited

## Sustainability Report 2023-24

New India New Energy

No	Particulars	Unit of Measurement	FY 2022-23	FY 2023-24
1.	Total Annual Procurement	INR Crores	1,532	1,963
2.	Target of Procurement	%	25	25
3.	% of Total Procurement (including MSEs owned by SC/ST Entrepreneur)	%	43.68	56.51
4.	Procurement from MSEs owned by SC/ST entrepreneurs)	INR Crores	137	142
5.	% Of Procurement from MSE owned by SC/ST entrepreneurs)	%	4.04	4.08
6.	Procurement from MSEs owned by women entrepreneurs	INR Crores	108	231
7.	% of Procurement from MSEs owned by women entrepreneurs	%	3.11	6.65
8.	Procurement through GeM	INR Crores	2,541	2,704

- a) If one of the bidders is an MSE owned by SC/ST Entrepreneur, the order shall be placed to that bidder.
- b) If one of the bidders is an MSE owned by a Women Entrepreneur, the order shall be placed to that bidder.
- c) If one of the bidders is an MSE, the order shall be placed to that bidder.
- d) If none of the above conditions are met, the order shall be placed to the bidder having a higher turnover in the previous financial year.

### Uploading of Annual Procurement Plan and Future Procurement Plan

To encourage the participation of MSEs, GAIL guarantees that the Annual Procurement Plan is regularly uploaded to its dedicated tender website. This strategy specifies the procurement requirements for MSEs and is a useful resource for local vendors. GAIL also ensures transparency by publishing detailed information on all MSE procurements over the last three years on its official website. This information enables interested parties to obtain data from prior years and acquire insights about the company's interactions with MSEs.

### Qualification of Indian Bidder Based on Experience of Foreign Supporting Company

GAIL has implemented a policy that prioritizes

Indian bidders based on the qualifications of their foreign supporting bidders. This policy encourages domestic participation in various projects and initiatives undertaken by GAIL.

### INDEG Group is constituted to support the growth of the domestic manufacturing sector

All the public sectors under the Ministry of Petroleum & Natural Gas (MoP&NG) have constituted the INDEG Group (Indigenisation Group) to promote the participation of indigenous produced goods and services in the Oil & Gas sector. GAIL has constituted INDEG Group at the Apex and site levels and is monitoring its progress regularly. The objective of INDEG Group is to take initiatives to develop indigenous source of materials / services, import substitution and reserving material / services to be supplied by domestic vendors only. The MoP&NG has developed an exhaustive portal where all Oil & Gas Companies (such as IOCL, BPCL, ONGC, GAIL, OIL etc.) will upload their future demands and various item categories procured by them. GAIL is actively participating in developing this portal, which will help Indian manufacturers enhance their manufacturing capacity.

To promote domestic manufacturing in MSEs under the Atmanirbhar Bharat Mission, the government or its agencies for the procurement of goods and services decided that no global

tender would be floated if the value was less than INR 200 Crores. In exceptional cases, where there are special reasons for tenders below mentioned limit, prior approval from the competent authority is obtained along with a detailed justification. The Secretary (Coordination) and the Cabinet Secretariat are the competent authority to approve the processing of tenders on a Global Trade Enquiry (GTE) basis up to INR 200 Crores in the exceptional cases mentioned above.

### 13.5 Grievance Mechanisms

GAIL has a designated Vendor Grievance Portal- “SAMADHAN” to address issues of Vendor/Supplier/ Contractor/ Consultant in a timely manner. These initiatives have been taken to transform from a “Reactive to Proactive organization”. Our goal is to move towards “Zero Disputes”. The Vendor/Supplier/Contractor/ Consultant can submit their issue(s) on the Vendor Grievance Portal- “SAMADHAN”.

The link to the portal is available on our website: [https://gailebank.gail.co.in/Grievance\\_new/vendor/Vendor\\_Login.aspx](https://gailebank.gail.co.in/Grievance_new/vendor/Vendor_Login.aspx)

GAIL also has specific complaint channels, i.e., an Online Complaint System for suppliers that is designed to streamline the process of addressing and resolving complaints promptly.

Online Compliant System link: <https://www.gailonline.com/onlineComplaints.html>

Vendors also have the option to address their grievances by reaching out to Independent External Monitors (IEM). These IEM have been appointed to ensure the proper implementation of the Integrity Pact Program in GAIL. Integrity Pact is an agreement between suppliers and GAIL to promote transparency, prevent corruption and uphold ethical business practices throughout the procurement process. The Integrity Pact is included in all tenders with a value exceeding INR One (01) Crores.

Apart from this, a vendor feedback portal has also been launched to capture the feedback of suppliers and contractors effectively.

Vendor feedback portal link: <https://gailebank.gail.co.in/vendorfeedback/Login.aspx>

### 13.6 Initiatives taken for Engaging with Suppliers in FY 2023-24

#### (GRI 3-3-d, f)

GAIL has taken initiatives to streamline and improve business interactions with its vendors and suppliers.

GAIL ensures broader participation and educates vendors on the tendering process through pre-tender and pre-bid meetings in all its tender processes. GAIL regularly organizes Interactive Meets & Development Programs for vendors, suppliers and contractors at its various work centres.

These events aim to provide updates on best practices for facilitating business operations, executing contracts, and presenting GAIL’s initiatives and policies, as well as regulations and policies introduced by the Government of India.

GAIL has developed ESG programs for its suppliers to provide information on best practices, regulatory compliance and performance improvement strategies. These programs aim to enhance suppliers’ understanding of environmental impacts, social responsibility and ethical governance. By participating in these programs, suppliers receive training on reducing environmental impacts, improving labour conditions and adhering to ethical business practices, ensuring their operations align with GAIL’s commitment to sustainability and corporate responsibility.

GAIL has also conducted meetings with MSEs, including those run by SC / ST entrepreneurs across India. Vendor Training Programs are organized to bridge the gaps in understanding and interpretation of RFQ/Tender documents, offering guidance to vendors on common mistakes done in the tender process and contract execution, to foster long-term mutually beneficial associations.

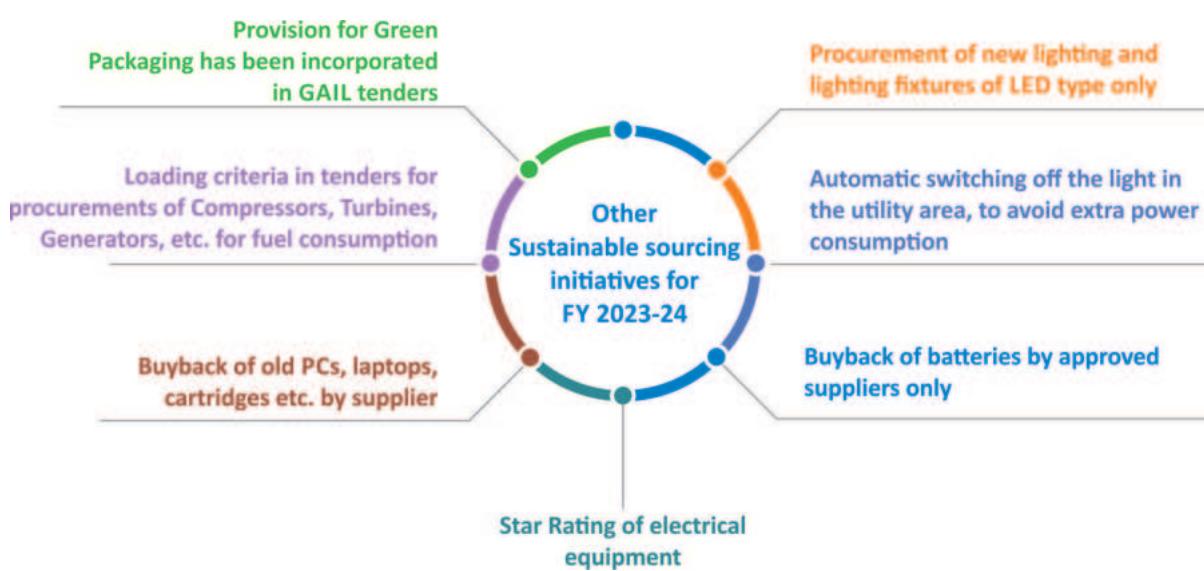
In FY 2023-24, GAIL successfully conducted an Entrepreneurship Development Program for developing SC/ST and Women Entrepreneurs at Dibiyapur from 22.02.2024 to 06.03.2024. GAIL also organizes Entrepreneurship Development Projects (EDPs) in partnership with companies like M/s HPCL to support the development of SC/ST entrepreneurs. Further, GAIL organized physical and virtual meetings to educate vendors and familiarize them with the company's latest digital initiatives, such as the Vendor Invoice Management Portal, which GAIL has launched to process vendor invoices digitally.

Besides this, GAIL regularly conducts Corporate Level Special Vendor Development Programs in collaboration with the National SC/ ST Hub, specifically aimed at MSEs owned by SC/ST entrepreneurs. During the program, participants are briefed about GAIL's procurement policies and the special initiatives to promote MSEs

owned by SC/ST entrepreneurs.

In FY 2023-24, 16 Vendor Development Programs (Including 04 programs for SC/ST & Women entrepreneurs) were conducted by GAIL across various work centres to create awareness and associate with the vendors for mutual and sustainable growth. GAIL has published advertisements in prominent newspapers, in various languages like Hindi, English, Bengali, Telugu, Tamil, etc., to reach out to large number of MSEs, especially those owned by SC/ST entrepreneurs

GAIL has established an email helpdesk, namely 'ED C&P Cell', to facilitate communication, seek advice and address concerns related to the Contracts & Procurement process. Officials can submit their questions and issues, which are promptly attended to and compiled into a Frequently Asked Questions (FAQ) format.



### 13.7 Digital Transformation

(GRI 3-3d, e, f)

Digital transformation is leveraging digital technologies to create new or modify existing policies, processes, procedures and customer experiences to meet changing business and market challenges.

GAIL intends to undergo a digital transformation as part of the Digital India campaign, envisioning a society and knowledge economy powered by digital technology. GAIL is actively contributing to

developing a modern digital economy by integrating new systems and procedures. Different online management tools were implemented as part of the continuous transition, including the Bill Watch System, cashless and paperless transactions, and File Movement System. These solutions have significantly increased operational efficiency and optimized procedures.

Tenders at GAIL are done on digital platforms, especially the GeM or the E-tendering system. GAIL intends to make the best use of the GeM portal for tendering purposes in accordance with the recent government rules. This portal complies entirely with several Central Vigilance Commission (CVC) rules, ensuring transparency and accountability in the procurement process. By leveraging these digital platforms, GAIL hopes to streamline and improve the efficiency of its tendering process in compliance with government guidelines.

As a part of the Digital India Initiative, GAIL recognizes the importance of reducing paper consumption and streamlining record-keeping processes. GAIL has developed a standard document, GCC, which is readily available on GAIL's tender website. GAIL has implemented a Document Transmittal System that simplifies the signing and countersigning of bulky contract documents in projects. Instead of printing and physically signing these documents, relevant GAIL officials utilize digital signatures to sign them electronically.

Vendor Invoice Management (VIM), a significant step towards complete digitalization, centralisation and automation of vendor payment, was launched in partnership with IBM Consulting. VIM is a complete digital solution for prompt payments, better experiences, enhanced efficiencies and transparency for end users. It will help GAIL remain competitive and succeed by providing ease of doing business.



CMD's visit to VIM Centre on 5th August 2024

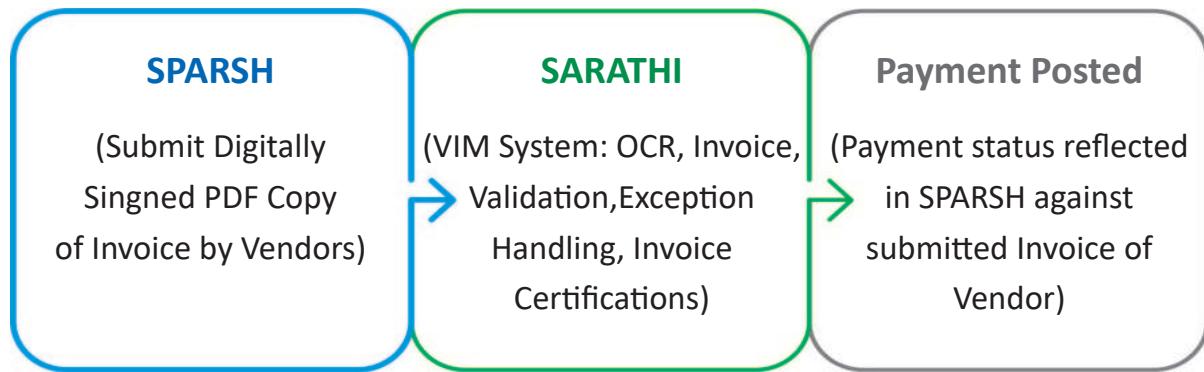
GAIL believes that introducing initiatives like 'SARATHI', 'SPARSH', 'ASK-ASHA' & 'Vendor Helpdesk' greatly enhance the relationship and provide valued vendors with the highest level of service, support and satisfaction.

**'SARATHI':** GAIL's Shared Service Centre for VIM for automation, digitalization & centralization of the Accounts Payable process.

**'SPARSH':** A Vendor or Supplier Portal for ingestion of digitally signed PDF copies of invoices, credit notes & retention release requests by Vendors into the VIM System.

**'ASK-ASHA'**: A Self-Service BOT for vendor query resolution in respect of the following is also operational:

- Status of Invoice Payment
- Features and usages of SPARSH



**'VIM Helpdesk'**: GAIL has established a VIM Helpdesk to assist vendors with any issues or queries and ensure that issues are resolved promptly and satisfactorily.

**Outcomes**: Implementation of VIM portals has resulted in the following outcomes

VIM-Centre has processed over 100,000 invoices and evolved as a centre of excellence, bringing efficiency to the processes with support from all stakeholders.

- This initiative has been able to save around 07 lakh pages.
- Invoice Payment Life Cycle reduced by 06 days.
- More than 93% receipt of Digitally Signed invoices.
- 90% Payment made within 15 days.
- More than 17,000 vendor queries have been resolved within 48 hours.

**Extension of VIM Portals to JVs and Subsidiaries**: GAIL has extended VIM Portal facilities to GAIL Mangalore Petrochemicals Limited (GMPL) and GAIL Gas Limited (GGL).

### 13.8 Tendering and Contracts Involves three Stages

- a) Pre-Award Stage
- b) Post-Award (Execution of Contracts)
- c) Closure of Contracts

#### A. Pre –Award Stage of Tender

The initial step of the Pre-award stage is a Pre-tender meeting to understand better technical & financial qualification criteria, specifications/scope of work etc. of tender and feedback from prospective bidders is received, if any. The details of the pre-meeting and all tenders are uploaded on GAIL's website and GeM portal for broader circulation. Any bidder who meets the BEC can download and participate in the tender.

GAIL is promoting e-tendering by sending & receiving tenders through e-platforms. The threshold value of E-Tendering has been lowered to INR 2 Lakhs. Model Instructions are given to Bidders (ITB) for all Tenders to bring uniformity in tendering across all work centres of GAIL and also facilitate bidders in submitting their bids. Further, GAIL also conducts meetings with OEMs for Standardization of Terms & Conditions to bring uniformity and reduce lead time in processing OEM cases. To date, 36 OEM agreements have been signed. Further submission of Security Deposit/Contract Performance Security & EMD through Online Bank transactions to facilitate bidders.

To promote **Make in India** & enhance the participation of Indian bidders, a policy

has been introduced to qualify the Indian bidder based on experience of foreign representative company introduced. Third-party agencies have been engaged in verifying and certifying BEC documents. Additionally, relaxation has been given to Start-ups, related to prior turnover and experience, in the procurement of goods/works/services.

#### B. Post-Award Stage of Tender

EIC will organise a kick-off meeting with the contractor after the contract is awarded. Aspects covered during the kick-off meeting include signing the agreement, submission of Contract Performance Security (CPS), schedule for submission/approval of drawing/document, work schedule and sub-milestones etc.

Contract Performance Bank Guarantee (CPBG) in work contracts modified as 5% initially & deduction of remaining 5% from Running Account (RA) Bills. The time for the submission of CPBG has been rationalized. Trade Receivable Discounting System (TReDS) has been introduced to address challenges faced by MSMEs in maintaining their working capital due to delayed payments from buyers. TReDS is an online electronic institutional

mechanism for financing MSMEs' trade receivables. GAIL is already registered on all three TReDS platforms.

GAIL has taken various measures in Pipeline Laying Contracts, such as mobilization advances in two instalments of 5% each, release of 70% of Running Account bills payment within 07 days, Extended stay compensation to the contractor etc. The interest rate is reduced to Marginal Cost of the Funds Based Lending Rate (MCLR) (for one year) charged by SBI plus 2.0% p.a. on a reducing balance basis.

The monthly health monitoring of contracts is implemented to ensure that contracts are managed and executed to the stakeholders' satisfaction. It includes various aspects of contract management, including claims, deviations, amendments, issues/disputes etc. Monthly Reports in the prescribed format are to be submitted to the management.

#### C. Closure of Contracts

GAIL has also implemented system for Quarterly Closure of Contracts to resolve all the issues and ensure that contracts are managed and executed with the satisfaction of all the stakeholders & resulting in ease in contract closure.



GAIL wins prestigious 15<sup>th</sup> CIDC Vishwakarma Award Barauni- Guwahati Pipeline



C&P Vendor Interactive Meet

14



## Our Customers



In the FY 2023-24, no incidence of customer privacy violations was reported



In the FY 2023-24, 85% of the customer complaints were resolved



In FY 2023-24, Customer Satisfaction Index is 91%

## Our Customers

(GRI 3-3)

GAIL is dedicated to provide high quality products and services with focus on innovation. GAIL is also committed to provide best experience possible and response to its clients. GAIL focuses on customer loyalty and satisfaction to achieve long term success.

We continuously undertake customer centric initiatives through tools like Market Research, Customer Engagement Programs and Surveys. This insight allows us to enhance our products and services, ensuring customer satisfaction and building long-term relationships that are the cornerstone of our growth.

GAIL aims to provide eco-friendly fuels, petrochemicals, chemicals to sectors such as industries, commercial establishments, among others, to enhance customer's convenience while prioritizing environmental concerns.

GAIL examines the strategies of competitors, and redefines its own technique/approach, and introduces new initiatives to enhance its services. By adopting a customer-centric approach we introduced initiatives in CGD segment such as Online Registration and Payment, Automated Smart Meters for Natural Gas consumption, and Mobile Applications for a seamless experience.



Shri Sandeep Kumar Gupta, Chairman & Managing Director, GAIL (India) Limited (centre) being conferred with the 'CEO with HR Orientation' award at the 32<sup>nd</sup> World HRD Congress & Awards



## 14.1 GAIL's Customers

Our customers for various business segments are as follows:

### Natural Gas:

1. The most prominent customers of GAIL in this segment are from
  - a) Fertilizer Sector- 45 Customers
  - b) Power Sector- 30 Customers
  - c) CGD Sector- 158 Customers
  - d) Others- 383 Customers
2. **Natural Gas Transmission:** Natural gas pipeline infrastructure connects various gas sources to different gas markets to meet the existing/ future natural gas demand of various power, fertilizer, City Gas Distribution (CGD) and other industries in the country.
3. **Petrochemical:** GAIL caters to the requirement of customers for various applications such as Blow Moulding, Injection Moulding, Raffia & Monofilament, Film, Pipe, Roto Moulding, etc., by supplying required grades of High Density Polyethylene (HDPE) and Linear Low Density Polyethylene (LLDPE).
4. **Liquid Hydrocarbon:** In the Liquid Hydrocarbon segment, our major customers are in the Industrial and Commercial sectors.

## 14.2 Customer Privacy

### (GRI 418-1 a, b, c)

Rapidly increasing digitalization has resulted in a greater emphasis on privacy. As a result, customer privacy is a critical issue and hence, a crucial element of our agreements. Customer's privacy concerns encompass data protection, ensuring that information/data is used for the intended purpose, maintaining confidentiality and preventing data theft or abuse. We place a high emphasis on our customers' privacy and take the necessary steps to ensure that there are no breaches such as leaks, thefts or loss of customer data.

We understand that it is our responsibility to maintain the integrity and accuracy of our stored

papers, data and information. All documents generated, recorded and stored comply with our Document Preservation Policy. Furthermore, consumer privacy is a fundamental component of GAIL's agreements. These include using information or data for its intended purpose, ensuring confidentiality, and protecting information and data from misuse or theft. No incidences of consumer privacy violations were reported in FY 2023-24. GAIL takes additional measures to protect consumer privacy (end consumers and business-to-business customers) based on the industry in which the customer operates:

- **RLNG:** Gas Supply Agreements and Gas Supply Purchase Agreements with RLNG customers include a confidentiality clause. This clause requires both the buyer and seller to keep the details of their transactions and business confidential, except for specific legal purposes. This measure protects sensitive business information and fosters trust between GAIL and its customers.
- **Domestic Gas:** GAIL provides Natural Gas to a diverse range of firms along the natural gas value chain, resulting in a wide range of customers. Contractual arrangements and financial agreements vary depending on the type of customer, whether they are end users or business-to-business clients. Details of these clauses are kept confidential.

## 14.3 Customer Satisfaction

### (GRI 2-29)

Our core values are centred on consistently exceeding customer expectations and being their one-stop solution by providing exceptional products. GAIL's customers can log their complaints online, through letters, emails, and in-person through GAIL coordinators at various Zonal Marketing Offices and Corporate Office.

GAIL carries out two types of surveys namely  
(1) Customer Satisfaction Index (CSI) and  
(2) Customer Value Management (CVM) on product quality and services offered by GAIL, to solicit customer feedback.

The Customer Satisfaction Index (CSI) is an in-house initiative by GAIL to collect feedback from customers. A link is provided to all active customers of GAIL on their email ID for providing feedback on predefined parameters related to quality and services. Secondly, the customer feedback is also collected through SAP and further analysed for needful resolution. In FY 2023-24, a total of 150 customers were surveyed. A total of 69 customer concerns were received, and all have been resolved. GAIL's Customer Satisfaction Index of 91% is an outstanding achievement that reflects the dedication of GAIL's employees.

Customer Value Management (CVM) involves collecting feedback from customers through a third-party evaluation agency. Customers are required to respond to a series of questions, and their answers are recorded. This input is subsequently analysed and presented to GAIL's management by the third-party agency. Customers' feedbacks are thoroughly examined, and the marketing develops a strategy for addressing the issues identified. Customers are kept informed about the actions taken in response to their feedback.

#### **14.4 Customer Grievance Redressal**

##### **(GRI 416-2 a)**

At GAIL, we ensure high customer satisfaction by offering an accessible, efficient and effective customer grievance resolution process. To achieve our goal of providing great customer service, we work with the appropriate business divisions to develop strategies for resolving

customer concerns as soon as feasible. We recognize all customer complaints upon receipt, and when an issue is fixed, we inform the consumer via email or letter.

Existing customers in the Natural Gas, Petrochemical, Liquid Hydrocarbon, Gas trading, and Transmission business segments can log their complaints, suggestions, and grievances through GAIL's Customer Relationship Management (CRM) system at any time. Complaints received through the CRM module are forwarded to the relevant Zonal Offices, where the Technical, Finance and Marketing teams work together to promptly resolve the issue. It is important to note that Technical, Finance and Marketing teams assist the relevant Zonal Offices in addressing complaints submitted through the CRM module to provide a possible solution at the earliest.

The GPTC resolves customer issues about Polymer product quality and provides technical support to resolve customers' concerns about Polymer grades.

The GPTC team, Pata/BCPL team and Zonal PC Marketing executives addressed technical customer complaints to the client's satisfaction. In FY 2023-24, 54 complaints were received at GPTC, out of which 46 were technical and 08 were physical complaints, and all the complaints were resolved.

A total of 35 Customer complaints were received at Zonal Offices, and all complaints were resolved. The complaints received at Zonal Offices and GPTC are summarised below:

No	Zonal Marketing Offices & GPTC	Complaint Received	Complaint Resolved
1	Jaipur	02	02
2	Kolkata	04	04
3	Lucknow	02	02
4	Bengaluru (including Kochi)	10	10
5	Bhubaneswar	02	02
6	Guwahati	15	15
7	Hyderabad		
8	Mumbai		
9	Chandigarh		
10	Bhopal		
11	Chennai		
12	NCR		
13	Ahmedabad		
14	GAIL Polymer Technology Centre	54	54

No complaints were received



**GAIL & CGD Customers - A total of 22,002 customer complaints were received during FY 2023-24, and 85% of the complaints were satisfactorily resolved till the end of Financial Year.**

GA Name	Number of Complaints Registered in FY2023-24	Number of Complaints Resolved in FY2023-24	Number of Complaints Open	% Complaints resolved
Varanasi	12,881	9,839	3,042	76%
Khordha	1,217	1,171	46	96%
Cuttack	192	188	4	98%
Patna	4,773	4,656	117	98%
Ranchi	1,332	1,243	89	93%
East Singhbhum	1,607	1,594	13	99%
<b>Total</b>	<b>22,002</b>	<b>18,691</b>	<b>3,311</b>	<b>85%</b>

#### 14.5 Product Labelling

(GRI 3-3, GRI 416-1 a, GRI 416-2, GRI 417-1a, GRI 417-2, GRI 417-3)

Product labelling in the energy sector is more focused on safety, regulatory compliance, technical specifications and environmental impact to ensure safe usage and comply with legal standards.

There was no reported incidence of non-compliance with regulations or voluntary codes concerning the Health and Safety impacts of Products during the reporting period.

Our strategy for delivering Product specific information is displayed on 25 kg strong bags made of woven fabric for Petrochemical Products:

- i. Grade Name
- ii. Batch Number
- iii. Manufacturer Details
- iv. Symbols for storage & instructions
- v. Recycling information
- vi. Instructions on the handling of bags
- vii. Net Weight
- viii. BIS Standard Mark for the License granted to GAIL as per IS 7328:2020, which is meant for Product Quality Certification for its Polyethene grades

ix. BIS Logo for Manufacturing

x. Contact e-mail for customer support

Instruction is clearly mentioned: "Not to be used in the manufacture of single-use plastic items prohibited under the Plastic Waste Management Rules, 2016, including plastic sheets <50-micron thickness, non-woven carry bags <60 GSM, Carry bags <120-micron thickness."

As per the Plastic Waste Management (Amendment) Rules, 2022, our product labels communicate to all petrochemical customers that they should not use GAIL's products in the production of banned single-use plastic items. Additionally, GPTC issues Quality Certificates as needed to ensure the quality of polymer products.

Also, the Quality Report and Material Safety Data Sheet (MSDS) are sent along with the products dispatched through tankers.

GAIL is engaged in marketing AHC products/by-products, namely LPG, Propane, Pentane, Naphtha, Mixed Fuel Oil (MFO), Propylene, Hydrogenated C4 Mix and Slop Oil.

- 1. MFO, Pentane and Slop Oil products are allocated based on statutory Solvent Licenses and Storage Licenses obtained by the customers.

2. Propane, Propylene and Hydrogenated C4 Mix are allocated based on the Storage License obtained by the customers.
3. Naphtha is being allocated based on the Naphtha Control Order/Act.

All the above-mentioned licenses are being periodically renewed by the government agencies and are required to be submitted by the customer to GAIL.

GAIL also provides Technical Data Sheets (TDS) and MSDS along with instructions for using its Petrochemical products safely. GAIL provides technical assistance through its Zonal Offices and GPTC to further promote the safe use of its products.

Name	No. of LHC Customers	Probable Industry Sector
Propane	52	Steel, glass food processing and automobile sector for process heating, metal processing painting units, drying ovens, metal industry, process heat dryers, etc.
Pentane	27	Petrochemical, paint, thinner, solvent industry
Naphtha	6	Institutional customer in the sector of Power Steel, petrochemical, chemical and fertilizer sector
MFO	48	Chemical industry, industrial fuel for heating, paint, furniture, road construction, etc.
C4 Mix	4	The commercial-industrial sector as fuel and as a feedstock in petrochemical ceramic road construction furnaces, and the paint industry extra as a heating fuel
Propylene	8	Petrochemical and Pharmaceutical
Slop Oil	9	Ceramic, road construction, furnaces, paint industry, etc. as a heating fuel
<b>Total</b>	<b>154</b>	

## 14.6 Customer Engagement

### (GRI 2-29)

GAIL's goal is to provide an end-to-end customer experience to a large extent. Engagement with customers at multiple contact points throughout the year allows us to build trust with them. Our employees are actively involved in Customer Satisfaction Surveys and Customer Complaints resolution process. Customer engagement activities are aimed at answering customer queries regarding our products and portfolio, as well as raising awareness about our services. Long-term goals involve building brand trust and expanding our reach with potential customers.

At GAIL, we leverage technology and customer information to gain in-depth understanding of our customer's demands, market intelligence and polymer grade-specific discounts. Steps are

being taken to tie up Natural Gas / RLNG volumes with our customers at most competitive prices. Customers are given a choice from GAIL's existing gas portfolio. Retail Marketing group has also created an application that notifies customers of any price change through online mode.

GAIL has also implemented systems to keep the customers informed of latest developments in gas pricing and gas supply. Any expected interruptions in gas supply is communicated to consumers as soon as possible via e-mails and phone calls. Regional Control Rooms for gas marketing communicate with customers Round The Clock to advise them of any potential delays or interruptions, plant closure and polymer grade availability.

At GAIL, we inform and educate consumers about the safe and responsible usage of



products and services. Contracts, MoUs, and Sales Policy have specific information on the usage of products. With regards to Natural Gas, LHC, and Polymer segments, the MSDS is also provided to customers. Customers are also asked to retain statutory licenses mandatory to handle products sold. Customer interactions, whether visits or meetings, are also a key channel for communicating information about the safe and responsible usage of products. Additionally, GAIL organizes demonstrations on Fire and Safety to educate customers about the safe and responsible use of Natural Gas. Periodic mock drills are also done to educate customers and the public about actions to be taken in case of any hazardous situations.

GAIL conducts public awareness programs on Pipeline Safety and training sessions on City Gas Distribution under corporate guidelines at various sites, including CGD and CNG stations.

**Waah Kya Energy Hai:** This digital campaign launched by GAIL for Business-to-Consumer (B2C) segment, is strategically geared towards engaging retail Natural Gas consumers across India. It comprises four short films in a mini-series format, which tells the story of a close-knit middle-class Indian family and how they navigate their challenges through a smarter choice of fuel usage, switching to D-PNG (Domestic Pipe Natural Gas), C-PNG (Commercial Pipe Natural Gas), CNG and Industrial PNG.

#### **Initiatives taken during the reporting year for engaging with customers:**

- **Kolkata Zonal:** For LHC & PC Marketing:
  - a) Regular interaction with customers and plant visits.
  - b) Conducting Customer Meetings for PC Marketing
    - » Regular customer visits
    - » Arranging customer meets at potential market locations

- » Participating in fairs, seminars, and other polymer-related programs
- » Attending meetings organized by plastic associations.
- » Conducting trials of new grades at factories of customers
- » Day-to-day commercial and technical support

PC Marketing team has met all customers and Consignment Stockists (CS) to keep the sales at a satisfactory level during the FY, which has been very tough and unpredictable. BCPL PC Marketing team has successfully created a niche market for BCPL products in Siliguri and adjoining areas. Siliguri has been developed as a satellite market for such products, and the realisation from the sale of polymer products is also highest. Similarly, the team is working towards creating many more satellite markets in Durgapur, Asansol, and parts of North Bengal to sell BCPL products.

#### **For NG Marketing:**

- a. Regular customer visits.
  - b. Arranging customer meets at potential markets.
  - c. Day-to-day commercial and technical support.
- **Bengaluru Zonal**

Customer visits were conducted to prospective customers in the LHC, PC and NG segments. Routine visits were made to existing customers to gather feedback. More than 100 visits to different PC customers were undertaken by PC Marketing executives in FY 2023-24. Regular customer engagement activities were carried out throughout the year via routine visits, telephonic calls and video calls to address the issues and concerns of customers. Customer meets were organized at Hyderabad (for PC customers) on 06.10.2023 and Bangalore

(NG, PC and LHC customers) on 04.11.2023. The customer meets are organized with the strategic intent of extending gas supply/transmission contracts to existing customers and exploring/creating new market opportunities with potential customers in NG, PC and LHC business segments through continual efforts. Regular meetings with Consignment Stockists and customers were conducted to gather feedback and update them on the challenges faced by GAIL and the industry. These meetings also provided information on new developments within GAIL and the broader industry.

- **Guwahati Zonal**

**PC Marketing** – Regular customer visits to increase customer engagement.

**Gas Marketing**- Periodic Customer visits, Customer feedback and virtual/physical meetings to resolve customer-related queries.

- **Bhopal Zonal**

In December 2023, the NG marketing team organised a Customer Meet in Indore. Similar Customer Meets were organised by LHC and the PC marketing department in March 2024.

- **Bhubaneshwar Zonal**

In FY 2023-24, around 85 Customer interactions through physical visits/virtual meetings were carried out to engage with the customers.

Zonal Offices employees attended a seminar organised by CII and addressed potential customers' queries on adopting Natural Gas for their unit.

- **Lucknow Zonal**

Customer Interaction Meets were organized for Petrochemical & Liquid Hydrocarbon customers at various locations such as Kanpur, Patna and Haridwar. Customer Interaction Meet was organized for Natural

Gas customers in Lucknow. GAIL has co-sponsored and participated in the UP Government's Ground Breaking Ceremony 2024 event under the aegis of the "Invest UP" initiative. Regular visits to customers of Class A, Class B and Class C categories across all business segments have been performed regularly for consistent and efficient engagement.

GAIL has sponsored various sports and cultural events organised by premier institutes such as IIT Kanpur and MNNIT Allahabad (Prayagraj) for active engagement with other stakeholders while aiming to spread more awareness about different initiatives being taken by GAIL.

- **Mumbai Zonal**

- a. Regular customer visits to NG, PC, and LHC customers and providing day-to-day commercial and technical support. Facilitated commencement of the LNG Truck loading facility at KLL, Dabhol. Customers in Maharashtra have benefited greatly due to savings in transportation costs and time.

- b. The Natural Gas customers' interactive meeting was organised on 23.02.2024 at Bandra Kurla Complex, Mumbai. There were more than 100 participants from major industries like MGL, JSW, TATA, RCF, RIL etc. Customers were informed about various initiatives taken by GAIL in the Natural Gas sector via presentations and panel discussions.

- c. Visits to / discussions with CBG producers have resulted in the signing of TPAs under the CBG-CGD Synchronisation scheme.
- d. New customers are being identified along MNJPL, and discussions are being held for the Gas Sales Agreement.

The digital initiatives that have been taken to spearhead initiatives on customer satisfaction are as follows:



1. Self-billing options for domestic PNG customers are available through the mobile application.
2. On-call billing option for Domestic PNG customers.
3. Online complaint management through web application as well as mobile application.
4. Digital payment options are available at CNG Station for smooth and fast payments.

#### **Inter-connection with pipelines of other operators**

1. Facilitating common carrier capacity booking through an open-access portal.
2. Introduced more customer-friendly, flexible GTA/GSA for small customers.
3. GAIL has approved guidelines on "Amicable settlement of Disputes with Consumers/ shippers under Gas Transportation Agreement" applicable for small Consumers/ shippers.
4. Provide Hook-up facilities and connectivity to the CGD entities from the nearest SV/ IP - Station and expedite the contracting process for Hook-up facilities.
5. GAIL has interconnected several other pipeline operators, including M/s PIL's EWPL (at Oduru/Mhaskal/Ankot), with its KG Basin NG pipeline network, DUPL pipeline, and HVJ pipelines. M/s IOCL's Dadri Panipat NGPL (at Dadri) with its HVJ pipeline, M/s GSPL's HP Gujarat Gas Grid (Dahej) with its HVJ pipeline, GIGL's Bhatinda-Jammu-Srinagar NGPL (at Jalandhar) with its DBNPL, and RGPL (at Phulpur) with its integrated HVJ/ JHBDPL, providing access to almost all the other operators to its pipelines.

6. Inter-connection with upcoming pipelines: GAIL shall also be providing interconnection of the Jagdishpur-Haldia & Bokaro-Dhamra Pipeline (JHBDPL) (2,655 km) and Barauni Guwahati Pipeline (BGPL) (729 km) section as an integral part of JHBDPL. This pipeline network shall pass through the Eastern part of Uttar Pradesh, Bihar, Jharkhand, Odisha, West Bengal, and Assam. The pipeline network would have two gas sources, one at Phulpur (Allahabad, U.P.) and the other at Dhamra RLNG Terminal (Odisha), which is also connected to the Integrated HVJ network to receive gas supply. The pipeline from Barauni to Guwahati will connect the North-Eastern gas grid to the National Gas Grid. Recently, PNGRB has granted authorization for the Dhamra-Haldia Pipeline (DHPL) (253 km) for capacity expansion of the JHBDPL network and increasing the size of the Dhamra Paradip spur line.

For the petrochemical business area, the GPTC, Noida provides customer satisfaction services, technical help, and resolution of product-related problems on Polymer grades. GAIL customer service and feedback interface carry out the following tasks:

1. Resolving customer complaints
2. Assisting with the right selection of GAIL Polymer grades
3. Entrepreneurial guidance
4. Development and modification of GAIL Polymer grades to satisfy market demands
5. Polymer grade development and promotion to meet evolving client requirements.
6. Participating and representing GAIL in technical forums and business associations to raise awareness and advocate for policy changes.



39<sup>th</sup> Annual General Meeting



Petrochemical customer Interactive meet organised by Guwahati Zonal Office

15



## Our Community



In the FY 2023-24, GAIL has spent  
INR 175.71 Crores under  
CSR initiatives



More than 13 lakh people benefitted  
through its CSR projects in FY 2023-24



GAIL has been recognised with the prestigious award in the  
“CSR Commitment” category by Governance Now 10th PSU  
Award in March 2024

## Our Community

For GAIL, the vision and strategic goals aim to position the company as a leader in the natural gas business while positively impacting people's lives. GAIL strengthens its community engagement through direct interactions with local communities. We have gained insights into the lives of the poor, identified significant challenges, and proposed effective strategic solutions. We have launched several Corporate Social Responsibility (CSR) initiatives to assist disadvantaged and marginalized groups, aligning our efforts with the community's ideas, ambitions and concerns.

Community involvement is a strong indicator of a socially responsible business. Creating shared value underpins all of GAIL's actions, and our business approach emphasizes inclusive development. Active community participation is crucial for successful CSR initiatives, helping to refine strategies and generate positive socio-economic outcomes for GAIL and the community through regular interactions and surveys.

### 15.1 CSR Policy

(GRI 3-3c, e, 2-24)

GAIL believes in responding to people's needs, giving back to communities and conserving the environment, which will ultimately decide the company's continued sustainable progress. The CSR policy directs the organization's CSR actions, which encompass a wide range of welfare and development initiatives across key focus areas. The activities are mostly carried out in and around the regions where we operate, with a focus on vulnerable and marginalized communities.

GAIL received inputs from various stakeholders and communities through an impact assessment study conducted for the eligible CSR projects. In addition, stakeholders were engaged through meetings/video calls for their input on CSR policies and activities.

The CSR projects at GAIL are monitored and overseen by the Board on the recommendation of the CSR Committee as per the Companies Act 2013, CSR Rules 2014 and their subsequent amendments, as notified by the Ministry of Corporate Affairs from time to time. The CSR Committee of the Board currently constitutes the following members:



Awareness Session among the Community at GAIL Pata



The role of the CSR Committee is as per the Companies Act, 2013 & DPE guidelines as amended from time-to-time (i) Guidelines on Accessible India Campaign (Sugamya Bharat Abhiyan) (Guidelines on CSR expenditure by CPSEs.)



GAIL through strategic CSR projects is committed to improving the social and economic conditions of aspirational districts, which are defined by NITI Aayog. GAIL has spent INR 24.22 Crores in 23 Aspirational Districts in FY 2023-24.

As a part of our CSR activities and various corporate initiatives, in FY 2023-24, GAIL incurred a CSR expenditure of INR 175.71 Crores towards achieving its CSR objectives through the implementation of meaningful & sustainable CSR programmes. The same is in alignment with the provisions of Section 135(1) of the Companies Act 2013.

Link to GAIL's CSR Policy- [https://www.gailonline.com/pdf/CSR/final\\_policy2010.pdf](https://www.gailonline.com/pdf/CSR/final_policy2010.pdf)

#### 15.1.1 GAIL's Community Involvement and Development Programmes

GAIL strongly emphasises community involvement programmes as a part of its commitment to responsible and sustainable business practices. It has implemented a formal system for identifying local stakeholders and communities of interest to ensure their voices are heard and valued.

GAIL initiates the CSR projects by conducting a baseline survey with the relevant local communities to identify the need for the project. Based on the survey results, a plan of action is developed, and a pilot project is implemented. The success and learnings from the pilot determine if the project can be scaled and its geographic coverage expanded.

### Community Development Process



After the implementation of the project, GAIL closely monitors the progress on a regular basis. A digital platform develops reports according to compliance requirements and maintains KPI sheets for each team member. This platform also facilitates the need assessment or baseline survey, guiding the CSR team to take appropriate actions as needed.

We have aligned our engagements with the national priorities and strive to make meaningful contributions to the United Nations Sustainable Development Goals (UN SDGs).

Throughout all projects, GAIL ensures direct interaction with the communities involved. These communities are onboarded onto the digital platform following a socio-economic survey, allowing for seamless tracking and management of the project's impact. This approach ensures that GAIL's CSR initiatives are effective and responsive to their communities.

### Skill Development Programs

GAIL is also playing a proactive role in supporting the Skill India Mission through the active participation of the Hydrocarbon Sector Skill Council (HSSC) and other Sector Skill Councils for providing Skill Training at the Skill Development Institute (SDI) at Raebareli and GAIL Institute of Skills at Guna and Nagaram. Another GAIL Institute of Skills was also set up at Amravati in 2023-24.

Skill Development Institute (SDI), Raebareli, has been registered and approved as a Government Training Partner (GTP) with NSDC for skill training under the Pradhan Mantri Kaushal Vikas Yojna 4.0 Scheme in a step towards a self-sustainable model. The institute is accredited and affiliated with a 5-star rating.

The main goal of the institute is to offer training to unemployed youth on trade courses like Auto CAD, Technician Instrumentation, Industrial Welding, and Industrial Electrician to help them get gainful employment. Local students who are qualified or have a technical degree or diploma or even dropped out of college education are utilizing this opportunity by enrolling in their respective trades. Job Linkages are built before the commencement of the training programs, and hence, a person joining the program is assured of a job at the end of the training process. A large number of youths were trained in various job roles during FY 2023-24 at various GAIL Institute of Skills (Guna-408 nos., Nagaram-133 number and Amravati-177 number) and got employed thereafter.

### 15.2 GAIL Hriday

(GRI 413-1a-iv)

GAIL's "Hriday" initiative is an umbrella programme for various communities. Our team aims to empower people from different communities and positively impact society. All Hriday initiatives adhere to the activities defined in Schedule VII of the Companies Act, 2013.

GAIL strives to follow best practices when identifying, implementing, and monitoring CSR initiatives to maximize sustainability, scalability, and transparency. We hope to improve the lives of thousands of underprivileged people by creating social capital through our seven CSR priority areas, which are determined by assessing the needs and requirements of local communities. These activities are carried out through collaborations with communities and



GAIL (India) Limited

## Sustainability Report 2023-24

### New India New Energy

non-governmental organizations (NGOs), employee volunteers, and direct business donations. These focused, value-driven developmental CSR programs are motivated by passion and propelled by the dedication of our employees, allowing us to reach out and positively impact countless lives.

No	Hriday Focus Area	% of beneficiaries from vulnerable and marginalized group	No. of lives touched
1.	GAIL Aarogya (Healthcare and Sanitation)	100	11,95,343
2.	GAIL Ujjwal (Education Centric Initiatives)	100	1,12,698
3.	GAIL Kaushal (Skill Development Related Initiatives)	100	1,500
4.	GAIL Shashakt (Women Empowerment Initiatives)	100	7,248
5.	GAIL Unnati (Rural development projects)	100	10,000
6.	GAIL Saksham (Care for elderly & differently-abled people)	100	1,780
7.	GAIL Harit (Environment Centric Initiatives)	100	8,006

#### 15.2.1 GAIL Arogya

GAIL is actively addressing healthcare, sanitation and clean drinking water issues by adopting measures that make primary healthcare facilities accessible and inexpensive to rural and vulnerable communities. GAIL's flagship initiative, Arogya, is leading these efforts.

**11,95,343 Beneficiaries**

**40 MMUs across 22 Districts and 11 States**

#### Objectives of GAIL Arogya

- To improve the health and sanitation facilities within the local communities and increase their awareness of various health issues.
- To support low-income residents and increase their accessibility to healthcare services through various healthcare initiatives.
- To facilitate water conservation and community nutrition activities.
- To support and advocate for the government's initiatives to enhance health and sanitation infrastructures.
- To boost the accessibility and availability of potable water in the targeted areas.

In FY 2023-24, approximately 11,95,343 beneficiaries were covered under the GAIL Arogya initiative.

#### Initiatives under Arogya

In line with the vision of the Hon'ble Prime Minister of India, Shri Narendra Modi Ji, to enhance access to quality healthcare in rural areas, GAIL has extended its CSR support by facilitating the operation of two Mobile Medical Units (MMUs) in Mirzapur district, Uttar Pradesh. These MMUs were inaugurated by Smt. Anupriya Patel, Hon'ble Minister of State for Commerce and Industry, Government of India on 29<sup>th</sup> October 2023, alongside senior officials from

GAIL, District Administration and other dignitaries. The event also witnessed the distribution of free sanitary napkins to adolescent school girls, reflecting a holistic approach towards community health.



MMU Flag off by Smt. Anupriya Patel, Hon'ble Minister of State for Commerce and Industry,  
Govt of India

These MMUs will offer essential primary healthcare services directly to the doorsteps of underprivileged communities in Mirzapur. Staffed by qualified medical professionals, the MMUs aim to strengthen the public healthcare infrastructure in the district and ensure the well-being of all residents, especially those in remote and marginalized areas. As of now, 40 MMUs are operational across 22 districts in 11 states of India in remote rural pockets of the country.

One of GAIL's CSR initiatives is also supporting the construction and renovation of Shri Badrinath Dham town as a spiritual, smart town through the extension of Hospital and Public Service Building, which will be a state-of-the-art facility for providing medical support to the pilgrims.

#### **15.2.2 GAIL Ujjwal**

GAIL's Ujjwal project focuses on education. The goal of this project is to increase educational outreach to the underprivileged.

#### **Objectives of GAIL Ujjwal**

- To aid in the development of infrastructure for the education of children from disadvantaged and marginalized communities.

- To aid in renovating various government school facilities, including IT facilities and science labs, procuring equipment and stationery.

#### **Initiatives under Ujjwal**

In FY 2023-24, approximately 1,12,698 beneficiaries were covered under the GAIL Ujjwal initiative. GAIL supported the quality education initiative for over 30,000 students in Madhya Pradesh by promoting education to underprivileged students in rural and urban slums, providing infrastructure support in government schools, and supporting the Atal Innovation Mission of the Government of India.

#### **GAIL Utkarsh under the Ujjwal initiative**

GAIL Utkarsh is an initiative by GAIL aimed at providing quality education and supporting underprivileged students in India.

#### **Objectives of GAIL Utkarsh**

- To offer free, high-quality coaching to underprivileged students, helping them prepare for competitive entrance exams like JEE (for engineering) and NEET (for medical).

- To empower students from marginalized backgrounds by providing them with opportunities for a better future through education
- GAIL Utkarsh also focuses on the overall personality development of students, ensuring they are well-developed individuals ready to face future challenges.

#### GAIL Utkarsh Projects – Result of JEE Mains 2024 Session 2023-24

No	Project location	Students enrolled	Students qualified (Best of 2)	Success Rate (%)
1	Haldwani	50	45	90%
2	Kanpur	100	99	99%
3	Varanasi	30	30	100%
<b>Total</b>		<b>180</b>	<b>174</b>	<b>97%</b>

- Further, the 30 female students enrolled in the medical entrance examination coaching qualified for NEET (100% batch result).

#### Hon'ble Minister visits GAIL's Utkarsh Project in Varanasi to Engage with Aspiring Students

Shri Hardeep Singh Puri, Hon'ble Minister of Petroleum & Natural Gas and Housing visited GAIL's flagship CSR project, Utkarsh's Varanasi Centre, to interact with aspiring female students from economically weaker sections.



Shri Hardeep Singh Puri, Hon'ble Union Minister of Petroleum & Natural Gas and Housing & Urban Affairs visited GAIL Utkarsh Centre at Varanasi

#### 15.2.3 GAIL Kaushal



Kaushal is a GAIL CSR flagship project focusing on skill development and livelihood enhancement. Its purpose is to enable and empower the underprivileged by implementing various skill development projects to make them employable and improve their quality of life.

### Objectives of GAIL Kaushal

- To provide skill development training to the poor and marginalized communities of society.
- To set up Skill Development Institutes (SDIs) to provide training to the beneficiaries.
- To empower women and youth to improve their livelihoods by providing skill development training in various fields such as CAD, web design, domestic BPV/BPO, welding, industrial electrician, CNC operator, instrument technician, retail associate and masonry.

In FY 2023-24, approximately 1,500 beneficiaries were covered under the GAIL Kaushal initiative.

### Initiatives under Kaushal

- 718 Candidates trained at GAIL Institute of Skills at Nagaram (Rajahmundry), Amravati (Andhra Pradesh) and Guna (Madhya Pradesh) in skill trades related to Hydro Carbon, Automotive, Telecom, Healthcare etc.
- 229 Candidates trained in Plastic Product Manufacturing at eight (08) centres of CIPET at Vijayawada, Guwahati, Raipur, Ranchi, Aurangabad, Chandrapur, Imphal and Lucknow.
- Provided support to 536 candidates (including 146 females) as part of the collaborative project with MoP&NG and PSEs on contribution to Skill Development Institute (SDI) at RaeBareli.
- GAIL CSR supported the establishment of a Skills Training Centre in Amravati, Andhra Pradesh, to instil economic security and stability among youth in the country by facilitating enhanced access to employment opportunities.

The skill trades or job roles in which the training of candidates is to be conducted are:

- Pipe Fitter (Oil & Gas / CGD), Industrial Electrician (Oil & Gas), Fire Safety Technician

(Oil & Gas), Pipeline Maintenance, Technician (Mechanical), Cathodic Protection Gas Meter Reader.

- Protection Technician training program for a total of 300 students, aiming to offer specialized training and secure placement for these candidates.

### Support for Setting up Natural Fibre Diversified Product Training and Development Centre for Women Empowerment at Murshidabad, West Bengal:

As part of the project, 08 Common Facility Centres (CFCs) are being set up at various locations in Murshidabad District for capacity building and training of underprivileged women beneficiaries in natural fibre diversified products (jute and its derived products). This is an integrated project which aims to achieve capacity building, empowerment and enhancement of skills of approximately 1,600 women beneficiaries in jute-related products and trades.

### 15.2.4 GAIL Unnati

GAIL acknowledges that economic competitiveness is intrinsically related to a society's social, economic and environmental well-being. GAIL Unnati was conceptually created to achieve all three of these goals. This programme promotes rural livelihood through a variety of measures.

### Objective of GAIL Unnati

- To improve the economic conditions of rural communities through various measures that enhance their source of income and employment opportunities.
- To address social needs in rural areas by providing support in areas such as education, healthcare and infrastructure, thereby improving the overall quality of life.
- To ensure that development efforts are holistic and address multiple dimensions of well-being, including economic growth, social progress and environmental stewardship.



GAIL (India) Limited

## Sustainability Report 2023-24

### New India New Energy

In FY 2023-24, approximately 10,000 beneficiaries were covered under the GAIL Unnati initiative.

#### Initiatives under Unnati

GAIL supports promoting sustainable livelihoods through Agriculture-Water-Energy nexus in Rajahmundry, Andhra Pradesh. The Project strives to promote organic farming by enhancing the skills and capacities of farmers to adopt sustainable agriculture based production practices.

#### 15.2.5 GAIL Shashakt

GAIL is actively engaged in women empowerment initiatives.

#### Objectives of GAIL Shashakt

- To enhance women's access to education and raise awareness about their rights, health, and legal issues, promoting overall personal and professional growth.
- To improve women's health and wellness by providing access to medical facilities, health education and hygiene products, as well as addressing specific health concerns affecting women.



Project Shashakt : Empowering Women and Girls with Knowledge on Health and Nutrition  
in Jhabua, Madhya Pradesh - 07.10.2023

- To create support systems and networks for women, including mentorship and peer support groups, to help them overcome challenges and achieve their goals.

In FY 2023-24, approximately 7,248 beneficiaries were covered under the GAIL Shashakt initiative.

#### Initiatives under Shashakt

- The inauguration of Project Shashakt, designed to empower women and girls with knowledge concerning health and nutrition in the region of Jhabua, Madhya Pradesh, done on October 7<sup>th</sup>, 2023, at Higher Secondary School, Bhagor. This significant event was honoured by distinguished guests, including Ms. Nisha Mehra, Assistant Commissioner of the Tribal Welfare Department, Jhabua, and Mr. Agam Jain, IPS, Superintendent of Police, Jhabua Police Department. Attended by a diverse array of stakeholders from various sectors, encompassing district officials, representatives from Gram Panchayats, Tadwis (Community Leaders) and officials from the Health & Education Departments, the launch served as a testament to a collaborative endeavour aimed at enhancing community health and well-being.



- A series of informative sessions were conducted throughout the event, shedding light on the paramount importance of nutrition, with a particular focus on raising awareness about Anaemia and Sickle Cell Anaemia. The presence of esteemed national-level champion archers, Kumari

Deepika and Laxmi Majhi, further enriched the occasion, as they underscored the indispensable role of a balanced diet in fostering optimal health and facilitating athletic excellence. The event concluded with the official commencement of a GAIL Shashakt initiative and the distribution of

meticulously curated project kits. These kits comprised nutritious millet laddoos, caps, bags, and Information, Education, & Communication (IEC) booklets elucidating critical aspects of anaemia. Notably, over 700 students benefited from this initiative, receiving educational materials and essential items intended to bolster their health and overall well-being.

#### **15.2.6 GAIL Saksham**

GAIL Saksham projects recognize and address the need for attention and care for differently abled people and the elderly.

##### **Objective of GAIL Saksham**

- To help Persons with Disabilities (PWDs) to achieve self-confidence, possess self-respect and dignity, and be more independent, along with better access to livelihood options.
- To provide assistive devices and technologies, such as hearing aids, to individuals with special needs, enabling them to improve their daily functioning, communication, and overall quality of life.
- To increase awareness about the challenges faced by differently-abled individuals and the elderly, and to promote a more supportive and understanding community.

In FY 2023-24, approximately 1,780 beneficiaries were covered under the GAIL Saksham initiative.

#### **15.2.7 GAIL Harit**

GAIL's Harit project is dedicated to environmental initiatives. The vision statement of GAIL reflects an implicit commitment to environmental stewardship.

##### **Objective of GAIL Harit**

- To undertake tree planting and forest regeneration activities to increase green cover, restore degraded lands and enhance biodiversity.
- To implement waste management practices that reduce, reuse and recycle waste, aiming

to minimize environmental impact and promote a circular economy.

- To support water conservation projects, including rainwater harvesting, watershed management and the development of sustainable water resources.
- To promote and support sustainable practices in agriculture, industry, and daily life, encouraging eco-friendly behaviours and technologies.
- To involve local communities in environmental conservation efforts, fostering a sense of responsibility and encouraging community-led environmental projects.

##### **Initiatives under Harit**

- Support towards setting up Natural Gas based crematoriums for protection of the environment and reduction of pollution levels as well as deforestation, GAIL is providing support towards setting up/ renovation of CNG crematoriums in Cuttack, Bhubaneswar and Calicut, as part of CSR initiative under GAIL Harit.

In FY 2023-24, approximately 8,006 beneficiaries were covered under the GAIL Harit initiative.

- Conversion of diesel / petrol boats into CNG propelled boats in Varanasi, in a move to make the revered ghats at Varanasi pollution-free. GAIL's CSR initiative is supporting the conversion of petrol / diesel boats to CNG boats in association with Varanasi Nagar Nigam.

#### **15.3 Social Commitments**

**(GRI 3-3a, b, c, GRI 413-2)**

GAIL, being in the business of Natural Gas, LPG, and PNG, recognises that its operations can positively and negatively impact communities. During FY 2023-24, no adverse concerns were reported by vulnerable or marginalized community groups.

In Planning, Designing and Executing our projects, we actively seek valuable insights and



GAIL (India) Limited

## Sustainability Report 2023-24

### New India New Energy

perspectives from our stakeholders. Conducting a needs assessment of the community is a critical responsibility, before initiating any CSR project. Throughout the reporting year, there were no significant disagreements with local communities or violations of Indigenous peoples' rights.

GAIL's Operations and use of hazardous substances had no adverse effects on communities during the reporting year. The company conducts regular environmental monitoring at all sites, adhering to statutory guidelines, and publishes the relevant reports on its website.

#### Community Engagement and Support for Disadvantaged Stakeholders

The disadvantaged, vulnerable and marginalized stakeholders for CSR projects predominantly constitute beneficiaries residing in remote areas, including socially and economically disadvantaged groups (SCs/STs/OBC/Women/ PwDs etc). Most of these beneficiaries live in and around GAIL's pipelines, installations, and offices (defined as local areas within 100 km of GAIL's installations).

Communication with the identified beneficiaries is continuously maintained by the implementing agencies of CSR projects on behalf of GAIL. Nodal officers from GAIL interact with the beneficiaries and communities through periodic site visits to each project. These interactions aim to increase community engagement, identify their needs, and bridge the last-mile delivery gaps.

#### 15.4 Community Grievance Redressal

(**GRI 3-3f, GRI 413-1a viii)**

At GAIL, we believe that Community Grievance Redressal acts as a mechanism for strengthening social ties by being more transparent and



accountable. CSR projects being implemented by GAIL, have designated nodal officers, who are in constant touch with implementing agencies and respective communities. Any inputs / suggestions / grievances received from communities to nodal officers are duly addressed. Communities can report grievances through CPGRAMS portal also.

#### 15.5 Awards and Recognition

- GAIL has been recognised with a prestigious award in the "CSR Commitment" category by '10<sup>th</sup> Governance Now PSU Award' in March 2024.
- GAIL received the prestigious award in the "Nation building" category by '10<sup>th</sup> Governance Now PSU Award'
- GAIL won the Global CSR Excellence Award 2024 for CSR initiative in concern for health.
- GAIL has been awarded the Corporate Responsibility Champion Award - Fossil Fuel Category at the Outlook Planet Sustainability Summit & Awards, 2024.

The award was presented to GAIL by Shri V Srinivas, Secretary, DARPG, Ministry of Personnel, PG & Pensions, Government of India and Dr. Vasundhara Upmanyu, Joint Secretary (Policy Division - I and MoU Division), Department of Public Enterprises, Ministry of Finance, Government of India. ED (CSR & HR), received the award on behalf of GAIL.

#### 15.6 Impact Assessment

GAIL allocates funds to conduct Impact Assessment, to ascertain the magnitude of impact of key CSR projects undertaken. The Impact Assessment of key projects are carried out by GAIL's CSR department and site coordinators, in partnership with various agencies and academic institutions. In project planning, design, execution and operational planning, we value stakeholder input. Resolving the problems and issues of local communities is our prime consideration, before starting any project. As part of the impact assessment process, case studies, success stories and comments from interested parties are gathered.

Inputs have been received from various stakeholders and communities through an impact assessment study conducted for the eligible CSR Projects. In addition, stakeholders are engaged through meetings / VCs for their input on CSR policies and activities.

Independent agencies have carried out an impact assessment in FY 2023-24 in accordance

with sub-rule (3) of rule 8 of the Companies (CSR Policy) Rules 2014 through a third party.

Currently, impact assessments of eligible CSR projects are in progress. On completion of the exercise, the same will be put up for the CSR Committee of the Board and will be web-hosted at the link: <https://www.gailonline.com/CSRIndex.html>



Health camp organized for the community by GAIL



Painting Competition for School Children



GAIL (India) Limited

## Sustainability Report 2023-24

New India New Energy

### Linkage to the UN SDGs

**Ujjawal –  
Education Centric Initiatives**

**4 QUALITY EDUCATION**



**3 GOOD HEALTH AND WELL-BEING**



**6 CLEAN WATER AND SANITATION**



**Aarogya - Healthcare, Sanitation,  
and Clean Drinking Water**

**Kaushal - Skill Training**

**4 QUALITY EDUCATION**



**8 DECENT WORK AND ECONOMIC GROWTH**



**1 NO POVERTY**



**9 INDUSTRY, INNOVATION  
AND INFRASTRUCTURE**



**11 SUSTAINABLE CITIES  
AND COMMUNITIES**



**Unnati - Rural Development  
Initiatives**

**Saksham - Initiatives Related  
to PWDs and Elderly**

**3 GOOD HEALTH AND WELL-BEING**



**10 REDUCED INEQUALITIES**



**5 GENDER EQUALITY**



**Sashakt -  
Women Empowerment**

**Harit -  
Environmental Initiatives**

**13 CLIMATE ACTION**



**15 LIFE ON LAND**



## Glimpse of GAIL's CSR Initiatives



Glimpse of GAIL's commitment to social responsibility through initiatives focused on women's empowerment, the inclusion of people with physical disabilities, and improving healthcare services across communities

16



## Performance and Standards

## Performance and Standards

### GRI 301-1, GRI 301-2

Material Consumption	Unit	2021-22	2022-23	2023-24
NG Processed	MMSCM	30,502	26,924	31,869
NG used for making product (LHC Shrinkage)	MMSCM	1,704	1,003	1,604
NG sent back to Pipeline	MMSCM	13,945	15,487	17,898

### GRI 301-1, GRI 301-2, GRI 301-3

Material Consumption	Unit	2021-22	2022-23	2023-24
Alum	MT	562	414	558
Chlorine	MT	2	2	2
Lube Oil & Grease	MT	207	287	345
Mercaptan	MT	18	18	16
Methanol	MT	218	190	202
Other chemical & catalyst	MT	6,549	6,470	7,488
Sulphuric Acid	MT	227	174	249
Water treatment chemicals	MT	13,475	7,301	9,595
Packaging bag	MT	3,832	2,243	3,999
Total associated material	MT	25,089	17,098	18,457
Material recycled/reused	MT	15	32	3,360

### GRI 302 -1

Energy Consumption* (GJ)	2021-22	2022-23	2023-24
Direct Energy	5,50,14,953	4,66,73,781	4,74,49,561
Indirect Energy	19,83,078	14,99,471	18,57,561
Renewable Energy	1,13,711	1,21,673	92,183
Energy from NG Flaring	9,31,853	11,40,567	9,35,625
Energy from LPG Flaring	3,707	9,698	9,635
Energy from NG Venting**	4,78,334	6,18,811	5,66,773
Energy from LPG Venting**	734	1,333	792
Total Energy Consumption	5,85,26,370	5,00,65,334	5,09,12,004

\* Energy calculation as per fuel quantity reported from various sites. Indirect energy is from grid electricity only. No other form of energy is purchased.

\*\* The energy considered in NG and LPG venting presented as accounting of GHG emissions.

Energy Savings (GJ)	2021-22	2022-23	2023-24
Diesel Saved	760	2,153	2,213
Electricity Saved (GJ)	50,891	38,349	22,214
NG Saved (GJ)	6,57,361	5,98,300	4,33,437
LPG saved (GJ)	25	154	0
Total Energy Saving	7,09,037	6,38,956	4,57,864



GAIL (India) Limited

## Sustainability Report 2023-24

New India New Energy

Energy Sold (GJ)	2021-22	2022-23	2023-24
Electricity Sold	5,537	10,781	2,185

\* No other form of energy is sold.

### GRI 302-1

Direct Energy Consumption Sources (GJ)	2021-22	2022-23	2023-24
Diesel	15,890	37,492	24,705
Natural Gas	4,10,41,469	3,35,07,905	3,60,03,646
Residual Fuel	1,39,57,595	1,31,28,383	1,14,21,209
Total Direct Energy	5,50,14,953	4,66,73,780	4,74,49,561
Total Energy Intensity (Energy consumption/ total annual turnover)	640	347	390

Renewable Energy generated (GJ)	2021-22	2022-23	2023-24
Wind	5,49,347	7,71,388	6,62,550
Solar	31,836	38,698	68,635
Total Renewable Energy	5,81,183	8,10,086	7,31,185

### GRI 305-7

Air Emissions*	Unit	2021-22	2022-23	2023-24
SPM	Tons/annum	290	243	355
NOx	Tons/annum	1,142	800	1,226
CO	Tons/annum	949	713	488
SOx	Tons/annum	474	520	715
VOC	Tons/annum	53	88	81
R-134 a HFC's	Kg/annum	713	337	193

\* Data Source: Exhaust Monitoring Report, Environment test report monthly data, SPCB reports. All the relevant air emissions are disclosed per process emissions and SPCB/CPCB regulatory requirements.

### GRI 305-6

ODS Gas Consumption	Unit	2021-22	2022-23	2023-24
R-22 (ODS)	Kg/annum	3,524	4,267	1,141

### GRI 305-1,GRI 305-2,GRI 305-3,GRI 305-4

GHG Emissions*	2021-22	2022-23	2023-24
Scope-1 Emissions (tCO2e)	41,33,249	36,56,175	34,67,989
Scope-2 Emissions (tCO2e)	4,34,135	3,19,380	3,86,108
Scope-3 Emissions (tCO2e)	2,40,06,532	2,34,23,804	2,95,08,803
Total GHG Emissions (tCO2e)	2,85,73,916	2,73,99,359	3,33,62,900
GHG Intensity (Scope1+2) (tCO2e/INR)	50	28	30
GHG Intensity (Scope1+2+3) (tCO2e/INR)	312.53	190.30	256.07
Turnover (Gross) (INR Crores)	91,426	1,43,976	1,30,284
N2O	-	-	0
PFC's	-	-	0
NF3	-	-	0
HFC's	-	-	0

\* N2O, PFC's, NF3 and HFC's Gases are not emitted by GAIL Sites. We have used the Emission Factors of Central Electricity Authority (CEA), India and IPCC Guidelines for National Greenhouse Gas Inventories, 2006 Greenhouse Gas Inventories for the estimation of direct and indirect emissions from Scope 1 and Scope 2. Methane emissions are included in Scope-1 emissions.

**\*\*Scope 3 emission includes CO<sub>2</sub> emission related to business travels. Scope 3 emissions are reported by following sites: Manasrampura, Vijaipur, Vizag, Pata, Jamnagar, Khera, Cherlapally and also include Scope 3 emissions for category (Use of Sold Products).**

#### GRI 305-5

GHG Savings (tCO <sub>2</sub> Equivalent)	2021-22	2022-23	2023-24
Diesel	56	160	164
Electricity	11,593	8,629	4,418
NG savings	36,878	38,411	27,827
LPG savings	1.62	10	0
Total GHG savings	48,527	47,209	32,409

#### GRI 303-3, GRI 303-4, GRI 303-5

Water Performance (million m <sup>3</sup> )*	2021-22	2022-23	2023-24
Total Water consumption	22.19	17.59	22.49
Total Waste Water Generated	2.31	1.86	2.20
Total Waste Water Discharged	1.64	2.20	1.42
Water Recycled/Reused	0.72	0.70	0.75

\*At these sites all the waste water generated is recycled. No waste water is discharged outside plant boundary.

#### GRI 303-3a

Water Withdrawal by Sources (Parameter) (million m <sup>3</sup> )	2021-22	2022-23	2023-24
Fresh Surface Water (Lakes, Rivers etc.)	19.59	14.90	19.95
Fresh Groundwater	0.28	0.15	0.13
Third Party Water	0.63	0.63	0.63
Seawater and Desalination	-	-	-
Municipal Water Supplies	1.69	1.81	1.78

\*Seawater and Desalination water are not used by GAIL Plants

#### GRI 303-3b

Total water withdrawal from all areas with water stress (Gandhar, Jamnagar, Jhabua) (million m <sup>3</sup> )*	2021-22	2022-23	2023-24
Groundwater	0.03	0.03	0.04
Municipal Water Supplies (or from other water utilizes)	1.24	1.31	1.33
Fresh Surface Water (River, Sea, Lake Stream)	-	-	-
Total Water Consumption	1.26	1.34	1.37

\* At these sites, all the waste water generated is recycled. No wastewater is discharged outside the plant boundary.

#### GRI 306-3

Waste Generation	UoM	2021-22	2022-23	2023-24
Basket filter waste	MT	801	2,616	1,882
Bio-medical waste	MT	3.59	0.21	4.25
Empty drums	MT	49	41	152
ETP Sludge	MT	0	0	0
E-Waste	MT	07	23	22
Oily Sludge	MT	430	2,450	793
Slop Oil	LIT	32,25,306	10,93,399	10,74,191



## Sustainability Report 2023-24

GAIL (India) Limited

New India New Energy

Waste Generation	UoM	2021-22	2022-23	2023-24
Tar	MT	17.40	27	7.20
Used batteries	Numbers	239	1,938	3,057
Used lube oil	LIT	88,413	94,091	99,192
Used oil	LIT	45,592	61,753	59,649
Radioactive Waste*	MT	0	0	0
Construction & Demolition Waste**	MT	-	-	-
Cables	MT	18	30	32
Canteen waste	MT	16	16	234
Ceramic Material	MT	8	19	0
Metal scrap	MT	1,677	836	1,258
Misc. Waste	MT	25	63	122
Molecular Sieve	MT	64	241	2
Paper Consumption	MT	13	28	23
Plastic scrap	MT	250	137	125
Silica Gel	MT	57	200	0.05
Spent Alumina	MT	1,158	966	1,169
Tyre	MT	517	499	326
Used bag filters/filters	Numbers	4,307	4,233	3,491
Used Consumables	MT	3	40	0
Wooden scrap	MT	152	375	2,077

\*Radioactive waste is not applicable for GAIL. Applicable State/Central regulations are followed for onsite storage and disposal of waste. Some of the wastes (battery, tyres etc) are monitored in numbers at site/offices and converted in MT by average weight of the material.

\*\* Construction & Demolition Waste separate accounting shall be taken up in next FY.

### GRI 306-5

Type of Waste Disposal	2021-22		2022-23		2023-24	
	Liquid (Litres)	Solid (MT)	Liquid (Litres)	Solid (MT)	Liquid	Solid (MT)
Incineration	0	713	0	2,809	0	3,848
Landfill	2	21	1	241	0	236
Onsite Storage	4,110.20	2	3,557	5	3,645	32
Recycling	23,26,082	2,594	11,36,745	1,820	11,80,510	3,880
Total	23,30,194	3,330	11,40,302	4,874	11,84,155	7,997

### GRI 306-5

Disposal (FY 2023-2024)	Hazardous	Non-Hazardous
Incineration (MT)	2,680	1,169
Landfill (MT)	0	236
Onsite		
Liquid (Litres)	3,645	0

<b>Disposal (FY 2023-2024)</b>	<b>Hazardous</b>	<b>Non-Hazardous</b>
Solid (MT)	0	12
<b>Recycling</b>		
Liquid (Litres)	11,80,510	0
Solid (MT)	362	3,518

<b>Environment Expenditure (INR Million)</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
Treatment and disposal of waste	78	140	80
Depreciation & Maintenance Cost of Equipment Used in Pollution Control	33	43	24
External services for environmental management	8	11	12
External certification of management systems	4	3	2
Cost of personnel for general environmental management activities	86	99	143
Expenditure for installing cleaner technologies	16	27	11
Insurance for environmental liability	36	16	4
Other environmental cost	41	109	90
Total Environment Expenditure	302	448	366
Environmental fines	0	0	0

<b>Cost of Total Energy (INR Crores)</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
Power Charges	386	361	441
Gas used as Fuel	1,762	3,607	4,174
Water Charges	21	24	27
<b>Total Cost</b>	<b>2,169</b>	<b>3,992</b>	<b>4,642</b>

**GRI 2-7,GRI 403-9**

<b>Health &amp; Safety of Permanent Employees</b>	<b>Units</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
Management representative in Safety Committee	Numbers	247	518	217
Non-management representative in Safety Committee	Numbers	183	272	193
Near miss case male permanent employee	Numbers	1,036	1,085	1,187
Near miss case female permanent employee	Numbers	99	8	5
Minor injuries male permanent employee	Numbers	0	0	1
Minor injuries female permanent employee	Numbers	0	0	0
Reportable injuries male permanent employee	Numbers	0	0	0
Reportable injuries female permanent employee	Numbers	0	0	0
Lost days due to reportable injuries permanent employee-Male	Numbers	0	0	0
Lost days due to reportable injuries permanent employee-Female	Numbers	0	0	0
Fatalities male permanent employee	Numbers	0	0	0
Fatalities female permanent employee	Numbers	0	0	0
First aid cases male permanent employee	Numbers	5	17	3



GAIL (India) Limited

## Sustainability Report 2023-24

New India New Energy

Health & Safety of Permanent Employees	Units	2021-22	2022-23	2023-24
First aid cases female permanent employee	Numbers	0	0	0
Man Hours worked permanent employee – Male	Man Hours	41,76,132	62,76,652	50,86,166
Man Hours worked permanent employee – Female	Man Hours	1,64,297	2,88,972	2,43,617
Occupational diseases-permanent employee – Male	Numbers	0	0	0
Occupational diseases-permanent employee – Female	Numbers	0	0	0

### GRI 2-7,GRI 403-9

Health & Safety of Permanent Employees	Unit	2021-22	2022-23	2023-24
LTIFR – Male	Reportable injuries per million-man-hours worked	0	0	0
LTIFR – Female	Reportable injuries per million-man-hours worked	0	0	0
Severity Rate – Total	Lost Days per million-man-hours worked	0	0	0
Fatality Rate – Male	Fatalities per million-man-hours worked	0	0	0
Fatality Rate – Female	Fatalities per million-man-hours worked	0	0	0

### GRI 2-7,GRI 403-9

Health and Safety of Contract Employees	Units	2021-22	2022-23	2023-24
Near miss case male contract employee	Numbers	177	193	150
Near miss case female contract employee	Numbers	0	7	2
Minor injuries male contract employee	Numbers	0	3	1
Minor injuries female contract employee	Numbers	0	0	0
Reportable injuries male contract employee	Numbers	0	4	3
Reportable injuries female contract employee	Numbers	0	0	0
Lost days due to reportable injuries contract employee-Male	Numbers	28	24,044	12,311
Lost days due to reportable injuries contract employee-Female	Numbers	0	0	0
Fatalities male contract employee	Numbers	0	4	2
Fatalities female contract employee	Numbers	-	-	-
First aid cases male contract employee	Numbers	104	99	10
First aid cases female contract employee	Numbers	1	0	0

### GRI 2-7

Health & Safety of Contract Employees	Units	2021-22	2022-23	2023-24
Man hours worked contract employee: Male	Man hours	2,17,35,261	2,83,29,076	2,34,62,196
Man hours worked contract employee: Female	Man hours	3,29,872	4,23,216	5,05,463
Occupational diseases-contract worker-Male	Numbers	0	0	0
Occupational diseases-contract worker-Female	Numbers	0	0	0

<b>Health &amp; Safety of Contract Employees</b>	<b>Units</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
LTIFR – Male	Reportable injuries per million-man-hours worked	0.046	0.141	0.28
LTIFR – Female	Reportable injuries per million-man-hours worked	0	0	0
Severity Rate – Total	Lost Days per million-man-hours worked	1.27	836.6	688.65
Fatality Rate – Male	Fatalities per million-man-hours worked	0	0.141	0.114
Fatality Rate – Female	Fatalities per million-man-hours worked	0	0	0
First aid cases – Female	Numbers	1	0	0

<b>Permanent Employee Distribution Level-wise (Numbers)</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
Senior Management (E7-E9) – Male	348	384	402
Senior Management (E7-E9) – Female	8	6	9
Middle Management (E4-E6) – Male	1,684	1,671	1,668
Middle Management (E4-E6) – Female	108	116	118
Junior Management (E0-E3) – Male	1,583	1,661	1,812
Junior Management (E0-E3) – Female	156	156	175
Non-Management (S0-S7) – Male	825	789	805
Non-management (S0-S7) – Female	36	34	42

#### GRI 401-1

<b>Permanent Employee Distribution Age-wise (Numbers)</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
Senior Management (E7-E9): <30 years Age	0	0	0
Senior Management (E7-E9): 30 To 50 Years Age	62	57	76
Senior Management (E7-E9): >50 years Age	294	333	335
Middle Management (E4-E6): <30 Years Age	0	0	1
Middle Management (E4-E6): 30 to 50 years Age	1,201	1,117	1,176
Middle Management (E4-E6): >50 Years Age	591	670	609
Junior Management (E0-E3): <30 years Age	703	750	920
Junior Management (E0-E3): 30 to 50 years Age	577	582	630
Junior Management (E0-E3): >50 years Age	459	485	437
Non-Management (S0-S7): <30 years Age	185	83	87
Non-Management (S0-S7): 30 to 50 years Age	550	580	617
Non-Management (S0-S7): >50 years Age	126	160	143
New Employees Hired During FY: Male	231	245	349
New Employees Hired During FY: Female	18	19	45

<b>Differently Abled Employees (FY2022-23)</b>	<b>Total</b>	<b>Male</b>		<b>Female</b>	
		<b>No.</b>	<b>%</b>	<b>No.</b>	<b>%</b>
Permanent Employee	63	57	90.48	6	9.52
Permanent Workers	34	29	85.29	5	14.70
Other than Permanent	0	0	0	0	0
Total differently abled employees	97	86	88.65	11	11.34



GAIL (India) Limited

## Sustainability Report 2023-24

New India New Energy

Differently Abled Employees (FY2023-24)	Total	Male		Female	
		No.	%	No.	%
Permanent Employee	72	64	88.9	8	11.1
Permanent Workers	34	29	85	5	15
Other than Permanent	0	0	0	0	0
Total differently abled employees	106	93	87.7	13	12.3

Contract Employee Distribution (Numbers)	2021-22	2022-23	2023-24
Security Staff Female	9	9	05
Regular Contract Worker Male	12,694	13,208	10,434
Regular Contract Worker Female	380	380	283
Total number of Apprentice in GAIL in FY – Male	275	325	374
Total number of Apprentice in GAIL in FY – Female	50	82	79

Turnover rate (%)	FY 2021-22			FY 2022-23			FY 2023-24		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Permanent Employees	4.82	3.73	4.75	4.29	5.39	4.37	3.84	3.79	3.83
Permanent Workers	2.16	2.74	2.19	2.61	0	2.55	2.38	0	2.28

### GRI 404-1

Training data	Unit	2021-22	2022-23	2023-24
Management Employee Male	Man Hours	98,979.5	1,55,351	57,816
Management Employee Female	Man Hours	7,457.5	11,120.5	5,333
Non-Management Employee Male	Man Hours	14,881.0	22,736	10,180
Non-Management Employee Female	Man Hours	481.0	776	379
Contract Worker Male	Man Hours	1,57,106.0	13,26,788	3,13,763
Contract Worker Female	Man Hours	817	13,545	3134
Permanent Employee-Physically Disabled	Man Hours	2,411.5	3,216	158
Contract Worker-Physically Disabled	Man Hours	25	128	10

### GRI 401-3

Employees Returned Work After Parental Leave	Gender	2021-22	2022-23	2023-24
Number of employees entitle to parental leave	Male	4,446	4,510	4,706
	Female	308	312	349
Number of employees that took parental leave	Male	155	177	45
	Female	15	24	27
Number of employees who returned to work after parental leave ended	Male	152	175	43
	Female	10	13	20

<b>Employees Returned Work After Parental Leave</b>	<b>Gender</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
Employee returned to work after parental leave ended who were still employed 12 months after their return	Male	152	152	174
	Female	8	10	24

<b>Procurement Highlights</b>	<b>2021-22</b>	<b>2022-23</b>	<b>2023-24</b>
Total Procurement of Goods & Supplies in INR Crores	8,961	11,075	8,911
Total Procurement of Goods & Supplies from Local Suppliers in INR Crores	8,169	9,651	8,199
% of new suppliers that has been screened through Environmental Criteria	100	100	100
% of new suppliers that has been screened through Labour Practice Criteria	100	100	100
% of new suppliers that has been screened through Human Rights Criteria	100	100	100
% of new suppliers that has been screened through Criteria for impacts on society	100	100	100
% of suppliers identified having significant actual & potential negative impacts on society	0	0	0
% of suppliers identified having significant actual & potential negative impacts on society with which relationship has been terminated	0	0	0



## Independent Assurance Statement



AA1000  
Licensed Report  
000-174/V3-4NYH8

<b>Ref. Number</b>	:	01/000-174/2024/SR-Asia/India
<b>Assurance Type</b>	:	Type 2/ Reasonable Assurance
<b>Assurance Level</b>	:	High Level Engagement
<b>Reporting Standards</b>	:	GRI Standard and IPIECA sustainability reporting guidance, ISSB
<b>Assurance Standards</b>	:	AA1000AS v3, AccountAbility UK

To

GAIL (India) Limited,

GAIL (India) Limited, hereinafter referred to as "the Reporting Organization" or "GAIL," has engaged Social Responsibility Asia (SR Asia), hereinafter referred to as "the Assurer", to conduct a Reasonable Assurance or Type 2 High Level Engagement of the Sustainability Report ("the Report") for the period from April 1, 2023, to March 31, 2024.

GAIL, India's largest natural gas company (Public Sector Enterprise), has a significant presence in Natural Gas Transmission, Marketing & Processing, LPG transmission, Petrochemicals, City Gas Distribution, and Exploration & Production. GAIL has grown organically by building a large network of natural gas pipelines covering over 16,243 km with a capacity of around 206 MMSCMD; two LPG pipelines covering 2,040 km with a capacity of 4.58 MMTPA of LPG transmission; five gas processing plants for the production of LPG and other liquid hydrocarbons, with a production capacity of 1.4 MMTPA; and a gas-based integrated petrochemical plant with polymer capacity of 810,000 TPA.

This is the Independent Assurance Statement ("the Statement") that reflects the results of the assurance work conducted by following the specific methods and approaches as per the contractual agreement.

### 1. Intended User and Purpose

This assurance report is made solely to the Reporting Organization in accordance with the terms of the contract agreement, which includes agreed arrangements for Reasonable Assurance. Our work has been undertaken so that we might state to the Reporting Organization the matters we have been engaged for, to state in this Reasonable Assurance report and for no other purpose.

Our Reasonable Assurance report should not be regarded as suitable for use or reliance by any party wishing to acquire rights against us for any purpose or in any context, other than the reporting organisation. Any party other than the Reporting Organization, who obtains access to



our Reasonable Assurance report or a copy thereof and chooses to rely on our Reasonable Assurance report (or any part thereof) does so at its own risk.

As per the laws of the land, we accept no responsibility and deny any liability to any party, other than the Reporting Organization, for our work, for this independent Reasonable Assurance report, or for the conclusions we have reached.

## **2. Responsibilities**

SR Asia and the Reporting Organization recognize the responsibilities of the parties as specified in the contract agreement. The Reporting Organization is fully responsible for the presentation of data, information, and disclosures in the Report. The assurance service provided is not an audit. SR Asia is responsible for generating conclusions and recommendations, including the Statement derived from the results of the assurance work, based on the agreed standards and technology, as indicated in the agreement document. Unless required by law, our responsibility to disclose the results of the assurance work is only to the Reporting Organization. SR Asia has no responsibilities or accountabilities for any risks or claims arising from third-party reliance on the results of the assurance work, the Statement, and the Report, or any issues, data, and information not covered in this Statement or the Report.

## **3. Scope of Work**

The scope of Reasonable Assurance covers visits to GAIL sites and/or through video conferencing from GAIL Jubilee Tower/Infohub Office, Noida to verify and validate data, information, management systems, its completeness, accuracy, comparability, and neutrality. The assurance requires observations on deviations of each data item in the Report, and information vis-à-vis findings based on the actual source, collecting sample copies of the evidence of data & information. SR Asia shall record deviations in the presence of the data owner and record the reason for deviations. Further, during every site visit, SR Asia shall study the system of data management and applicable compliances and carry out Reasonable Assurance in at least but not limited to the following areas:

- Material consumption
- Energy consumption
- Energy saving
- Water management
- Hazardous and non-Hazardous waste
- GHG Emission
- Air Emission
- Environmental expenditure



- Health and safety
- Labour practices

The boundary of our assurance covers the non-financial sustainability disclosures of GAIL as per the contract agreement.

#### 4. Description and Sources of Disclosures Covered

The reporting organisation has used GRI Universal standards and GRI 11: Oil and Gas Sector 2021 as a base reference for preparing the sustainability report FY2023-24 and mapped various related standards used for designing and developing the sustainability report. The following disclosures are assured:

- **GRI 1: Foundation 2021**
- **GRI 2: General Disclosures 2021**
  - Disclosures 2-1 to 2-5 (The organization and its reporting practices)
  - Disclosures 2-6 to 2-8 (Activities and Workers)
  - Disclosures 2-9 to 2-21 (Governance)
  - Disclosures 2-22 to 2-28 (Strategies, policies, and practices)
  - Disclosures 2-29 to 2-30 (Stakeholder engagement)
- **GRI 3: Material Topics 2021**
  - Disclosure 3-1 to 3-3 (Disclosures on material topics)
- **Sector Specific Disclosures**
  - Performance Indicators for identified material topics as below:
    - **Economic:**
      - Disclosures 201-1 to 201-4 (Economic performance)
      - Disclosures 202-1 and 203-2 (Market Presence)
      - Disclosures 204-1 (Procurement practices)
      - Disclosures 205-1 to 205-3 (Anti-corruption)
      - Disclosures 206-1 to 207-4 (Anti-competitive behavior)
    - **Environmental:**
      - Disclosures 301-1 to 301-3 (Materials)
      - Disclosures 302-1 to 302-5 (Energy)
      - Disclosures 303-1 to 303-5 (Water and Effluents)
      - Disclosures 304-1 to 304-4 (Biodiversity)
      - Disclosures 305-1 to 305-7 (Emissions)
      - Disclosures 306-1 to 306-5 (Waste)
      - Disclosures 308-1 and 308-2 (Supplier environmental assessment)
    - **Social:**



- Disclosures 401-1 to 401-3 (Employment)
- Disclosures 402-1 (Labour/management relations)
- Disclosures 403-1 to 403-10 (Occupational health and safety)
- Disclosures 404-1 to 404-3 (Training and education)
- Disclosures 405-1 and 405-2 (Diversity and equal opportunity)
- Disclosures 406-1 (Non-discrimination)
- Disclosures 407-1 (Freedom of association and collective bargaining)
- Disclosures 408-1 (Child labor)
- Disclosures 409-1 (Forced or compulsory labor)
- Disclosures 410-1 (Security practices)
- Disclosures 411-1 (Rights of Indigenous peoples)
- Disclosures 413-1 and 413-2 (Local communities)
- Disclosures 414-1 and 414-2 (Supplier social assessment)
- Disclosures 415-1 (Public policy)
- Disclosures 416-1 to 416-2 (Customer Health and Safety)
- Disclosures 417-1 to 417-3 (Marketing and labeling)
- Disclosures 418-1 (Customer Privacy)

## 5. Methodology

Our procedures were designed to obtain a reasonable level of assurance based on the data and information provided, supported by evidence. The necessary observations and conclusions were based on the procedures. Our procedures did not include testing controls or performing procedures related to checking the aggregation or calculation of any data within web portal systems and SAP. A Reasonable Assurance engagement consists of carrying out a gap assessment, making inquiries primarily of persons responsible for preparing the Sustainability Report FY2023-24 and related information while applying analytical and other appropriate procedures. Our procedures included:

- Checking the standard disclosures regarding GAIL's material sustainability aspects reported in the report
- Checking consistency of data/information pertaining to the aspects
- Testing on a sample basis of underlying source information to check the accuracy of the data for the following sites, through physical and virtual consultations with the site team and corporate sustainability team:

S No	Sites	City and States	Mode of Assessment
1	GAIL Corporate Office	Delhi	Physical
2	GAIL Jubilee Tower and Info Hub	Noida, Uttar Pradesh	Physical
3	GTI	Noida, Uttar Pradesh	Physical



4	Cherlapally	Secunderabad, Telangana	Virtual
5	Pata	Uttar Pradesh	Physical and Virtual
6	Vijaipur	Madhya Pradesh	Physical and Virtual
7	Jhabua Compressor Station	Madhya Pradesh	Physical and Virtual
8	Vaghodia Plant	Vaghodia, Gujarat	Physical and Virtual
9	Regional Office – Navi Mumbai	Mumbai, Maharashtra	Physical
10	Kochi	Kochi, Kerala	Virtual

- Executing an audit trail of claims and data streams, on a sample test basis, to determine the level of accuracy in collection, transcription, and aggregation processes followed.

## 6. Independence, Impartiality, and Competence

SR Asia applies assurance mechanisms and procedures based on a professional code of conduct that mandates all works be performed objectively and truthfully (independence principle). We also carried out a pre-engagement assessment before the assurance work to verify the risks of engagement and the independence & impartiality of experts in conducting the assurance work. The Assurance Team members are qualified and experienced with ISO 26000 and AA1000 AccountAbility standards & principles and have experience in sustainability and assessment based on various reporting regulations and standards such as BRSR, GRI, IPIECA, CDP, TCFD, SASB, ISAE 3000 and AA1000AS standards.

## 7. Limitations and Approach Used to Mitigate Limitations

The assurance scope excludes the following:

- Data related to the reporting organisation's financial performance.
- Data and information outside the defined Reporting Period FY 2023-24.
- Data outside the operations mentioned in the assurance boundary above unless otherwise specifically mentioned in this assurance report.
- The Reporting organisation's statements that describe expressions of opinion, claims, belief, aspiration, expectation, or aim for future intentions provided by GAIL and assertions related to Intellectual Property Rights and other competitive issues.
- Strategy and other related linkages expressed in the Report.
- Mapping of the Report with reporting frameworks other than those mentioned in the reporting criteria above.
- Aspects of the Report other than those mentioned under the scope and boundary above.
- Performance of any management function or making any decision relating to the services provided by us in the terms of this report. GAIL is responsible for making management decisions, including accepting responsibility for the results of our services.
- Review of legal compliances.



## **8. Findings and Conclusions Concerning Adherence to the AA1000 AccountAbility Principles**

**Inclusivity:** As shown in the Report, the reporting organisation has identified and engaged all its stakeholders that affect and are involved in the reporting organisation's operation and sustainability. The policy on diversity, equity, and inclusivity in the workforce is defined and implemented.

**Materiality:** The materiality parameters are derived considering global and local business scenarios and specific opportunities and challenges that GAIL finds relevant to business according to a defined policy. There are 10 material topics covered with a high level of importance, including double materiality.

**Responsiveness:** The reporting organisation's responsiveness has been adequately presented in the report. GAIL has a Grievance Redressal Mechanism, Emergency Response and Disaster Management Plan, Emergency Response Center, and a whistleblowing system managed by designated committees based on existing regulations. This whistleblowing system can also be accessed by internal and external parties through several digital and non-digital complaint channels.

**Impact:** The quantitative and qualitative data regarding the economic, environmental, and social impacts of business decisions and operations of the reporting organisation are sufficiently presented in the Report. GAIL also has a commitment to understand, measure, evaluate, and manage the impact of its business on stakeholders.

**In Accordance with GRI Standards 2021:** The assurance team has concluded that the GAIL adheres to the GRI standard specific to the Oil and Gas sector. The Report contains all the disclosures of each material topic covered in GRI sufficiently. The General Disclosure and the Disclosure of Management Approach are well presented, as well as the omission statement.

**Reliability and Quality of Specified Performance Information:** The data collection and analysis at each Plant is managed mostly through Excel files at the first level, then the data is compiled through GAIL's e-Sustainability Portal and partly managed through SAP. The controls to maximize the data integrity can be improved by using locked specifications in Excel sheets to ensure that manipulation is not possible, and the web portal may be redesigned to port data from Excel to the e-sustainability web portal for seamless transfer. The reporting organisation manages and operates various web platforms such as e-BRSR module, e-sustainability, and LODR specifically for SEBI, all requirements may be mapped together to integrate data to improve the overall quality with less effort, time saving, and improved efficiency.



## 9. Recommendations

1. GHG accounting may be mapped to international standards such as ISO 14064-1:2018, ISO 14064-2:2019, and ISO 14064-3:2019.
2. Data collection can be strengthened at the base level through a control mechanism to ensure data integrity, quality, and reliability.
3. The e-sustainability portal & e-BRSR module should be modified to capture subject matter data or indicators related to various standards used and applied by the reporting organisation for designing sustainability policy, implementation thereof, and opportunities for continual improvement.
4. The use of AI & ML technology may be assessed to further enhance the intelligence of sustainability data analytics and predictability.
5. Capacity-building programs shall be organized at all levels, especially for sustainability coordinators or departmental representatives who provide sustainability data and information at each plant and office. These programs will focus on sustainability data requirements, practices to be followed, and protocols to be adhered to, ensuring continuity of these practices and protocols pertaining to sustainability irrespective of the transfer of personnel.
6. An internal control system may be defined and exercised to enhance the reliability and quality of data and information used in sustainability reporting.
7. Compliance and regulatory systems may be used to derive cost-benefit analysis.
8. Data pertaining to “Health & Safety,” specifically such as injuries, should be corroborated with the respective health centers at each plant site.

**Team Leader: Birendra Raturi**  
India, July 16, 2024



**Sr. Sustainability Expert: Sunil Kumar**  
India, July 16, 2024



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## GRI Content Index

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
<b>GRI 2: General Disclosures 2021</b>				
<b>1. The organization and its reporting practices</b>				
Disclosure 2-1 Organizational details	2-1-a	Report its legal name;		3; 3.1 About GAIL
	2-1-b	Report its nature of ownership and legal form;		3; 3.1 About GAIL
	2-1-c	Report the location of its headquarters;		3; 3.1 About GAIL
	2-1-d	Report its countries of operation.		1; 1.4 Reporting Boundary, 3; 3.1 About GAIL, 7; 7.4 Business Outlook
Disclosure 2-2 Entities included in the organization's sustainability reporting	2-2-a	List all its entities included in its sustainability reporting;		1; About Report 1.4 Reporting Boundary
	2-2-b	If the organization has audited consolidated financial statements or financial information filed on public record, specify the differences between the list of entities included in its financial reporting and the list included in its sustainability reporting;		1; About Report 1.4 Reporting Boundary
	2-2-c	If the organization consists of multiple entities, explain the approach used for consolidating the information, including:	i. Whether the approach involves adjustments to information for minority interests;  iii. Whether and how the approach differs across the disclosures in this Standard and across material topics.	1; About Report 1.4 Reporting Boundary
Disclosure 2-3 Reporting period, frequency and contact point	2-3-a	Specify the reporting period for, and the frequency of, its sustainability reporting;		1; About Report; 1.1 Reporting Year and Cycle



GAIL (India) Limited

# Sustainability Report 2023-24

## New India New Energy

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
	2-3-b	Specify the reporting period for its financial reporting and, if it does not align with the period for its sustainability reporting, explain the reason for this;		1; About Report; 1.1 Reporting Year and Cycle
	2-3-c	Report the publication date of the report or reported information;		1; About Report; 1.1 Reporting Year and Cycle
	2-3-d	Specify the contact point for questions about the report or reported information.		1; About Report; 1.1 Reporting Year and Cycle, 1.6 Data Validation and Assurance
<b>Disclosure 2-4 Restatements of information</b>	2-4-a	Report restatements of information made from previous reporting periods and explain:	i. The reasons for the restatements; ii. The effect of the restatements.	1; 1.6 Data Validation and Assurance
<b>Disclosure 2-5 External assurance</b>	2-5-a	Describe its policy and practice for seeking external assurance, including whether and how the highest governance body and senior executives are involved;		1; 1.6 Data Validation and Assurance
	2-5-b	If the organization's sustainability reporting has been externally assured:	i. Provides a link or reference to the external assurance report(s) or assurance statement(s); ii. Describe what has been assured and on what basis, including the assurance standards used, the level of assurance obtained, and any limitations of the assurance process;	1; 1.6 Data Validation and Assurance
			iii. Describe the relationship between the organization and the assurance provider (SR Asia).	1; 1.6 Data Validation and Assurance

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
<b>2. Activities and workers</b>				
<b>Disclosure 2-6 Activities, value chain and other business relationships</b>	2-6-a	Report the sector(s) in which it is active;		3; 3.1 About GAIL, 7; Business Outlook; Business Growth; Economic Performance; Initiatives for Advocacy of Natural Gas
	2-6-b	Describe its value chain, including:	i. The organization's activities, products, services, and markets served;  ii. The organization's supply chain;  iii. The entities downstream from the organization and their activities;	3; 3.1 About GAIL , 7; 7.3 Business Initiatives  3; 3.1 About GAIL  3; 3.1 About GAIL
	2-6-c	Report other relevant business relationships;		3; 3.1 About GAIL, 7;; 7.1 Business Growth; 7.2 Economic Performance; 7.4 Business Outlook
	2-6-d	Describe significant changes in 2-6-a, 2-6-b, and 2-6-c compared to the previous reporting period.		3; 3.1 About GAIL, 7;; 7.1 Business Growth; 7.2 Economic Performance; 7.4 Business Outlook
<b>Disclosure 2-7 Employees</b>	2-7-a	Report the total number of employees, and a breakdown of this total by gender and by region; report the total number of:	i. Permanent employees, and a breakdown by gender and by region;  ii. Temporary employees, and a breakdown by gender and by region;  iii. Non-guaranteed hours employees, and a breakdown by gender and by region;  iv. Full-time employees, and a breakdown by gender and by region;	16; Performance and Standard  16; Performance and Standard  16; Performance and Standard  16; Performance and Standard



GAIL (India) Limited

# Sustainability Report 2023-24

## New India New Energy

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
			v. Part-time employees, and a breakdown by gender and by region;	16; Performance and Standard
	2-7-c	Describe the methodologies and assumptions used to compile the data, including whether the numbers are reported:	i. In head count, full-time equivalent (FTE), or using another methodology; ii. At the end of the reporting period, as an average across the reporting period, or using another methodology;	
	2-7-d	Report contextual information necessary to understand the data reported under 2-7-a and 2-7-b;		
	2-7-e	Describe significant fluctuations in the number of employees during the reporting period and between reporting periods.		
<b>Disclosure 2-8 Workers who are not employees</b>	2-8-a	Report the total number of workers who are not employees and whose work is controlled by the organization and describe:	i. The most common types of workers and their contractual relationship with the organization;	16; Performance and Standard
	2-8-b	Describe the methodologies and assumptions used to compile the data, including whether the number of workers who are not employees is reported:	i. In head count, full-time equivalent (FTE), or using another methodology; ii. At the end of the reporting period, as an average across the reporting period, or using another methodology;	
	2-8-c	Describe significant fluctuations in the number of workers who are not employees during the reporting period and between reporting periods.		

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
<b>3. Governance</b>				
<b>Disclosure 2-9 Governance structure and composition</b>	2-9-a	Describe its governance structure, including committees of the highest governance body;		4; 4.3 Sustainability Governance, 6; 6.1.1 Governance Structure,
	2-9-b	List the committees of the highest governance body that are responsible for decision-making on and overseeing the management of the organization's impacts on the economy, environment, and people;		4; 4.3 Sustainability Governance, 6; 6.1.1 Governance Structure,
	2-9-c	Describe the composition of the highest governance body and its committees by:	i. Executive and non-executive members; ii. Independence; iii. Tenure of members on the governance body; iv. Number of other significant positions and commitments held by each member, and the nature of the commitments; v. Gender; vi. Under-represented social groups; vii. Competencies relevant to the impacts of the organization; viii. Stakeholder representation.	6; 6.1.1 Governance Structure 6; 6.1.1 Governance Structure
<b>Disclosure 2-10 Nomination and selection of the highest governance body</b>	2-10-a	Describe the nomination and selection processes for the highest governance body and its committees;		6; 6.1.1 Governance Structure
	2-10-b	Describe the criteria used for nominating and selecting highest governance body members, including whether and how the following are taken into consideration:	i. Views of stakeholders (including shareholders);	6; 6.1.1 Governance Structure



GAIL (India) Limited

## Sustainability Report 2023-24

New India New Energy

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
			ii. Diversity;	6; 6.1.1 Governance Structure
			iii. Independence;	6; 6.1.1 Governance Structure
			iv. Competencies relevant to the impacts of the organization	6; 6.1.1 Governance Structure
<b>Disclosure 2-11 Chair of the highest governance body</b>	2-11-a	Report whether the chair of the highest governance body is also a senior executive in the organization;		6; 6.1.1 Governance Structure
	2-11-b	If the chair is also a senior executive, explain their function within the organization's management, the reasons for this arrangement, and how conflicts of interest are prevented and mitigated.		6; 6.1.1 Governance Structure
<b>Disclosure 2-12 Role of the highest governance body in overseeing the management of impacts</b>	2-12-a	Describe the role of the highest governance body and of senior executives in developing, approving, and updating the organization's purpose, value or mission statements, strategies, policies, and goals related to sustainable development;		6; 6.1.1 Governance Structure
	2-12-b	Describe the role of the highest governance body in overseeing the organization's due diligence and other processes to identify and manage the organization's impacts on the economy, environment, and people, including:	i. Whether and how the highest governance body engages with stakeholders to support these processes;	6; 6.1.1 Governance Structure
	2-12-c	Describe the role of the highest governance body in reviewing the effectiveness of the organization's processes as described in 2-12-b, and report the frequency of this review.	ii. How the highest governance body considers the outcomes of these processes;	6; 6.1.1 Governance Structure
				6; 6.1.1 Governance Structure

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
<b>Disclosure 2-13 Delegation of responsibility for managing impacts</b>	2-13-a	Describe how the highest governance body delegates responsibility for managing the organization's impacts on the economy, environment, and people, including:	i. Whether it has appointed any senior executives with responsibility for the management of impacts;	6; 6.1.1 Governance Structure
	2-13-b	Describe the process and frequency for senior executives or other employees to report back to the highest governance body on the management of the organization's impacts on the economy, environment, and people.		6; 6.1.1 Governance Structure
<b>Disclosure 2-14 Role of the highest governance body in sustainability reporting</b>	2-14-a	Report whether the highest governance body is responsible for reviewing and approving the reported information, including the organization's material topics, and if so, describe the process for reviewing and approving the information;		6; 6.1.4 Internal Control System and their Adequacy
	2-14-b	If the highest governance body is not responsible for reviewing and approving the reported information, including the organization's material topics, explain the reason for this.		NA
<b>Disclosure 2-15 Conflicts of interest</b>	2-15-a	Describe the processes for the highest governance body to ensure that conflicts of interest are prevented and mitigated;		6 Avoidance of Conflict of Interest
	2-15-b	Report whether conflicts of interest are disclosed to stakeholders, including, at a minimum, conflicts of interest relating to	i. Cross-board membership;	6 Avoidance of Conflict of Interest
			ii. Cross-shareholding with suppliers and other stakeholders;	6 Avoidance of Conflict of Interest
			iii. Existence of controlling shareholders;	6 Avoidance of Conflict of Interest



GAIL (India) Limited

# Sustainability Report 2023-24

## New India New Energy

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
			iv. Related parties, their relationships, transactions, and outstanding balances	6; Avoidance of Conflict of Interest
<b>Disclosure 2-16 Communication of critical concerns</b>	2-16-a	Describe whether and how critical concerns are communicated to the highest governance body;		6; Governance Mechanism; 6.1.6 Stakeholder Grievance Redressal
	2-16-b	Report the total number and the nature of critical concerns that were communicated to the highest governance body during the reporting period.		6; Governance Mechanism; 6.1.6 Stakeholder Grievance Redressal
<b>Disclosure 2-17 Collective knowledge of the highest governance body</b>	2-17-a	Report measures taken to advance the collective knowledge, skills, and experience of the highest governance body on sustainable development.		6; 6.1.1 Governance Structure
<b>Disclosure 2-18 Evaluation of the performance of the highest governance body</b>	2-18-a	Describe the processes for evaluating the performance of the highest governance body in overseeing the management of the organization's impacts on the economy, environment, and people;		6; Committees of Board
	2-18-b	Report whether the evaluations are independent or not, and the frequency of the evaluations;		6; Committees of Board
	2-18-c	Describe actions taken in response to the evaluations, including changes to the composition of the highest governance body and organizational practices.		6; Committees of Board
<b>Disclosure 2-19 Remuneration policies</b>	2-19-a	Describe the remuneration policies for members of the highest governance body and senior executives, including:	i. Fixed pay and variable pay;	6; 6.1.2 Performance Evaluation, Remuneration and Incentives, 11;11.9 Human Rights

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
			ii. Sign-on bonuses or recruitment incentive payments;	6; 6.1.2 Performance Evaluation, Remuneration and Incentives, 11;11.9 Human Rights
			iii. Termination payments;	6; 6.1.2 Performance Evaluation, Remuneration and Incentives, 11;11.9 Human Rights
			iv. Clawbacks;	6; 6.1.2 Performance Evaluation, Remuneration and Incentives, 11;11.9 Human Rights
			v. Retirement benefits;	6; 6.1.2 Performance Evaluation, Remuneration and Incentives, 11;11.9 Human Rights
	2-19-b	Describe how the remuneration policies for members of the highest governance body and senior executives relate to their objectives and performance in relation to the management of the organization's impacts on the economy, environment, and people.		6; 6.1.2 Performance Evaluation, Remuneration and Incentives, 11;11.9 Human Rights
<b>Disclosure 2-20 Process to determine remuneration</b>	2-20-a	Describe the process for designing its remuneration policies and for determining remuneration, including:	i. Whether independent highest governance body members or an independent remuneration committee oversees the process for determining remuneration;	6; 6.1.2 Performance Evaluation, Remuneration
			ii. How the views of stakeholders (including shareholders) regarding remuneration are sought and taken into consideration;	6; 6.1.2 Performance Evaluation, Remuneration



GAIL (India) Limited

# Sustainability Report 2023-24

New India New Energy

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
	2-20-b	Report the results of votes of stakeholders (including shareholders) on remuneration policies and proposals, if applicable.		6; 6.1.2 Performance Evaluation, Remuneration
<b>Disclosure 2-21 Annual total compensation ratio</b>	2-21-a	Report the ratio of the annual total compensation for the organization's highest-paid individual to the median annual total compensation for all employees (excluding the highest-paid individual);		6 ; 6.1.3 Highlights of Remuneration and incentives of GAIL
	2-21-b	Report the ratio of the percentage increase in annual total compensation for the organization's highest-paid individual to the median percentage increase in annual total compensation for all employees (excluding the highest-paid individual);		6 ; 6.1.3 Highlights of Remuneration and incentives of GAIL
	2-21-c	Report contextual information necessary to understand the data and how the data has been compiled.		6 ; 6.1.3 Highlights of Remuneration and incentives of GAIL
<b>4. Strategy, policies and practices</b>				
<b>Disclosure 2-22 Statement on sustainable development strategy</b>	2-23-a	Describe its policy commitments for responsible business conduct, including:		
<b>Disclosure 2-23 Policy commitments</b>		Describe its policy commitments for responsible business conduct, including:	i. The authoritative intergovernmental instruments that the commitments reference;	4; 4.2 Sustainability policy
			ii. Whether the commitments stipulate conducting due diligence;	4; 4.2 Sustainability policy
			iii. Whether the commitments stipulate applying the precautionary principle;	4; 4.2 Sustainability policy
	2-23-b	Describe its specific policy commitment to respect human rights, including:	iv. Whether the commitments stipulate respecting human rights;	4; 4.2 Sustainability policy

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
			i. The internationally recognized human rights that the commitment covers;	4 4.2 Sustainability policy
	2-23-c	Provide links to the policy commitments if publicly available, or, if the policy commitments are not publicly available, explain the reason for this;		4; 4.2 Sustainability policy
	2-23-d	Report the level at which each of the policy commitments was approved within the organization, including whether this is the most senior level;		4; 4.2 Sustainability policy
	2-23-e	Report the extent to which the policy commitments apply to the organization's activities and to its business relationships;		4; 4.2 Sustainability policy
	2-23-f	Describe how the policy commitments are communicated to workers, business partners, and other relevant parties.		4; 4.2 Sustainability policy
<b>Disclosure 2-24 Embedding policy commitments</b>	2-24-a	Describe how it embeds each of its policy commitments for responsible business conduct throughout its activities and business relationships, including:	i. How it allocates responsibility to implement the commitments across different levels within the organization;  ii. How it integrates the commitments into organizational strategies, operational policies, and operational procedures;	4; 4.4 Sustainability Activities  10;10.5 Key Enablers,
<b>Public Policy</b>				
			iii. How it implements its commitments with and through its business relationships;	



GAIL (India) Limited

# Sustainability Report 2023-24

New India New Energy

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
			iv. Training that the organization provides on implementing the commitments.	11; 11.5.1 Training and Development Programmes: GAIL trainings
<b>Disclosure 2-25 Processes to remediate negative impacts</b>	2-25-a	Describe its commitments to provide for or cooperate in the remediation of negative impacts that the organization identifies it has caused or contributed to;		11;11.10 Grievance Redressal System 11;11.10 Grievance Redressal System
	2-25-b	Describe its approach to identify and address grievances, including the grievance mechanisms that the organization has established or participates in;		11;11.10 Grievance Redressal System
	2-25-c	Describe other processes by which the organization provides for or cooperates in the remediation of negative impacts that it identifies it has caused or contributed to;		11;11.10 Grievance Redressal System
	2-25-d	Describe how the stakeholders who are the intended users of the grievance mechanisms are involved in the design, review, operation, and improvement of these mechanisms;		11;11.10 Grievance Redressal System
	2-25-e	Describe how the organization tracks the effectiveness of the grievance mechanisms and other remediation processes, and report examples of their effectiveness, including stakeholder feedback.		11;11.10 Grievance Redressal System
<b>Disclosure 2-26 Mechanisms for seeking advice and raising concerns</b>	2-26-a	Describe the mechanisms for individuals to:	i. Seek advice on implementing the organization's policies and practices for responsible business conduct;	11;11.10 Grievance Redressal System
			ii. Raise concerns about the organization's business conduct.	11;11.10 Grievance Redressal System

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
<b>Disclosure 2-27 Compliance with laws and regulations</b>	2-27-a	Report the total number of significant instances of non-compliance with laws and regulations during the reporting period, and a breakdown of this total by:	i. Instances for which fines were incurred;	6; Anti-competitive Behaviour, 8; 8.2.6 Responsible Compliance Management
			ii. Instances for which non-monetary sanctions were incurred;	6; Anti-competitive Behaviour, 8; 8.2.6 Responsible Compliance Management
	2-27-b	Report the total number and the monetary value of fines for instances of non-compliance with laws and regulations that were paid during the reporting period, and a breakdown of this total by:	i. Fines for instances of non-compliance with laws and regulations that occurred in the current reporting period;	6; Anti-competitive Behaviour
			ii. Fines for instances of non-compliance with laws and regulations that occurred in previous reporting periods;	6; Anti-competitive Behaviour
	2-27-c	Describe the significant instances of non-compliance;		6; Anti-competitive Behaviour
	2-27-d	Describe how it has determined significant instances of non-compliance.		6; Anti-competitive Behaviour
<b>Disclosure 2-28 Membership associations</b>	2-28-a	Report industry associations, other membership associations, and national or international advocacy organizations in which it participates in a significant role.		7; 7.5.2 Initiatives for Advocacy of Natural Gas 7; 7.5.3 Partnerships with Coalition and Association.
<b>5. Stakeholder engagement</b>				
<b>Disclosure 2-29 Approach to stakeholder engagement</b>	2-29-a	Describe its approach to engaging with stakeholders, including:	i. The categories of stakeholders it engages with, and how they are identified;	14;Customer Value Management; 14.3;Customer Engagement
			ii. The purpose of the stakeholder engagement;	14;Customer Value Management; 14.3;Customer Engagement



GAIL (India) Limited

# Sustainability Report 2023-24

New India New Energy

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
			iii. How the organization seeks to ensure meaningful engagement with stakeholders	14;Customer Value Management; 14.3;Customer Engagement
<b>Disclosure 2-30 Collective bargaining agreements</b>	2-30-a	Report the percentage of total employees covered by collective bargaining agreements;		5; 5.1 Our Approach to Stakeholder Engagement, 11; 11.9 Human Rights
	2-30-b	For employees not covered by collective bargaining agreements, report whether the organization determines their working conditions and terms of employment based on collective bargaining agreements that cover its other employees or based on collective bargaining agreements from other organizations.		5; 5.1 Our Approach to Stakeholder Engagement 11; 11.9 Human Rights

## GRI 3: Material Topics 2021

### Economic Performance

<b>Disclosure 3-1 Process to determine material topics</b>	3-1-a	Explanation of the material topic and its boundary describe the process it has followed to determine its material topics, including:	i. How it has identified actual and potential, negative and positive impacts on the economy, environment, and people, including impacts on their human rights, across its activities and business relationships;	5; 5.3 Our Approach to materiality
	ii. How it has prioritized the impacts for reporting based on their significance;		5; 5.3 Our Approach to materiality	
	3-1-b	Specify the stakeholders and experts whose views have informed the process of determining its material topics.	5; 5.3 Our Approach to materiality	

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
<b>Disclosure 3-2 List of material topics</b>	3-2-a	List its material topics;		5; 5.5 Review of Material Topics
	3-2-b	Report changes to the list of material topics compared to the previous reporting period.		5; 5.5 Review of Material Topics
<b>Disclosure 3-3 Management of material topics</b>	3-3-a	Describe the actual and potential, negative and positive impacts on the economy, environment, and people, including impacts on their human rights;		5; Boundary and KPI's with Respect to Material Topic, 6; 6.1 Governance and Board Oversight at GAIL; 6.1.5 Ethics and Integrity; 6.2 Risk Management at GAIL; Overarching Management Approach 7; 7.1 Business Growth; Economic Performance 8; Operational Excellence; 8.2 Integrated Management System (IMS); 8.2.1 Asset Integrity Management System; 8.2.4 Environment Management System (EMS); 8.2.5 Energy Management System (EnMS); 8.2.7 Information System and Digitalization, 9; Governance and Policy on Energy and Environment, 10; Climate Change and Sustainable Development, 11; 11.4 Employee Engagement and Empowerment, 12; Health, Safety, and Environment Performance, 13; Procurement Practices; Zero Tolerance to Child Labour; Sustainable Procurement, 14.3; Product Labelling, 15.2; Social Commitments



GAIL (India) Limited

## Sustainability Report 2023-24

New India New Energy

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
	3-3-b	Report whether the organization is involved with the negative impacts through its activities or as a result of its business relationships, and describe the activities or business relationships;		5; Boundary and KPI's with Respect to Material Topic, 6; 6.1 Governance and Board Oversight at GAIL; 6.1.5 Ethics and Integrity; 6.2 Risk Management at GAIL; Overarching Management Approach 7; 7.1 Business Growth; Economic Performance 8; Operational Excellence; 8.2 Integrated Management System (IMS); 8.2.1 Asset Integrity Management System; 8.2.4 Environment Management System (EMS); 8.2.5 Energy Management System (EnMS); 8.2.7 Information System and Digitalization, 9; Governance and Policy on Energy and Environment, 10; Climate Change and Sustainable Development, 11; 11.4 Employee Engagement and Empowerment, 12; Health, Safety, and Environment Performance, 13; Procurement Practices; Zero Tolerance to Child Labour; Sustainable Procurement, 14.3; Product Labelling, 15.2; Social Commitments

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
	3-3-c	Describe its policies or commitments regarding the material topic;		5; Boundary and KPI's with Respect to Material Topic, 6; 6.1 Governance and Board Oversight at GAIL; 6.1.5 Ethics and Integrity; 6.2 Risk Management at GAIL; Overarching Management Approach 7;7.1 Business Growth; Economic Performance 8; Operational Excellence; 8.2 Integrated Management System (IMS); 8.2.1 Asset Integrity Management System; 8.2.4 Environment Management System (EMS); 8.2.5 Energy Management System (EnMS); 8.2.7 Information System and Digitalization, 9; Governance and Policy on Energy and Environment, 10; Climate Change and Sustainable Development, 11; 11.4 Employee Engagement and Empowerment, 12; Health, Safety, and Environment Performance, 13; Procurement Practices; Zero Tolerance to Child Labour; Sustainable Procurement, 14.3; Product Labelling, 15.2; Social Commitments



GAIL (India) Limited

## Sustainability Report 2023-24

New India New Energy

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
	3-3-d	Describe actions taken to manage the topic and related impacts, including:	i. Actions to prevent or mitigate potential negative impacts;	5; Boundary and KPI's with Respect to Material Topic, 6; 6.1 Governance and Board Oversight at GAIL; 6.1.5 Ethics and Integrity; 6.2 Risk Management at GAIL; Overarching Management Approach 7;7.1 Business Growth; Economic Performance 8; Operational Excellence; 8.2 Integrated Management System (IMS); 8.2.1 Asset Integrity Management System; 8.2.4 Environment Management System (EMS); 8.2.5 Energy Management System (EnMS); 8.2.7 Information System and Digitalization, 9;Governance and Policy on Energy and Environment, 10; Climate Change and Sustainable Development, 11; 11.4 Employee Engagement and Empowerment, 12; Health, Safety, and Environment Performance, 13; Procurement Practices; Zero Tolerance to Child Labour; Sustainable Procurement, 14.3; Product Labelling, 15.2; Social Commitments

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
			ii. Actions to address actual negative impacts, including actions to provide for or cooperate in their remediation;	5; Boundary and KPI's with Respect to Material Topic, 6; 6.1 Governance and Board Oversight at GAIL; 6.1.5 Ethics and Integrity; 6.2 Risk Management at GAIL; Overarching Management Approach 7;7.1 Business Growth; Economic Performance 8; Operational Excellence; 8.2 Integrated Management System (IMS); 8.2.1 Asset Integrity Management System; 8.2.4 Environment Management System (EMS); 8.2.5 Energy Management System (EnMS); 8.2.7 Information System and Digitalization, 9; Governance and Policy on Energy and Environment, 10; Climate Change and Sustainable Development, 11; 11.4 Employee Engagement and Empowerment, 12; Health, Safety, and Environment Performance, 13; Procurement Practices; Zero Tolerance to Child Labour; Sustainable Procurement, 14.3 ;Product Labelling, 15.2; Social Commitments



GAIL (India) Limited

## Sustainability Report 2023-24

New India New Energy

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
			iii. Actions to manage actual and potential positive impacts;	5; Boundary and KPI's with Respect to Material Topic, 6; 6.1 Governance and Board Oversight at GAIL; 6.1.5 Ethics and Integrity; 6.2 Risk Management at GAIL; Overarching Management Approach 7; 7.1 Business Growth; Economic Performance 8; Operational Excellence; 8.2 Integrated Management System (IMS); 8.2.1 Asset Integrity Management System; 8.2.4 Environment Management System (EMS); 8.2.5 Energy Management System (EnMS); 8.2.7 Information System and Digitalization, 9; Governance and Policy on Energy and Environment, 10; Climate Change and Sustainable Development, 11; 11.4 Employee Engagement and Empowerment, 12; Health, Safety, and Environment Performance, 13; Procurement Practices; Zero Tolerance to Child Labour; Sustainable Procurement, 14.3; Product Labelling, 15.2; Social Commitments

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
	3-3-e	Report the following information about tracking the effectiveness of the actions taken:	i. Processes used to track the effectiveness of the actions;	5; Boundary and KPI's with Respect to Material Topic, 6; 6.1 Governance and Board Oversight at GAIL; 6.1.5 Ethics and Integrity; 6.2 Risk Management at GAIL; Overarching Management Approach 7; 7.1 Business Growth; Economic Performance 8; Operational Excellence; 8.2 Integrated Management System (IMS); 8.2.1 Asset Integrity Management System; 8.2.4 Environment Management System (EMS); 8.2.5 Energy Management System (EnMS); 8.2.7 Information System and Digitalization, 9; Governance and Policy on Energy and Environment, 10; Climate Change and Sustainable Development, 11; 11.4 Employee Engagement and Empowerment, 12; Health, Safety, and Environment Performance, 13; Procurement Practices; Zero Tolerance to Child Labour; Sustainable Procurement, 14.3; Product Labelling, 15.2; Social Commitments



GAIL (India) Limited

## Sustainability Report 2023-24

New India New Energy

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
			ii. Goals, targets, and indicators used to evaluate progress;	5; Boundary and KPI's with Respect to Material Topic, 6; 6.1 Governance and Board Oversight at GAIL; 6.1.5 Ethics and Integrity; 6.2 Risk Management at GAIL; Overarching Management Approach 7; 7.1 Business Growth; Economic Performance 8; Operational Excellence; 8.2 Integrated Management System (IMS); 8.2.1 Asset Integrity Management System; 8.2.4 Environment Management System (EMS); 8.2.5 Energy Management System (EnMS); 8.2.7 Information System and Digitalization, 9; Governance and Policy on Energy and Environment, 10; Climate Change and Sustainable Development, 11; 11.4 Employee Engagement and Empowerment, 12; Health, Safety, and Environment Performance, 13; Procurement Practices; Zero Tolerance to Child Labour; Sustainable Procurement, 14.3; Product Labelling, 15.2; Social Commitments

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
			iii. The effectiveness of the actions, including progress toward the goals and targets;	5; Boundary and KPI's with Respect to Material Topic, 6; 6.1 Governance and Board Oversight at GAIL; 6.1.5 Ethics and Integrity; 6.2 Risk Management at GAIL; Overarching Management Approach 7; 7.1 Business Growth; Economic Performance 8; Operational Excellence; 8.2 Integrated Management System (IMS); 8.2.1 Asset Integrity Management System; 8.2.4 Environment Management System (EMS); 8.2.5 Energy Management System (EnMS); 8.2.7 Information System and Digitalization, 9; Governance and Policy on Energy and Environment, 10; Climate Change and Sustainable Development, 11; 11.4 Employee Engagement and Empowerment, 12; Health, Safety, and Environment Performance, 13; Procurement Practices; Zero Tolerance to Child Labour; Sustainable Procurement, 14.3; Product Labelling, 15.2; Social Commitments



GAIL (India) Limited

## Sustainability Report 2023-24

New India New Energy

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
			iv. lessons learned and how these have been incorporated into the organization's operational policies and procedures;	5; Boundary and KPI's with Respect to Material Topic, 6; 6.1 Governance and Board Oversight at GAIL; 6.1.5 Ethics and Integrity; 6.2 Risk Management at GAIL; Overarching Management Approach 7;7.1 Business Growth; Economic Performance 8; Operational Excellence; 8.2 Integrated Management System (IMS); 8.2.1 Asset Integrity Management System; 8.2.4 Environment Management System (EMS); 8.2.5 Energy Management System (EnMS); 8.2.7 Information System and Digitalization, 9; Governance and Policy on Energy and Environment, 10; Climate Change and Sustainable Development, 11; 11.4 Employee Engagement and Empowerment, 12; Health, Safety, and Environment Performance, 13; Procurement Practices; Zero Tolerance to Child Labour; Sustainable Procurement, 14.3 ;Product Labelling, 15.2; Social Commitments

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
	3-3-f	Describe how engagement with stakeholders has informed the actions taken (3-3-d) and how it has informed whether the actions have been effective (3-3-e).		5; Boundary and KPI's with Respect to Material Topic, 6; 6.1 Governance and Board Oversight at GAIL; 6.1.5 Ethics and Integrity; 6.2 Risk Management at GAIL; Overarching Management Approach 7;7.1 Business Growth; Economic Performance 8; Operational Excellence; 8.2 Integrated Management System (IMS); 8.2.1 Asset Integrity Management System; 8.2.4 Environment Management System (EMS); 8.2.5 Energy Management System (EnMS); 8.2.7 Information System and Digitalization, 9;Governance and Policy on Energy and Environment, 10; Climate Change and Sustainable Development, 11; 11.4 Employee Engagement and Empowerment, 12; Health, Safety, and Environment Performance, 13; Procurement Practices; Zero Tolerance to Child Labour; Sustainable Procurement, 14.3 ;Product Labelling , 15.2 ;Social Commitments



GAIL (India) Limited

# Sustainability Report 2023-24

New India New Energy

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
<b>Disclosure 201-1 Direct economic value generated and distributed</b>	201-1-a	Direct economic value generated and distributed (EVG&D) on an accrual's basis, including the basic components for the organization's global operations as listed below. If data are presented on a cash basis, report the justification for this decision in addition to reporting the following basic components:	i. Direct economic value generated: revenues;	7; 7.2 Economic Performance, Performance Highlights
			ii. Economic value distributed: operating costs, employee wages and benefits, payments to providers of capital, payments to government by country, and community investments;	7 7.2 Economic Performance, Performance Highlights
			iii. Economic value retained: 'direct economic value generated' less 'economic value distributed'.	7 ; 7.2 Economic Performance, Performance Highlights
	201-1-b	Where significant, report EVG&D separately at country, regional, or market levels, and the criteria used for defining significance.		
<b>Disclosure 201-2 Financial implications and other risks and opportunities due to climate change</b>	201-2-a	Risks and opportunities posed by climate change that have the potential to generate substantive changes in operations, revenue, or expenditure, including:	i. A description of the risk or opportunity and its classification as either physical, regulatory, or other;	6 ; 6.2.1 Overaching Management Approach, Risk Management and Strategic Initiatives
			ii. A description of the impact associated with the risk or opportunity;	6 ; 6.2.1 Overaching Management Approach, Risk Management and Strategic Initiatives
			iii. The financial implications of the risk or opportunity before action is taken;	6 ; 6.2.2 Key Risk and Mitigate Measures

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
			iv. The methods used to manage the risk or opportunity; v. The costs of actions taken to manage the risk or opportunity.	6 ; 6.2.2 Key Risk and Mitigate Measures 6 ; 6.2.2 Key Risk and Mitigate Measures
<b>Disclosure 201-3 Defined benefit plan obligations and other retirement plans</b>	201-3-a	If the plan's liabilities are met by the organization's general resources, the estimated value of those liabilities.		
	201-3-b	If a separate fund exists to pay the plan's pension liabilities:	i. The extent to which the scheme's liabilities are estimated to be covered by the assets that have been set aside to meet them;	
			ii. The basis on which that estimate has been arrived at;	
			iii. When that estimate was made.	
	201-3-c	If a fund set up to pay the plan's pension liabilities is not fully covered, explain the strategy, if any, adopted by the employer to work towards full coverage, and the timescale, if any, by which the employer hopes to achieve full coverage.		
	201-3-d	Percentage of salary contributed by employee or employer.		
	201-3-e	Level of participation in retirement plans, such as participation in mandatory or voluntary schemes, regional, or country-based schemes, or those with financial impact.		
<b>Disclosure 201-4 Financial assistance received from government</b>	201-4-a	Total monetary value of financial assistance received by the organization from any government during the reporting period, including:	i. Tax relief and tax credits;	7 ; 7.3 Financial Management Improvement Initiatives in FY 2023-24



GAIL (India) Limited

## Sustainability Report 2023-24

New India New Energy

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
			ii. Subsidies;	7 ; 7.3 Financial Management Improvement Initiatives in FY 2023-24
			iii. Investment grants, research and development grants, and other relevant types of grant;	7 ; 7.3 Financial Management Improvement Initiatives in FY 2023-24
			iv. Awards;	7 ; 7.3 Financial Management Improvement Initiatives in FY 2023-24
			v. Royalty holidays;	7 ; 7.3 Financial Management Improvement Initiatives in FY 2023-24
			vi. Financial assistance from Export Credit Agencies (ECAs);	7 ; 7.3 Financial Management Improvement Initiatives in FY 2023-24
			vii. Financial incentives;	7 ; 7.3 Financial Management Improvement Initiatives in FY 2023-24
			viii. Other financial benefits received or receivable from any government for any operation.	7 ; 7.3 Financial Management Improvement Initiatives in FY 2023-24
201-4-b	The information in 201-4-a by country.			
201-4-c	Whether, and the extent to which, any government is present in the shareholding structure.			
Market Presence				
<b>Disclosure 202-1 Ratios of standard entry level wage by gender compared to local minimum wage</b>	202-1-a	When a significant proportion of employees are compensated based on wages subject to minimum wage rules, report the relevant ratio of the entry level wage by gender at significant locations of operation to the minimum wage.		6;6.1.2 Performance Evaluation, Remuneration, and Incentives ; 6.1.3 Highlights of Remuneration and Incentives at GAIL

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
	202-1-b	When a significant proportion of other workers (excluding employees) performing the organization's activities are compensated based on wages subject to minimum wage rules, describe the actions taken to determine whether these workers are paid above the minimum wage.		6;6.1.2 Performance Evaluation, Remuneration, and Incentives ; 6.1.3 Highlights of Remuneration and Incentives at GAIL
	202-1-c	Whether a local minimum wage is absent or variable at significant locations of operation, by gender. In circumstances in which different minimums can be used as a reference, report which minimum wage is being used.		6;6.1.2 Performance Evaluation, Remuneration, and Incentives ; 6.1.3 Highlights of Remuneration and Incentives at GAIL
	202-1-d	The definition used for 'significant locations of operation'.		1; 1.3 Reporting scope
<b>Disclosure 202-2 Proportion of senior management hired from the local community</b>	202-2-a	Percentage of senior management at significant locations of operation that are hired from the local community.		
	202-2-b	The definition used for 'senior management'.		
	202-2-c	The organization's geographical definition of 'local'.		
	202-2-d	The definition used for 'significant locations of operation'.		
<b>Disclosure 203-1 Infrastructure investments and services supported</b>	203-1-a	Extent of development of significant infrastructure investments and services supported.		
	203-1-b	Current or expected impacts on communities and local economies, including positive and negative impacts where relevant.		



GAIL (India) Limited

# Sustainability Report 2023-24

New India New Energy

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
	203-1-c	Whether these investments and services are commercial, in-kind, or pro bono engagements.		
<b>Disclosure 203-2 Significant indirect economic impacts</b>	203-2-a	Examples of significant identified indirect economic impacts of the organization, including positive and negative impacts.		
	203-2-b	Significance of the indirect economic impacts in the context of external benchmarks and stakeholder priorities, such as national and international standards, protocols, and policy agendas.		
<b>Procurement Practices</b>				
<b>Disclosure 204-1 Proportion of spending on local suppliers</b>	204-1-a	Percentage of the procurement budget used for significant locations of operation that is spent on suppliers local to that operation (such as percentage of products and services purchased locally).		13;13.4 Sustainable Procurement
	204-1-b	The organization's geographical definition of 'local'.		1.3 Reporting Scope
	204-1-c	The definition used for 'significant locations of operation'.		1.3 Reporting Scope
<b>Anti-Corruption</b>				
<b>Disclosure 205-1 Operations assessed for risks related to corruption</b>	205-1-a	Total number and percentage of operations assessed for risks related to corruption.		6 ; 6.1.5 Ethics and Integrity
	205-1-b	Significant risks related to corruption identified through the risk assessment.		6 ; 6.1.5 Ethics and Integrity
<b>Disclosure 205-2 Communication and training about anti-corruption policies and procedures</b>	205-2-a	Total number and percentage of governance body members that the organization's anti-corruption policies and procedures have been communicated to, broken down by region.		6 ; 6.1.5 Ethics and Integrity

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
	205-2-b	Total number and percentage of employees that the organization's anti-corruption policies and procedures have been communicated to, broken down by employee category and region.		6 ; 6.1.5 Ethics and Integrity
	205-2-c	Total number and percentage of business partners that the organization's anti-corruption policies and procedures have been communicated to, broken down by type of business partner and region. Describe if the organization's anti-corruption policies and procedures have been communicated to any other persons or organizations.		6 ; 6.1.5 Ethics and Integrity
	205-2-d	Total number and percentage of governance body members that have received training on anti-corruption, broken down by region.		6 ; 6.1.5 Ethics and Integrity
	205-2-e	Total number and percentage of employees that have received training on anti-corruption, broken down by employee category and region.		6 ; 6.1.5 Ethics and Integrity
<b>Disclosure 205-3 Confirmed incidents of corruption and actions taken</b>	205-3-a	Total number and nature of confirmed incidents of corruption.		6 ; 6.1.5 Ethics and Integrity
	205-3-b	Total number of confirmed incidents in which employees were dismissed or disciplined for corruption.		6 ; 6.1.5 Ethics and Integrity
	205-3-c	Total number of confirmed incidents when contracts with business partners were terminated or not renewed due to violations related to corruption.		6 ; 6.1.5 Ethics and Integrity



GAIL (India) Limited

## Sustainability Report 2023-24

New India New Energy

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
	205-3-d	Public legal cases regarding corruption brought against the organization or its employees during the reporting period and the outcomes of such cases.		6 ; 6.1.5 Ethics and Integrity
<b>Anti-Competitive Behaviour</b>				
<b>Disclosure 206-1 Legal actions for anti-competitive behaviour, anti-trust, and monopoly practices</b>	206-1-a	Number of legal actions pending or completed during the reporting period regarding anti-competitive behaviour and violations of anti-trust and monopoly legislation in which the organization has been identified as a participant.		6;Anti-competitive Behaviour
	206-1-b	Main outcomes of completed legal actions, including any decisions or judgements.		6;Anti-competitive Behaviour
<b>Disclosure 207-1 Approach to tax</b>	207-1-a	A description of the approach to tax, including:	i. Whether the organization has a tax strategy and, if so, a link to this strategy if publicly available;	6; Tax Strategy
			ii. The governance body or executive-level position within the organization that formally reviews and approves the tax strategy, and the frequency of this review;	
			iii. The approach to regulatory compliance;	
			iv. How the approach to tax is linked to the business and sustainable development strategies of the organization.	
<b>Disclosure 207-2 Tax governance, control, and risk management</b>	207-2-a	A description of the tax governance and control framework, including:	i. The governance body or executive-level position within the organization accountable for compliance with the tax strategy;	

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
			ii. How the approach to tax is embedded within the organization;	
			iii. The approach to tax risks, including how risks are identified, managed, and monitored;	
			iv. How compliance with the tax governance and control framework is evaluated.	
	207-2-b	A description of the mechanisms to raise concerns about the organization's business conduct and the organization's integrity in relation to tax.		
	207-2-c	A description of the assurance process for disclosures on tax including, if applicable, a link or reference to the external assurance report(s) or assurance statement(s).		
<b>Disclosure 207-3 Stakeholder engagement and management of concerns related to tax</b>	207-3-a	A description of the approach to stakeholder engagement and management of stakeholder concerns related to tax, including:	i. The approach to engagement with tax authorities;	
			ii. The approach to public policy advocacy on tax;	
			iii. The processes for collecting and considering the views and concerns of stakeholders, including external stakeholders	
<b>Disclosure 207-4 Country-by-country reporting</b>	207-4-a	All tax jurisdictions where the entities included in the organization's audited consolidated financial statements, or in the financial information filed on public record, are resident for tax purposes.		



GAIL (India) Limited

# Sustainability Report 2023-24

New India New Energy

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
	207-4-b	For each tax jurisdiction reported in Disclosure 207-4-a:	i. Names of the resident entities;	
			ii. Primary activities of the organization;	
			iii. Number of employees, and the basis of calculation of this number;	
			iv. Revenues from third-party sales;	
			v. Revenues from intra-group transactions with other tax jurisdictions;	
			vi. Profit/loss before tax;	
			vii. Tangible assets other than cash and cash equivalents;	
			viii. Corporate income tax paid on a cash basis;	
			ix. Corporate income tax accrued on profit/loss;	
			x. Reasons for the difference between corporate income tax accrued on profit/loss and the tax due if the statutory tax rate is applied to profit/loss before tax.	
	207-4-c	The time period covered by the information reported in Disclosure 207-4.		
<b>Materials</b>				
<b>Disclosure 301-1 Materials used by weight or volume</b>	301-1-a	Total weight or volume of materials that are used to produce and package the organization's primary products and services during the reporting period, by:	i. Non-renewable materials used;	
			ii. Renewable materials used.	

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
<b>Disclosure 301-2 Recycled input materials used</b>	301-2-a	Percentage of recycled input materials used to manufacture the organization's primary products and services.		
<b>Disclosure 301-3 Reclaimed products and their packaging materials</b>	301-3-a	Percentage of reclaimed products and their packaging materials for each product category.		
	301-3-b	How the data for this disclosure have been collected.		
<b>Energy</b>				
<b>Disclosure 302-1 Energy consumption within the organization</b>	302-1-a	Total fuel consumption within the organization from non-renewable sources, in joules or multiples, and including fuel types used.		16; Performance and standard
	302-1-b	Total fuel consumption within the organization from renewable sources, in joules or multiples, and including fuel types used.		16; Performance and standard
	302-1-c	In joules, watt-hours or multiples, the total:	i. Electricity consumption	16; Performance and standard
			ii. Heating consumption	
			iii. Cooling consumption	
			iv. Steam consumption	
	302-1-d	In joules, watt-hours or multiples, the total:	i. Electricity sold	16; Performance and standard
			ii. Heating sold	
			iii. Cooling sold	
	302-1-e	Total energy consumption within the organization, in joules or multiples.	iv. Steam sold	
	302-1-f	Standards, methodologies, assumptions, and/or calculation tools used.		16; Performance and standard
	302-1-g	Source of the conversion factors used.		16; Performance and standard
<b>Disclosure 302-2 Energy consumption outside of the organization</b>	302-2-a	Energy consumption outside of the organization, in joules or multiples.		9 ; 9.4 Energy Management , 16; Performance and Standard



GAIL (India) Limited

## Sustainability Report 2023-24

New India New Energy

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
	302-2-b	Standards, methodologies, assumptions, and/or calculation tools used.		9 ; 9.4 Energy Management , 16; Performance and Standard
	302-2-c	Source of the conversion factors used.		9 ; 9.4 Energy Management, 16; Performance and Standard
<b>Disclosure 302-3 Energy intensity</b>	302-3-a	Energy intensity ratio for the organization.		9;9.4.1 Central Approved Energy Saving Initiatives, 16; Performance and Standard
	302-3-b	Organization-specific metric (the denominator) chosen to calculate the ratio.		9;9.4.1 Central Approved Energy Saving Initiatives, 16; Performance and Standard
	302-3-c	Types of energy included in the intensity ratio; whether fuel, electricity, heating, cooling, steam, or all.		9;9.4.1 Central Approved Energy Saving Initiatives, 16; Performance and Standard
	302-3-d	Whether the ratio uses energy consumption within the organization, outside of it, or both.		9;9.4.1 Central Approved Energy Saving Initiatives, 16; Performance and Standard
<b>Disclosure 302-4 Reduction of energy consumption</b>	302-4-a	Number of reductions in energy consumption achieved as a direct result of conservation and efficiency initiatives, in joules or multiples.		8; 8.2.5 Energy Management System (EnMS) , 9;9.3.2 Central Approved Energy Saving Initiatives , 10;10.4.2 Energy Transition, 16; Performance and Standard
	302-4-b	Types of energy included in the reductions; whether fuel, electricity, heating, cooling, steam, or all.		8; 8.2.5 Energy Management System (EnMS) , 9;9.3.2 Central Approved Energy Saving Initiatives , 10;10.4.2 Energy Transition, 16; Performance and Standard
	302-4-c	Basis for calculating reductions in energy consumption, such as base year or baseline, including the rationale for choosing it.		8; 8.2.5 Energy Management System (EnMS) , 9;9.3.2 Central Approved Energy Saving Initiatives , 10;10.4.2 Energy Transition, 16; Performance and Standard

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
	302-4-d	Standards, methodologies, assumptions, and/or calculation tools used.		8; 8.2.5 Energy Management System (EnMS) , 9;9.3.2 Central Approved Energy Saving Initiatives , 10;10.4.2 Energy Transition, 16; Performance and Standard
<b>Disclosure 302-5 Reductions in energy requirements of products and services</b>	302-5-a	Reductions in energy requirements of sold products and services achieved during the reporting period, in joules or multiples.		9;9.3.2 Central Approved Energy Saving Initiatives , 10; 10.4.2 Energy Transition
	302-5-b	Basis for calculating reductions in energy consumption, such as base year or baseline, including the rationale for choosing it.		9;9.3.2 Central Approved Energy Saving Initiatives , 10; 10.4.2 Energy Transition
	302-5-c	Standards, methodologies, assumptions, and/or calculation tools used.		9;9.3.2 Central Approved Energy Saving Initiatives , 10; 10.4.2 Energy Transition
<b>Water and Effluents</b>				
<b>Disclosure 303-1 Interactions with water as a shared resource</b>	303-1-a	A description of how the organization interacts with water, including how and where water is withdrawn, consumed, and discharged, and the water-related impacts the organization has caused or contributed to, or that are directly linked to its operations, products, or services by its business relationships (e.g., impacts caused by runoff).		9; 9.6 Responsible Water Management
	303-1-b	A description of the approach used to identify water-related impacts, including the scope of assessments, their timeframe, and any tools or methodologies used.		9; 9.6 Responsible Water Management



GAIL (India) Limited

## Sustainability Report 2023-24

New India New Energy

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
	303-1-c	A description of how water-related impacts are addressed, including how the organization works with stakeholders to steward water as a shared resource, and how it engages with suppliers or customers with significant water-related impacts.		9; 9.6 Responsible Water Management
	303-1-d	An explanation of the process for setting any water-related goals and targets that are part of the organization's approach to managing water and effluents, and how they relate to public policy and the local context of each area with water stress.		9; 9.6 Responsible Water Management
<b>Disclosure 303-2 Management of water discharge-related impacts</b>	303-2-a	A description of any minimum standards set for the quality of effluent discharge, and how these minimum standards were determined, including:	i. How standards for facilities operating in locations with no local discharge requirements were determined;  ii. Any internally developed water quality standards or guidelines;  iii. Any sector-specific standards considered;  iv. Whether the profile of the receiving waterbody was considered.	9; 9.6 Responsible Water Management  9; 9.6 Responsible Water Management  9; 9.6 Responsible Water Management  9; 9.6 Responsible Water Management
<b>Disclosure 303-3 Water withdrawal</b>	303-3-a	Total water withdrawal from all areas in megaliters, and a breakdown of this total by the following sources, if applicable:	i. Surface water;  ii. Groundwater;  iii. Seawater;  iv. Produced water;	16; Performance and Standard  16; Performance and Standard
	303-3-b	Total water withdrawal from all areas with water stress in mega liters, and a breakdown of this total by the following sources, if applicable:	i. Surface water;	16; Performance and Standard
			ii. Groundwater;	16; Performance and Standard

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
			iii. Seawater;	
			iv. Produced water;	
			v. Third-party water, and a breakdown of this total by the withdrawal sources listed in i-iv.	9; 9.6 Responsible Water Management
	303-3-c	A breakdown of total water withdrawal from each of the sources listed in Disclosures 303-3-a and 303-3-b in megaliters by the following categories:	i. Freshwater ( $\leq 1,000 \text{ mg/L Total Dissolved Solids}$ );	16; Performance and Standard
			ii. Other water ( $> 1,000 \text{ mg/L Total Dissolved Solids}$ ).	16; Performance and Standard
	303-3-d	Any contextual information necessary to understand how the data have been compiled, such as any standards, methodologies, and assumptions used.		9; 9.6 Responsible Water Management
<b>Disclosure 303-4 Water discharge</b>	303-4-a	Total water discharge to all areas in megaliters, and a breakdown of this total by the following types of destination, if applicable:	i. Surface water;	16; Performance and Standard
			ii. Groundwater;	16; Performance and Standard
			iii. Seawater;	Not Applicable
			iv. Third-party water, and the volume of this total sent for use to other organizations, if applicable.	Not Applicable
	303-4-b	A breakdown of total water discharge to all areas in megaliters by the following categories:	i. Freshwater ( $\leq 1,000 \text{ mg/L Total Dissolved Solids}$ );	9; 9.6 Responsible Water Management
			ii. Other water ( $> 1,000 \text{ mg/L Total Dissolved Solids}$ ).	9; 9.6 Responsible Water Management
	303-4-c	Total water discharge to all areas with water stress in megaliters, and a breakdown of this total by the following categories:	i. Freshwater ( $\leq 1,000 \text{ mg/L Total Dissolved Solids}$ );	9; 9.6 Responsible Water Management



GAIL (India) Limited

## Sustainability Report 2023-24

New India New Energy

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
			ii. Other water (>1,000 mg/L Total Dissolved Solids).	9; 9.6 Responsible Water Management
	303-4-d	Priority substances of concern for which discharges are treated, including:	i. How priority substances of concern were defined, and any international standard, authoritative list, or criteria used;	9; 9.6 Responsible Water Management
			ii. The approach for setting discharge limits for priority substances of concern;	9; 9.6 Responsible Water Management
			iii. Number of incidents of non-compliance with discharge limits.	9; 9.6 Responsible Water Management
	303-4-e	Any contextual information necessary to understand how the data have been compiled, such as any standards, methodologies, and assumptions used.		9; 9.6 Responsible Water Management
Disclosure 303-5 Water consumption	303-5-a	Total water consumption from all areas in megaliters.		Chapter 16; Performance and Standards
	303-5-b	Total water consumption from all areas with water stress in megaliters		Chapter 16; Performance and Standards
	303-5-c	Change in water storage in megaliters, if water storage has been identified as having a significant water-related impact.		9; 9.6 Responsible Water Management
	303-5-d	Any contextual information necessary to understand how the data have been compiled, such as any standards, methodologies, and assumptions used, including whether the information is calculated, estimated, modelled, or sourced from direct measurements, and the approach taken for this, such as the use of any sector-specific factors.		

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
<b>Biodiversity</b>				
<b>Disclosure 304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas</b>	304-1-a	For each operational site owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas, the following information:	i. Geographic location;	9.2; Biodiversity Management
			ii. Subsurface and underground land that may be owned, leased, or managed by the organization;	9.2; Biodiversity Management
			iii. Position in relation to the protected area (in the area, adjacent to, or containing portions of the protected area) or the high biodiversity value area outside protected areas;	9.2; Biodiversity Management
			iv. Type of operation (office, manufacturing or production, or extractive);	9.2; Biodiversity Management
			v. Size of operational site in km <sup>2</sup> (or another unit, if appropriate);	9.2; Biodiversity Management
			vi. Biodiversity value characterized by the attribute of the protected area or area of high biodiversity value outside the protected area (terrestrial, freshwater, or maritime ecosystem);	9.2; Biodiversity Management



GAIL (India) Limited

# Sustainability Report 2023-24

New India New Energy

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
			vii. Biodiversity value characterized by listing of protected status (such as IUCN Protected Area Management Categories, Ramsar Convention, national legislation).	9.2; Biodiversity Management
<b>Disclosure 304-2 Significant impacts of activities, products and services on biodiversity</b>	304-2-a	Nature of significant direct and indirect impacts on biodiversity with reference to one or more of the following:	i. Construction or use of manufacturing plants, mines, and transport infrastructure;	9 .2; Biodiversity Management
			ii. Pollution (introduction of substances that do not naturally occur in the habitat from point and non-point sources);	9 .2; Biodiversity Management
			iii. Introduction of invasive species, pests, and pathogens;	9 .2.; Biodiversity Management
			iv. Reduction of species;	9.2; Biodiversity Management
			v. Habitat conversion;	9 .2; Biodiversity Management
			vi. Changes in ecological processes outside the natural range of variation (such as salinity or changes in groundwater level).	9 .2; Biodiversity Management
	304-2-b	Significant direct and indirect positive and negative impacts with reference to the following:	i. Species affected; ii. Extent of areas impacted; iii. Duration of impacts; iv. Reversibility or irreversibility of the impacts.	
<b>Disclosure 304-3 Habitats protected or restored</b>	304-3-a	Size and location of all habitat areas protected or restored, and whether the success of the restoration measure was or is approved by independent external professionals.		9 .2; Biodiversity Management

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
	304-3-b	Whether partnerships exist with third parties to protect or restore habitat areas distinct from where the organization has overseen and implemented restoration or protection measures.		
	304-3-c	Status of each area based on its condition at the close of the reporting period.		
	304-3-d	Standards, methodologies, and assumptions used.		
<b>Disclosure 304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations</b>	304-4-a	Total number of IUCN Red List species and national conservation list species with habitats in areas affected by the operations of the organization, by level of extinction risk:	i. Critically endangered ii. Endangered iii. Vulnerable iv. Near threatened v. Least concern	9.2; Biodiversity Management
<b>Emissions</b>				
<b>Disclosure 305-1 Direct (Scope 1) GHG emissions</b>	305-1-a	Gross direct (Scope1) GHG emissions in metric tons of CO <sub>2</sub> equivalent		Chapter 16; Performance and Standard
	305-1-b	Gases included in the calculation; whether CO, CH, NO, HFCs, PFCs, SF, NF, or all		Chapter 16; Performance and Standard
	305-1-c	Biogenic CO <sub>2</sub> emissions in metric tons of CO equivalent.		
	305-1-d	Base year for the calculation, if applicable, including:	i. The rationale for choosing it ii. Emissions in the base year iii. The context for any significant changes in emissions that triggered recalculations of base year emissions.	9;9.4 Emission Management
	305-1-e	Source of the emission factors and the global warming potential (GWP) rates used, or a reference to the GWP source.		9;9.4 Emission Management



GAIL (India) Limited

# Sustainability Report 2023-24

New India New Energy

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
	305-1-f	Consolidation approach for emissions; whether equity share, financial control, or operational control.		9;9.4 Emission Management
	305-1-g	Standards, methodologies, assumptions, and/or calculation tools used.		9;9.4 Emission Management
<b>Disclosure 305-2 Energy indirect (Scope 2) GHG emissions</b>	305-2-a	Gross location-based energy indirect (Scope2) GHG emissions in metric tons of CO2equivalent.		Chapter 16; Performance and Standard
	305-2-b	If applicable, gross market-based energy indirect (Scope 2) GHG emissions in metric tons of CO equivalent.		9;9.4 Emission Management, Chapter 16; Performance and Standard
	305-2-c	If available, the gases included in the calculation; whether CO, CH, NO, HFCs, PFCs, SF, NF, or all.		9;9.4 Emission Management Chapter 16; Performance and Standard
		i. The rationale for choosing it;		9;9.4 Emission Management
		i. Emissions in the base year;		9;9.4 Emission Management
		iii. The context for any significant changes in emissions that triggered recalculations of base year emissions.		9;9.4 Emission Management
	305-2-e	Source of the emission factors and the global warming potential (GWP) rates used, or a reference to the GWP source.		9;9.4 Emission Management
	305-2-f	Consolidation approach for emissions; whether equity share, financial control, or operational control.		9;9.4 Emission Management
	305-2-g	Standards, methodologies, assumptions, and/or calculation tools used.		9;9.4 Emission Management
<b>Disclosure 305-3 Other indirect (Scope 3) GHG emissions</b>	305-3-a	Gross other indirect (Scope3) GHG emissions in metric tons of CO2equivalent.		9;9.4 Emission Management Chapter 16; Performance and Standard

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
	305-3-b	If available, the gases included in the calculation; whether CO, CH, NO, HFCs, PFCs, SF, NF, or all.		9;9.4 Emission Management Chapter 16; Performance and Standard
	305-3-c	Biogenic CO <sub>2</sub> emissions in metric tons of CO equivalent.		9;9.4 Emission Management
	305-3-d	Other indirect (Scope 3) GHG emissions categories and activities included in the calculation.		9;9.4 Emission Management Chapter 16; Performance and Standard
	305-3-e	Base year for the calculation, if applicable, including:	a. The rationale for choosing it;	9;9.4 Emission Management
			i. Emissions in the base year;	9;9.4 Emission Management
			iii. The context for any significant changes in emissions that triggered recalculations of base year emissions	9;9.4 Emission Management
	305-3-f	Source of the emission factors and the global warming potential (GWP) rates used, or a reference to the GWP source.		9;9.4 Emission Management
	305-3-g	Standards, methodologies, assumptions, and/or calculation tools used.		9;9.4 Emission Management
<b>Disclosure 305-4 GHG emissions intensity</b>	305-4-a	GHG emissions intensity ratio for the organization.		Chapter 16; Performance and Standard
	305-4-c	Types of GHG emissions included in the intensity ratio; whether direct (Scope1), energy indirect (Scope2), and/or other indirect (Scope3).		9;9.4 Emission Management Chapter 16; Performance and Standard
	305-4-d	Gases included in the calculation; whether CO, CH, NO, HFCs, PFCs, SF, NF, or all.		9;9.4 Emission Management
<b>Disclosure 305-5 Reduction of GHG emissions</b>	305-5-a	GHG emissions reduced as a direct result of reduction initiatives, in metric tons of CO <sub>2</sub> equivalent.		Chapter 16; Performance and Standard



GAIL (India) Limited

# Sustainability Report 2023-24

New India New Energy

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
	305-5-b	Gases included in the calculation; whether CO, CH, NO, HFCs, PFCs, SF, NF, or all.		Not Applicable
	305-5-c	Base year or baseline, including the rationale for choosing it.		9;9.4 Emission Management
	305-5-d	Scopes in which reductions took place; whether direct (Scope1), energy indirect (Scope2), and/or other indirect (Scope3).		Chapter 16; Performance and Standard
	305-5-e	Standards, methodologies, assumptions, and/or calculation tools used.		
<b>Disclosure 305-6 Emissions of ozone-depleting substances (ODS)</b>	305-6-a	Production, imports, and exports of ODS in metric tons of CFC-11(trichlor of luoro methane) equivalent.		Chapter 16; Performance and Standard
	305-6-b	Substances included in the calculation.		Chapter 16; Performance and Standard
	305-6-c	Source of the emission factors used.		9;9.4 Emission Management
	305-6-d	Standards, methodologies, assumptions, and/or calculation tools used.		
<b>Disclosure 305-7 Nitrogen oxides (NOx), sulfur oxides(SOx), and other significant air emissions</b>	305-7-a	Significant air emissions, in kilograms or multiples, for each of the following	i. NOx	Chapter 16; Performance and Standard
			ii. SOx	Chapter 16; Performance and Standard
			iii. Persistent organic pollutants (POP)	
			iv. Volatile organic compounds (VOC)	Chapter 16; Performance and Standard
			v. Hazardous air pollutants (HAP)	9;9.4 Emission Management
			vi. Particulate matter (PM)	Chapter 16; Performance and Standard
			vii. Other standard categories of air emissions identified in relevant regulations	Chapter 16; Performance and Standard

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
	305-7-b	Source of the emission factors used.		9.9.4 Emission Management
	305-7-c	Standards, methodologies, assumptions, and/or calculation tools used.		Chapter 16; Performance and Standard
<b>Waste</b>				
<b>Disclosure 306-1 Waste generation and significant waste-related impacts</b>	306-1-a	For the organization's significant actual and potential waste-related impacts, a description of:	i. The inputs, activities, and outputs that lead or could lead to these impacts;	9.6.1; GAIL's Waste Management Initiatives & approach/ initiatives towards circular economy
			ii. Whether these impacts relate to waste generated in the organization's own activities or to waste generated upstream or downstream in its value chain	9.6.1; GAIL's Waste Management Initiatives & approach/ initiatives towards circular economy
<b>Disclosure 306-2 Management of significant waste-related impacts</b>	306-2-a	Actions, including circularity measures, taken to prevent waste generation in the organization's own activities and upstream and downstream in its value chain, and to manage significant impacts from waste generated.		9.6.1; GAIL's Waste Management Initiatives & approach/ initiatives towards circular economy
	306-2-b	If the waste generated by the organization in its own activities is managed by a third-party, a description of the processes used to determine whether the third party manages the waste in line with contractual or legislative obligations.		9.6.1; GAIL's Waste Management Initiatives & approach/ initiatives towards circular economy
	306-2-c	The processes used to collect and monitor waste-related data.		9.6.1; GAIL's Waste Management Initiatives & approach/ initiatives towards circular economy
<b>Disclosure 306-3 Waste generated</b>	306-3-a	Total weight of waste generated in metric tons, and a breakdown of this total by composition of the waste.		Chapter 16; Performance and Standard



GAIL (India) Limited

## Sustainability Report 2023-24

### New India New Energy

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
	306-3-b	Contextual information necessary to understand the data and how the data has been compiled.		9.6; Responsible Waste Management
<b>Disclosure 306-4 Waste diverted from disposal</b>	306-4-a	Total weight of waste diverted from disposal in metric tons, and a breakdown of this total by composition of the waste.		Chapter 16; Performance and Standard
	306-4-b	Total weight of hazardous waste diverted from disposal in metric tons, and a breakdown of this total by the following recovery operations:	i. Preparation for reuse;	Chapter 16; Performance and Standard
			ii. Recycling	Chapter 16; Performance and Standard
			iii. Other recovery operations.	Chapter 16; Performance and Standard
	306-4-c	Total weight of non-hazardous waste diverted from disposal in metric tons, and a breakdown of this total by the following recovery operations:	i. Preparation for reuse;	Chapter 16; Performance and Standard
			ii. Recycling	Chapter 16; Performance and Standard
			iii. Other recovery operations.	Chapter 16; Performance and Standard
	306-4-d	For each recovery operation listed in Disclosures 306-4-b and 306-4-c, a breakdown of the total weight in metric tons of hazardous waste and of non-hazardous waste diverted from disposal:	i. Onsite;	Chapter 16; Performance and Standard
			ii. Offsite.	Chapter 16; Performance and Standard
	306-4-e	Contextual information necessary to understand the data and how the data has been compiled.		9.6; Responsible Waste Management

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
<b>Disclosure 306-5 Waste directed to disposal</b>	306-5-a	Total weight of waste directed to disposal in metric tons, and a breakdown of this total by composition of the waste.		Chapter 16; Performance and Standard
	306-5-b	Total weight of hazardous waste directed to disposal in metric tons, and a breakdown of this total by the following disposal operations:	i. Incineration (with energy recovery);	Chapter 16; Performance and Standard
			ii. Incineration (without energy recovery);	Chapter 16; Performance and Standard
			i. Landfilling;	Chapter 16; Performance and Standard
			ii. Other disposal operations.	Chapter 16; Performance and Standard
	306-5-c	Total weight of non-hazardous waste directed to disposal in metric tons, and a breakdown of this total by the following disposal operations:	i. Incineration (with energy recovery);	Chapter 16; Performance and Standard
			ii. Incineration (without energy recovery);	Chapter 16; Performance and Standard
			iii. Landfilling	Chapter 16; Performance and Standard
			iv. Other disposal operations.	Chapter 16; Performance and Standard
	306-5-d	For each disposal operation listed in Disclosures 306-5-b and 306-5-c, a breakdown of the total weight in metric tons of hazardous waste and of non-hazardous waste directed to disposal:	i. Onsite;	Chapter 16; Performance and Standard
			ii. Offsite.	Chapter 16; Performance and Standard
	306-5-e	Contextual information necessary to understand the data and how the data has been compiled.		9.7; Responsible Waste Management



GAIL (India) Limited

# Sustainability Report 2023-24

New India New Energy

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
<b>Supplier Environmental Assessment</b>				
<b>Disclosure 308-1 New suppliers that were screened using environmental criteria</b>	308-1-a	Percentage of new suppliers that were screened using environmental criteria.		Chapter 16; Performance and Standard
<b>Disclosure 308-2 Negative environmental impacts in the supply chain and actions taken</b>	308-2-a	Number of suppliers assessed for environmental impacts.		Chapter 16; Performance and Standard
	308-2-b	Number of suppliers identified as having significant actual and potential negative environmental impacts.		Chapter 16; Performance and Standard
	308-2-c	Significant actual and potential negative environmental impacts identified in the supply chain.		
	308-2-d	Percentage of suppliers identified as having significant actual and potential negative environmental impacts with which improvements were agreed upon as a result of assessment.		Chapter 16; Performance and Standard
	308-2-e	Percentage of suppliers identified as having significant actual and potential negative environmental impacts with which relationships were terminated as a result of assessment, and why.		Chapter 16; Performance and Standard
<b>Employment</b>				
<b>Disclosure 401-1 New employee hires and employee turnover</b>	401-1-a	Total number and rate of new employee hires during the reporting period, by age group, gender and region.		Chapter 16; Performance and Standard
	401-1-b	Total number and rate of employee turnover during the reporting period, by age group, gender and region.		Chapter 16; Performance and Standard

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
<b>Disclosure 401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees</b>	401-2-a	Benefits which are standard for full-time employees of the organization but are not provided to temporary or part-time employees, by significant locations of operation. These include, as a minimum:	i. Life insurance;	11; 11.3 Employee Benefits and Incentives
			ii. Health care;	11; 11.3 Employee Benefits and Incentives
			iii. Disability and invalidity coverage;	11; Employee Benefits and Incentives
			iv. Parental leave	11; 11.3 Employee Benefits and Incentives
			v. Retirement provision;	11; 11.3 Employee Benefits and Incentives
			vi. Stock ownership;	11; 11.3 Employee Benefits and Incentives
			vii. Others.	11; 11.3 Employee Benefits and Incentives
	401-2-b	The definition used for 'significant locations of operation'.		
<b>Disclosure 401-3 Parental leave</b>	401-3-a	Total number of employees that were entitled to parental leave, by gender.		Chapter 16; Performance and Standard
	401-3-b	Total number of employees that took parental leave, by gender.		Chapter 16; Performance and Standard
	401-3-c	Total number of employees that returned to work in the reporting period after parental leave ended, by gender.		Chapter 16; Performance and Standard
	401-3-d	Total number of employees that returned to work after parental leave ended that were still employed 12 months after their return to work, by gender.		Chapter 16; Performance and Standard
	401-3-e	Return to work and retention rates of employees that took parental leave, by gender.		Chapter 16; Performance and Standard



GAIL (India) Limited

# Sustainability Report 2023-24

New India New Energy

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
<b>Labour /Management Relations</b>				
<b>Disclosure 402-1 Minimum notice periods regarding operational changes</b>	402-1-a	Minimum number of weeks' notice typically provided to employees and their representatives prior to the implementation of significant operational changes that could substantially affect them.		11, 11.9 Human Rights
	402-1-b	For organizations with collective bargaining agreements, report whether the notice period and provisions for consultation and negotiation are specified in collective agreements.		11,11.9 Human Rights
<b>Occupational Health and Safety</b>				
<b>Disclosure 403-1 Occupational health and safety management system</b>	403-1-a	A statement of whether an occupational health and safety management system has been implemented, including whether:	i. The system has been implemented because of legal requirements and, if so, a list of the requirements;	12; Ensuring Health & Safety for All
			ii. The system has been implemented based on recognized risk management and/or management system standards/guidelines and, if so, a list of the standards/guidelines.	12; Ensuring Health & Safety for All
	403-1-b	A description of the scope of workers, activities, and workplaces covered by the occupational health and safety management system, and an explanation of whether and, if so, why any workers, activities, or workplaces are not covered.		12; 12.1 GAIL HSE Policy;12.2 HSE Management System

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
<b>Disclosure 403-2 Hazard identification, risk assessment, and incident investigation</b>	403-2-a	A description of the processes used to identify work-related hazards and assess risks on a routine and non-routine basis, and to apply the hierarchy of controls in order to eliminate hazards and minimize risks, including:	i. How the organization ensures the quality of these processes, including the competency of persons who carry them out;  ii. how the results of these processes are used to evaluate and continually improve the occupational health and safety management system.	8; 8.2 Integrated Management System (IMS), HSE Management System, 12; 12.1 GAIL HSE Policy; 12.2 HSE Management System
	403-2-b	A description of the processes for workers to report work-related hazards and hazardous situations, and an explanation of how workers are protected against reprisals.		8; 8.2 Integrated Management System (IMS), Environment, Health, and Safety Management (EHSM) Using SAP, 12; HSE Management System
	403-2-c	A description of the policies and processes for workers to remove themselves from situations that they believe could cause injury or ill health, and an explanation of how workers are protected against reprisals.		8; Integrated Management System (IMS), 12; GAIL HSE Policy
	403-2-d	A description of the processes used to investigate work-related incidents, including the processes to identify hazards and assess risks relating to the incidents, to determine corrective actions using the hierarchy of controls, and to determine improvements needed in the occupational health and safety management system.		8; Integrated Management System (IMS), 12; 12.1 GAIL HSE Policy; 12.2 HSE Management System; Occupational Health and Safety at GAIL



GAIL (India) Limited

## Sustainability Report 2023-24

### New India New Energy

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
<b>Disclosure 403-3 Occupational health services</b>	403-3-a	A description of the occupational health services' functions that contribute to the identification and elimination of hazards and minimization of risks, and an explanation of how the organization ensures the quality of these services and facilitates workers' access to them.		12; HSE Management System; GAIL HSE Policy
<b>Disclosure 403-4 Worker participation, consultation, and communication on occupational health and safety</b>	403-4-a	A description of the processes for worker participation and consultation in the development, implementation, and evaluation of the occupational health and safety management system, and for providing access to and communicating relevant information on occupational health and safety to workers		12; HSE Management System
	403-4-b	Where formal joint management-worker health and safety committees exist, a description of their responsibilities, meeting frequency, decision-making authority, and whether and, if so, why any workers are not represented by these committees.		12; HSE Management System
<b>Disclosure 403-5 Worker training on occupational health and safety</b>	403-5-a	A description of any occupational health and safety training provided to workers, including generic training as well as training on specific work-related hazards, hazardous activities, or hazardous situations.		Health and Safety Initiatives in FY 2023-24, 12; 12.1 GAIL HSE Policy; Employee Safety: Occupational Health, Training, and Emergency Preparedness
<b>Disclosure 403-6 Promotion of worker health</b>	403-6-a	An explanation of how the organization facilitates workers' access to non-occupational medical and healthcare services, and the scope of access provided.		12.5; Occupational Health and Safety at GAIL

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
	403-6-b	A description of any voluntary health promotion services and programs offered to workers to address major non-work-related health risks, including the specific health risks addressed, and how the organization facilitates workers' access to these services and programs.		12.5; Occupational Health and Safety at GAIL
<b>Disclosure 403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships</b>	403-7-a	A description of the organization's approach to preventing or mitigating significant negative occupational health and safety impacts that are directly linked to its operations, products, or services by its business relationships, and the related hazards and risks.		12.5; Occupational Health and Safety at GAIL
<b>Disclosure 403-8 Workers covered by an occupational health and safety management system</b>	403-8-a	If the organization has implemented an occupational health and safety management system based on legal requirements and/or recognized standards/guidelines:	i. The number and percentage of all employees and workers who are not employees but whose work and/or workplace is controlled by the organization, who are covered by such a system;	12;HSE Management System ; 12.1 GAIL HSE Policy, Chapter 16 Performance and Standard
			ii. The number and percentage of all employees and workers who are not employees but whose work and/or workplace is controlled by the organization, who are covered by such a system that has been internally audited;	12;HSE Management System, Chapter 16 Performance and Standard



GAIL (India) Limited

## Sustainability Report 2023-24

### New India New Energy

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
			iii. The number and percentage of all employees and workers who are not employees but whose work and/or workplace is controlled by the organization, who are covered by such a system that has been audited or certified by an external party.	12.2; HSE Management System, Chapter 16 Performance and Standard
	403-8-b	Whether and, if so, why any workers have been excluded from this disclosure, including the types of workers excluded.		12.2; HSE Management System
	403-8-c	Any contextual information necessary to understand how the data have been compiled, such as any standards, methodologies, and assumptions used.		12.2; HSE Management System
<b>Disclosure 403-9 Work-related injuries</b>	403-9-a	For all employees:	i. The number and rate of fatalities as a result of work-related injury;	Chapter 16: Performance and Standard
			ii. The number and rate of high-consequence work-related injuries (excluding fatalities);	Chapter 16: Performance and Standard
			iii. The number and rate of recordable work-related injuries;	Chapter 16: Performance and Standard
			iv. The main types of work-related injury;	Chapter 16: Performance and Standard
			v. The number of hours worked.	Chapter 16: Performance and Standard
	403-9-b	For all workers who are not employees but whose work and/or workplace is controlled by the organization:	i. The number and rate of fatalities as a result of work-related injury;	Chapter 16: Performance and Standard

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
			ii. The number and rate of high-consequence work-related injuries (excluding fatalities);	Chapter 16: Performance and Standard
			iii. The number and rate of recordable work-related injuries;	Chapter 16: Performance and Standard
			iv. The main types of work-related injury;	Chapter 16: Performance and Standard
			v. The number of hours worked.	Chapter 16: Performance and Standard
403-9-c	The work-related hazards that pose a risk of high-consequence injury, including:	i. How these hazards have been determined;		
		ii. Which of these hazards have caused or contributed to high-consequence injuries during the reporting period;		
		iii. Actions taken or underway to eliminate these hazards and minimize risks using the hierarchy of controls.		
403-9-d	Any actions taken or underway to eliminate other work-related hazards and minimize risks using the hierarchy of controls.			
403-9-e	Whether the rates have been calculated based on 200,000 or 1,000,000 hours worked.			
403-9-f	Whether and, if so, why any workers have been excluded from this disclosure, including the types of workers excluded.			
403-9-g	Any contextual information necessary to understand how the data have been compiled, such as any standards, methodologies, and assumptions used.			



GAIL (India) Limited

## Sustainability Report 2023-24

New India New Energy

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
<b>Disclosure 403-10 Work-related ill health</b>	403-10-a	For all employees:	i. The number of fatalities as a result of work-related ill health; ii. The number of cases of recordable work-related ill health; iii. The main types of work-related ill health.	Chapter 16; Performance and Standard
	403-10-b	For all workers who are not employees but whose work and/or workplace is controlled by the organization:	i. The number of fatalities as a result of work-related ill health; ii. The number of cases of recordable work-related ill health; iii. The main types of work-related ill health.	Chapter 16; Performance and Standard
	403-10-c	The work-related hazards that pose a risk of ill health, including:	i. How these hazards have been determined; ii. Which of these hazards have caused or contributed to cases of ill health during the reporting period; iii. Actions taken or underway to eliminate these hazards and minimize risks using the hierarchy of controls.	
	403-10-d	Whether and, if so, why any workers have been excluded from this disclosure, including the types of worker excluded.		
	403-10-e	Any contextual information necessary to understand how the data have been compiled, such as any standards, methodologies, and assumptions used.		

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
<b>Training and Education</b>				
<b>Disclosure 404-1 Average hours of training per year per employee</b>	404-1-a	Average hours of training that the organization's employees have undertaken during the reporting period, by:	i. Gender;	11.5.1 Training and Development Programmes : GAIL Trainings, Chapter 16:Performance and Standard
			ii. Employee category;	11.5.1 Training and Development Programmes : GAIL Trainings, Chapter 16:Performance and Standard
<b>Disclosure 404-2 Programs for upgrading employee skills and transition assistance programs</b>	404-2-a	Type and scope of programs implemented and assistance provided to upgrade employee skills.		11.5.1 Training and Development Programmes: GAIL Training, 11; Focus Areas of Training Programmes
		Transition assistance programs provided to facilitate continued employability and the management of career endings resulting from retirement or termination of employment.		11.5.1 Training and Development Programmes: GAIL Trainings, , 11.3; Employee Benefits and Incentives
<b>Disclosure 404-3 Percentage of employees receiving regular performance and career development reviews</b>	404-3-a	Percentage of total employees by gender and by employee category who received a regular performance and career development review during the reporting period.		11.5.1 Training and Development Programmes: GAIL Trainings, Chapter 16: Performance and Standard
<b>Diversity and Equal Opportunity</b>				
<b>Disclosure 405-1 Diversity of governance bodies and employees</b>	405-1-a	Percentage of individuals within the organization's governance bodies in each of the following diversity categories:	i. Gender;	6.1.1; Governance Structure, 11.2; Diversity, Equity, and Inclusivity in Workforce
			ii. Age group: under 30 years old, 30-50 years old, over 50 years old;	6; 6.1.1 Governance Structure, 11.2; Diversity, Equity, and Inclusivity in Workforce
			iii. Other indicators of diversity where relevant (such as minority or vulnerable groups).	6.1.1; Governance Structure



GAIL (India) Limited

# Sustainability Report 2023-24

New India New Energy

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
	405-1-b	Percentage of employees per employee category in each of the following diversity categories:	i. Gender;	Chapter 16: Performance and Standard
			ii. Age group: under 30 years old, 30-50 years old, over 50 years old;	Chapter 16: Performance and Standard
			iii. Other indicators of diversity where relevant (such as minority or vulnerable groups).	Chapter 16: Performance and Standard
<b>Disclosure 405-2 Ratio of basic salary and remuneration of women to men</b>	405-2-a	Ratio of the basic salary and remuneration of women to men for each employee category, by significant locations of operation.		6.1.2; Performance Evaluation, Remuneration, and Incentives; 6.1.3 Highlights of Remuneration and Incentives at GAIL
	405-2-b	The definition used for 'significant locations of operation'.		6.1.2; Performance Evaluation, Remuneration, and Incentives; 6.1.3 Highlights of Remuneration and Incentives at GAIL
<b>Non - Discrimination</b>				
<b>Disclosure 406-1 Incidents of discrimination and corrective actions taken</b>	406-1-a	Total number of incidents of discrimination during the reporting period.		11; Human Rights
	406-1-b	Status of the incidents and actions taken with reference to the following:	i. Incident reviewed by the organization;	11; 11.9 Human Rights; 11.10 Grievance Redressal System
			ii. Remediation plans being implemented;	11.9; Human Rights; 11.10 Grievance Redressal System
			iii. Remediation plans that have been implemented, with results reviewed through routine internal management review processes;	
			iv. Incident no longer subject to action.	11.9; Human Rights; 11.10 Grievance Redressal System

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
<b>Freedom of Association and Collective Bargaining</b>				
<b>Disclosure 407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk</b>	407-1-a	Operations and suppliers in which workers' rights to exercise freedom of association or collective bargaining may be violated or at significant risk either in terms of:	i. Type of operation (such as manufacturing plant) and supplier;  ii. Countries or geographic areas with operations and suppliers considered at risk.	13.4; Sustainable Procurement, 11.9; Human Rights
				13.4; Sustainable Procurement, 11.9; Human Rights
	407-1-b	Measures taken by the organization in the reporting period intended to support rights to exercise freedom of association and collective bargaining.		13.4; Sustainable Procurement, 11.9; Human Rights
<b>Child Labour</b>				
<b>Disclosure 408-1 Operations and suppliers at significant risk for incidents of child labour</b>	408-1-a	Operations and Suppliers considered to have significant risk for incidents of:	i. Childlabour ;	13.4; Sustainable Procurement, 11.9; Human Rights
			ii. Young workers exposed to hazardous work.	13.4; Sustainable Procurement, 11.9; Human Rights
	408-1-b	Operations and suppliers considered to have significant risk for incidents of child labour labour either in terms of:	i. Type of operation (such as manufacturing plant) and supplier;	13.4; Sustainable Procurement, 11.9; Human Rights
			ii. Countries or geographic areas with operations and suppliers considered at risk.	13.4; Sustainable Procurement, 11.9; Human Rights
	408-1-c	Measures taken by the organization in the reporting period intended to contribute to the effective abolition of child labour .		13.4; Sustainable Procurement, 11.9; Human Rights
<b>Forced or Compulsory Labour</b>				
<b>Disclosure 409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labour</b>	409-1-a	Operations and suppliers considered to have significant risk for incidents of for cedar compulsory labour labour either in terms of:	i. Type of operation (such as manufacturing plant) and supplier;	13.4; Sustainable Procurement, 11.9; Human Rights
			ii. Countries or geographic areas with operations and suppliers considered at risk.	13.4; Sustainable Procurement, 11.9; Human Rights



GAIL (India) Limited

# Sustainability Report 2023-24

New India New Energy

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
	409-1-b	Measures taken by the organization in the reporting period intended to contribute to the elimination of all forms of forced or compulsory labour .		13.4; Sustainable Procurement, 11.9; Human Rights
<b>Security Practices</b>				
<b>Disclosure 410-1Security personnel trained in human rights policies or procedures</b>	410-1-a	Percentage of security personnel who have received formal training in the organization's human rights policies or specific procedures and their application to security.		11 11.9 Human Rights
	410-1-b	Whether training requirements also apply to third-party organizations providing security personnel.		11 11.9 Human Rights
<b>Rights of Indigenous Peoples</b>				
<b>Disclosure 411-1Incidents of violations involving rights of indigenous peoples</b>	411-1-a	Total number of identified incidents of violations involving the rights of indigenous peoples during the reporting period.		15.6 Impact Assessment
	411-1-b	Status of the incidents and actions taken with reference to the following:	i. Incident reviewed by the organization;	15.4 Community Grievance Redressal, 15.6 Impact Assessment,
			ii. Remediation plans being implemented;	15.4 Community Grievance Redressal, 15.6 Impact Assessment,
			iii. Remediation plans that have been implemented, with results reviewed through routine internal management review processes;	15.4 Community Grievance Redressal, 15.6 Impact Assessment,
			iv. Incident no longer subject to action.	15.4 Community Grievance Redressal, 15.6 Impact Assessment,

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
<b>Local Communities</b>				
<b>Disclosure 413-1Operations with local community engagement, impact assessments, and development programs</b>	413-1	Percentage of operations with implemented local community engagement, impact assessments, and/or development programs, including the use of:	i. Social impact assessments, including gender impact assessments, based on participatory processes;	15.6 Impact Assessment.
			ii. Environmental impact assessments and ongoing monitoring;	15.6 Impact Assessment.
			iii. Public disclosure of results of environmental and social impact assessments;	15.6 Impact Assessment.
			iv. Local community development program based on local community's needs;	15; 15.2 GAIL Hriday
			v. Stakeholder engagement plans based on stakeholder mapping;	
			vi. Broad based local community consultation committees and processes that include vulnerable groups;	15.3 Social Commitments
			vii. Works councils, occupational health and safety committees and other worker representation bodies to deal with impacts;	12.2 HSE Management System
			viii. Formal local community grievance processes.	15.6 Impact Assessment
<b>Disclosure 413-2Operations with significant actual and potential negative impacts on local communities</b>	413-2	Operations with significant actual and potential negative impacts on local communities, including:	i. The location of the operations;	15; 15.3 Social Commitments



GAIL (India) Limited

# Sustainability Report 2023-24

New India New Energy

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
			ii. The significant actual and potential negative impacts of operations.	15; 15.3 Social Commitments
<b>Supplier Social Assessment</b>				
<b>Disclosure 414-1</b> <b>New suppliers that were screened using social criteria</b>	414-1-a	Percentage of new suppliers that were screened using social criteria		Chapter 16; Performance and Standard
<b>Disclosure 414-2</b> <b>Negative social impacts in the supply chain and actions taken</b>	414-2-a	Number of suppliers assessed for social impacts.		Chapter 16; Performance and Standard
	414-2-b	Number of suppliers identified as having significant actual and potential negative social impacts.		Chapter 16; Performance and Standard
	414-2-c	Significant actual and potential negative social impacts identified in the supply chain		Chapter 16; Performance and Standard
	414-2-d	Percentage of suppliers identified as having significant actual and potential negative social impacts with which improvements were agreed upon as a result of assessment.		Chapter 16; Performance and Standard
	414-2-e	Percentage of suppliers identified as having significant actual and potential negative social impacts with which relationships were terminated as a result of assessment, and why.		Chapter 16; Performance and Standard
<b>Public Policy</b>				
<b>Disclosure 415-1</b> <b>Political contributions</b>	415-1-a	Total monetary value of financial and in-kind political contributions made directly and indirectly by the organization by country and recipient/beneficiary.		7; 7.1 Business Growth;7.2 Economic Performance
	415-1-b	If applicable, how the monetary value of in-kind contributions was estimated.		7; 7.1 Business Growth;7.2 Economic Performance

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
<b>Customer Health and Safety</b>				
<b>Disclosure 416-1</b> <b>Assessment of the health and safety impacts of product and service categories</b>	416-1-a	Percentage of significant product and service categories for which health and safety impacts are assessed for improvement.		14.5 Product Labelling
<b>Disclosure 416-2</b> <b>Incidents of non-compliance concerning the health and safety impacts of products and services</b>	416-2-a	Total number of incidents of non-compliance with regulations and/or voluntary codes concerning the health and safety impacts of products and services within the reporting period, by:	i. Incidents of non-compliance with regulations resulting in a fine or penalty;	14.5 Product Labelling, 14.6 Customer Engagement
			ii. Incidents of non-compliance with regulations resulting in a warning;	14.6 Customer Engagement
			iii. Incidents of non-compliance with voluntary codes.	14.6 Customer Engagement
	416-2-b	If the organization has not identified any non-compliance with regulations and/or voluntary codes, a brief statement of this fact is sufficient.		14.6 Customer Engagement
<b>Marketing and Labelling</b>				
<b>Disclosure 417-1</b> <b>Requirements for product and service information and labeling</b>	417-1-a	Whether each of the following types of information is required by the organization's procedures for product and service information and labelling:	i. The sourcing of components of the product or service;	14;14.5 Product Labelling
			ii. Content, particularly with regard to substances that might produce an environmental or social impact;	14;14.5 Product Labelling
			iii. Safe use of the product or service;	14;14.5 Product Labelling
			iv. Disposal of the product and environmental or social impacts;	14;14.5 Product Labelling
			v. Other (explain).	14;14.5 Product Labelling
	417-1-b	Percentage of significant product or service categories covered by and assessed for compliance with such procedures.		14;14.5 Product Labelling



GAIL (India) Limited

# Sustainability Report 2023-24

New India New Energy

GRI Standard	Disclosure	Text of Disclosure	Details of the Disclosure	Chapter & Section
<b>Disclosure 417-2 Incidents of non-compliance concerning product and service information and labeling</b>	417-2-a	Total number of incidents of non-compliance with regulations and/or voluntary codes concerning product and service information and labelling, by:	i. Incidents of non-compliance with regulations resulting in a fine or penalty;	14;14.5 Product Labelling
			ii. Incidents of non-compliance with regulations resulting in a warning;	14;14.5 Product Labelling
			iii. Incidents of non-compliance with voluntary codes.	14;14.5 Product Labelling
	417-2-b	If the organization has not identified any non-compliance with regulations and/or voluntary codes, a brief statement of this fact is sufficient.		14;14.5 Product Labelling
<b>Disclosure 417-3 Incidents of non-compliance concerning marketing communications</b>	417-3-a	Total number of incidents of non-compliance with regulations and/or voluntary codes concerning marketing communications, including advertising, promotions, and sponsorship, by:	i. Incidents of non-compliance with regulations resulting in a fine or penalty;	14;14.5 Product Labelling
			ii. Incidents of non-compliance with regulations resulting in a warning;	14;14.5 Product Labelling
			iii. Incidents of non-compliance with voluntary codes.	14;14.5 Product Labelling
	417-3-b	If the organization has not identified any non-compliance with regulations and/or voluntary codes, a brief statement of this fact is sufficient.		14;14.5 Product Labelling
<b>Customer Privacy</b>				
<b>Disclosure 418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data</b>	418-1-a	Total number of substantiated complaints received concerning breaches of customer privacy, categorized by:	i. Complaints received from outside parties and substantiated by the organization;	14; 14.3 Customer Satisfaction
			ii Complaints from regulatory bodies.	14; 14.3 Customer Satisfaction
	418-1-b	Total Number of identified leaks, thefts, or losses of customer data.		14; 14.3 Customer Satisfaction
	418-1-c	If the organization has not identified any substantiated complaints, a brief statement of this fact is sufficient.		14; 14.3 Customer Satisfaction

## Linkages to SASB

Topic	Code	Accounting	Metric Report Section/Chapter	Page No
Greenhouse gas Emission	EM-MD-110a.1	Gross global Scope 1 emissions, percentage methane, percentage covered under emissions-limiting regulations	Chapter 10: Climate Change Chapter 16: Performance and Standard	124,209
	EM-MD-110a.2	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets and an analysis of performance against those targets	Chapter 10: Climate Change- 10.2 Vision and Action Pertaining to climate strategy	127
Air quality	EM-MD-120a.1	Air emissions of the following pollutants: (1) NOx (excluding N2O), (2) SOx, (3) volatile organic compounds (VOCs) and (4) particulate matter (PM10)	Chapter 16: Performance and Standard	202
Ecological Impacts	EM-MD-160a.1	Description of environmental management policies and practices for active operations	Chapter 9: Energy and Environment:9.2 Biodiversity Management	113
	EM-MD-160a.2	Percentage of land owned, leased and/ or operated within areas of protected conservation status or endangered species habitat	Chapter 9: Energy and Environment:9.2 Biodiversity Management	113
		Description of environmental management policies and practices for active operations	Chapter 9: Energy and Environment:9.2 Biodiversity Management	113
		Percentage of land owned, leased and/ or operated within areas of protected conservation status or endangered species habitat	Chapter 9: Energy and Environment:9.2 Biodiversity Management	113
Competitive Behaviour	EM-MD-520a.1	Total amount of monetary losses as a result of legal proceedings associated with federal pipeline and storage regulations"	Chapter 8: Operational Excellence: 8.2: Integrated Management System: 8.2.6 Responsible Compliance Management	107
Operational Safety, Emergency Preparedness & Response	EM-MD-540a.1	Number of reportable pipeline incidents, percentage significant	Chapter 12: Ensuring Health and safety for all:12.2 HSE Management System: 12.2.2 Health, Safety and Environment Performance	160
	EM-MD-540a.2	Percentage of (1) natural gas and (2) hazardous liquid pipelines inspected	Chapter 8: Operational Excellence: 8.2: Integrated Management System:8.2.2 Responsible Pipeline Integrity Management System Chapter 12: Ensuring Health and Safety for all:12.7 GAIL Safety Audits	102,164
	EM-MD-540a.3	Number of (1) accident releases and (2) non-accident releases (NARs) from rail transportation	Chapter 8: Operational excellence	100
	EM-MD-540a.4	Discussion of management systems used to integrate a culture of safety and emergency preparedness throughout the value chain and throughout project lifecycles	Chapter 12: Ensuring Health and Safety for all:12.1 GAIL HSE Policy	157



Topic	Code	Accounting	Metric Report Section/Chapter	Page No
<b>Water management</b>	EM-MD-140a.1	(1) Total water withdrawn, (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Chapter 16: Performance and Standard	202
	EM-MD-140a.2	Number of incidents of non-compliance associated with water quality permits, standards and regulations	Chapter 8: Operational excellence	100
<b>Hazardous materials management</b>	EM-RM-150a.1	Amount of hazardous waste generated; percentage recycled	Chapter 16: Performance and Standard	202
	EM-RM-150a.2	(1) Number of underground storage tanks (USTs), (2) number of UST releases requiring cleanup and (3) percentage in states with UST financial assurance funds	Chapter 8: Operational excellence Chapter 12: Ensuring Health and Safety for All	100, 156
<b>Workforce Health &amp; Safety</b>	EM-RM-320a.1	(1) Total recordable incident rate (TRIR), (2) fatality rate and (3) near miss frequency rate (NMFR) for (a) full-time employees and (b) contract employees	Chapter 16: Performance and Standard	202
	EM-RM-320a.2	Discussion of management systems used to integrate a culture of safety	Chapter 12: Ensuring Health and Safety for all: 12.4 Employee Safety: Occupational Health, Training and Emergency Preparedness	161
<b>Product specifications &amp; Clean fuel blends</b>	EM-RM-410a.3	Percentage of Renewable Volume Obligation (RVO) met through: (1) production of renewable fuels, (2) purchase of "separated" renewable identification numbers (RIN)	Chapter 9: Energy and Environment Chapter 16: Performance Standard	110, 202
	EM-RM-410a.2	Total addressable market and share of market for advanced biofuels and associated infrastructure	Chapter 7: Business Growth, Chapter 10: Climate Change	88, 124
<b>Pricing Integrity &amp; Transparency</b>	EM-RM-520a.1	Total amount of monetary losses as a result of legal proceedings associated with price fixing or price manipulation	Chapter 8: Operational excellence, Chapter 7: Business Growth	100, 88
<b>Management of the Legal &amp; Regulatory Environment</b>	EM-RM-530a.1	Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry	Chapter 6: Strong Governance and Business Resilience:6.1 Governance and Board Oversight at GAIL: 6.1 Governance Risk Management:6.2	69, 81
<b>Critical Incident Risk Management</b>	EM-RM-540a.1	Process Safety Event (PSE) rates for Loss of Primary Containment (LOPC) of greater consequence (Tier 1) and lesser consequence (Tier 2)	Chapter 8: Operational Excellence	100
	EM-RM-540a.2	Challenges to Safety Systems indicator rate	Chapter 8: Operational Excellence, Chapter 12 Ensuring Health and Safety for All	100, 156
	EM-RM-540a.3	Discussion of measurement of Operating Discipline and Management System Performance through Tier 4 Indicators	Chapter 8: Operational Excellence, Chapter 9: Energy and Environment	100, 110

## Linkages to IPIECA

IPIECA	Issue IPIECA Indicators	Report Section/Chapters	Page No
<b>Governance and Business Ethics</b>	GOV-1: Governance approach	Chapter 6: Strong Governance and Business Resilience	79
	GOV-2: Management systems	Chapter 6: Strong Governance and Business Resilience	83
	GOV-3: Preventing corruption	Chapter 6: Strong Governance and Business Resilience	73
	GOV-4: Transparency of payments to host governments	Chapter 6: Strong Governance and Business Resilience	79
	GOV-5: Public advocacy and lobbying	Chapter 6: Strong Governance and Business Resilience	96
<b>Climate change and energy</b>	CCE-1: Climate governance and strategy	Chapter 10: Climate Change: 10.2: Vision and Action Pertaining to climate strategy	127
	CCE-2: Climate risk and opportunities	Chapter 10: Climate Change	124
	CCE-3: Lower-carbon technology	Chapter 10: Climate Change	124
	CCE-4: Greenhouse gas (GHG) emissions	Chapter 9: Energy and Environment: 9.4 Emission Management Chapter 16: Performance and Standard	116, 204
	CCE-5: Methane emissions	Chapter 9: Energy and Environment: 9.4 Emission Management: 9.5.1 Reducing Methane Emission	116
	CCE-6: Energy use	Chapter 9: Energy and Environment: 9.3 Energy Management Chapter 16: Performance and Standard	115, 203, 204
	CCE-7: Flared gas	Chapter 10: Climate change: 10.3 Net Zero Strategy 10.4 Net Zero Action Plan	129, 132
<b>Water</b>	ENV-1: Freshwater	Chapter 9: Energy and Environment: 9.6 Responsible Water Management Chapter 16: Performance and Standard	118, 202
	ENV-2: Discharges to water	Chapter 9: Energy and Environment: 9.5 Responsible Water Management: 9.5 GAIL's Water Management Initiatives/approach to reduce water footprint Chapter 16: Performance and Standard	117, 202
<b>Biodiversity</b>	ENV-3: Biodiversity policy and strategy	Chapter 9: Energy and Environment: 9.2 Biodiversity Management	113
	ENV-4: Protected and priority areas for biodiversity conservation	Chapter 9: Energy and Environment: 9.2 Biodiversity Management	113
<b>Air Emissions</b>	ENV-5: Emissions to air	Chapter 9: Energy and Environment: 9.54 Emission Management: 9.4.2 Reducing other Air Emission Chapter 16: Performance and Standard	117, 202
<b>Spills to the Environment</b>	ENV-6: Spills to the Environment	Chapter 9: Energy and Environment; 9.6 Responsible Waste Management	118
<b>Materials Management</b>	ENV-7: Materials Management	Chapter 5: Our Stakeholder Inclusion and Materiality; 5.3 Our Approach to Materiality	55
<b>Decommissioning</b>	ENV-8: Decommissioning	Chapter 9: Energy and Environment	110



GAIL (India) Limited

# Sustainability Report 2023-24

New India New Energy

IPIECA	Issue IPIECA Indicators	Report Section/Chapters	Page No
Safety, Health and Security	SHS-1: Safety, health and security engagement	Chapter 12: Ensuring Health and Safety for all	156
	SHS-2: Workforce health	Chapter 12: Ensuring Health and Safety for all: 12.4 Employee Safety: Occupational Health, Training and Emergency Preparedness	161
	SHS-3: Occupational injury and illness incidents	Chapter 16: Performance and Standard	207
	SHS-4: Transport safety	Chapter 12: Ensuring Health and Safety for all :12.3 GAIL Transport Safety	160
	SHS-5: Product stewardship	Chapter 14: Our Customer 14.5 Product Labelling	182
	SHS-6: Process safety	Chapter 12: Ensuring Health and safety for all:12.2 HSE Management System: 12.2.2 Health, Safety and Environment Performance	160
	SHS-7: Security risk management	Chapter 6: 6 Strong Governance and Business resilience; 6.2.2 Key Risk and Mitigation measures	84
Human Rights Management	SOC-1: Human rights due diligence	Chapter 11: Our Employee: 11.9 Human Rights	149
	SOC-2: Suppliers and human rights	Chapter 11: Our Employee: 11.9 Human Rights Chapter 13: Responsible Supply Chain:13.3 Procurement Practices and Policies, 13.4 Sustainable Procurement- Zero Tolerance to Child Labour	149, 169, 170
	SOC-3: Security and human rights	Chapter 11: Our Employee: 11.9 Human Rights Chapter 13: Responsible Supply Chain:13.3 Sustainable Procurement- Zero Tolerance to Child Labour	149, 169
Labour Practices	SOC-5: Workforce diversity and inclusion	Chapter 11: Our Employee:11.4 Employee Engagement and Empowerment	143
	SOC-6: Workforce engagement	Chapter 11: Our Employee:11.2 Diversity, Equity and Inclusivity in Workforce	141
	SOC-7: Workforce training and development	Chapter 11: Our Employee 11.5 Training and Development programme	144
	SOC-8: Workforce nonretaliation and grievance mechanism	Chapter 11: Our Employee:11.10 Grievance Redressal System	150
Community Engagement	SOC-9: Local community impacts and engagement	Chapter 15: Our Community: 15.2 GAIL Hriday	191
	SOC-10: Indigenous peoples	Chapter 15: Our community: 15.4Community Grievance Redressal	199
	SOC-12: Community grievance mechanisms	Chapter 15: Our Community: 15.3 Social Commitments	199
Local Content	SOC-13: Social investment	Chapter 15: Our Community: 15.2 GAIL Hriday	191
	SOC-14: Local procurement and supplier development	Chapter 13: Responsible Supply Chain:13.1 Procurement Practices	169
	SOC-15: Local hiring practices	Chapter 13: Responsible Supply Chain:13.3 Procurement Practices and Policies	169

## Linkages to UNGC and ISO 26000:2010 Clause

Section	UNGC Principle	ISO 26000:2010 Clause
<b>Our Stakeholder Inclusion and Materiality</b>	Principle 1	4.2, 4.5, 5.2, 5.3, 6.3.6-6.3.7,
	Principle 6	6.3.10, 6.7.1-6.7.6, 6.8.1-6.8.3,
	Principle 7	7.3.2- 7.3.4, 7.5.3, 7.8
	Principle 10	
<b>Strong Governance and Business Resilience</b>	Principle 10	4.3, 4.4, 6.2, 6.3.5, 6.3.6, 6.6.1,
	Principle 8	
	Principle 7	6.6.3, 6.6.5, 6.6.6, 7.4.3, 7.7.5
<b>Risk Management</b>	Principle 10	4.3, 6.2.3, 6.3.5, 6.3.4
	Principle 7	
	Principle 8	
<b>Business Growth</b>	Principle 9	6.6.1-6.6.2, 6.6.4, 6.6.6, 6.8.1– 6.8.3, 6.8.1-6.8.9
<b>Operational Excellence</b>	Principle 8	4.6, 6.5.3-6.5.6, 6.6.6
	Principle 9	
<b>Energy and Environment</b>	Principle 7	6.5.1, 6.5.2, 6.5.3, 6.5.4, 6.5.5, 6.5.6
	Principle 8	
	Principle 9	
<b>Climate Change</b>	Principle 7	
	Principle 8	6.5.5
	Principle 9	
<b>Our Employees</b>	Principle 1 Principle 2	4.5, 4.8, 5.2, 5.3, 6.3.1-6.3.8,
	Principle 3 Principle 4	6.3.10, 6.4.1, 6.4.7, 6.5.1-6.5.2
	Principle 5 Principle 6	6.7.8 – 6.7.9, 6.8.1-6.8.9
<b>Ensuring Health and Safety for All</b>	Principle 4	6.4.5, 6.4.6, 6.5.3, 6.8.8
	Principle 5	
	Principle 6	
<b>Responsible Supply Chain Management</b>	Principle 1	4.4, 4.5, 4.6, 4.7, 6.3.1-6.3.8,
	Principle 2	6.3.10, 6.6, 6.7.3, 6.7.4, 6.7.6,
	Principle 7	6.7.9, 6.7.1-6.7.2, 7.3.1
	Principle 10	
<b>Our Customers</b>	Principle 1	6.7.1 – 6.7.9
<b>Our Community</b>	Principle 2	
	Principle 4	
	Principle 5	
	Principle 6	
	Principle 1	5.2.1, 5.2.2, 5.2.3, 6.8.1 – 6.8.9, 6.6.7
<b>Performance &amp; Standards</b>	Principle 2	
	Principle 4	
	Principle 5	
<b>Performance &amp; Standards</b>	Principle 6	
	Principle 7	4.6, 6.4.3, 6.4.4, 6.4.6, 6.5.3-
	Principle 8	
	Principle 9	6.5.5, 6.5.8



GAIL (India) Limited

## Sustainability Report 2023-24

New India New Energy

### Linkages to UNSDG

Sustainable development goals (SDGs)	Description	Description	Report Section/ Chapter
<b>SDG 01</b> No Poverty	End poverty in all its forms, everywhere	15.2.3 GAIL Kaushal initiatives under GAIL CSR Initiative  15.2.4 GAIL Unnati initiative under GAIL CSR	Chapter 15: Our Community
<b>SDG 02</b> Zero hunger	End hunger, achieve food security and improved nutrition and promote sustainable agriculture	15.2.1 GAIL Arogya initiatives under GAIL CSR Initiative	Chapter 15: Our Community
<b>SDG 03</b> Good health and well being	Ensure healthy lives and promote wellbeing for all at all ages	11.11 Employee Well-Being  12.5 Occupational Health and Safety at GAIL  15.2.1 GAIL Aarogya (Healthcare and Sanitation) initiative under GAIL CSR  11.3 Employee Benefits and Incentives	Chapter 11: Our Employee  Chapter 12: Ensuring health and safety for all  Chapter 15: Our Community
<b>SDG 04</b> Quality Education	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	11.3 Employee Benefits and Incentives  15.2.2 GAIL Ujjwal initiative under GAIL CSR	Chapter 11: Our Employee  Chapter 15: Our Community
<b>SDG 05</b> Gender Equality	"Achieve gender equality and empower all women and girls"	11.2 Diversity, Equity and Inclusivity in Workforce  15.2.6 GAIL Sashakt initiative under GAIL CSR	Chapter 11: Our Employee  Chapter 15: Our Community
<b>SDG 06</b> Clean water and sanitation	Ensure available and sustainable management of water and sanitation for all	9.5 Responsible Water Management  9.6 Responsible Waste Management  15.2.1 GAIL Arogya initiative under GAIL CSR	Chapter 9: Energy and Environment Chapter  15: Our Community
<b>SDG 07</b> Affordable and clean energy	Ensure access to affordable reliable, sustainable and modern energy for all	8.2.5 Energy Management System Installation of modern and new energy-efficient equipment  9.3.2 Site Wise Energy Saving Initiatives Commissioning of Grid Power Supply at Compressor Stations Green Hydrogen Blending in NG in CGD Network Installation and commissioning of Solar Power Plants  10.4.2 Energy Transition	Chapter 8: Operational Excellence Chapter  9: Energy and Environment Chapter  10: Climate change

<b>Sustainable development goals (SDGs)</b>	<b>Description</b>	<b>Description</b>	<b>Report Section/ Chapter</b>
<b>SDG 08</b> Decent work and economic growth	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	11.5 Training and Development Programmes 11.10 Grievance Redressal System 11.2.2 Utilising Technology & Training Strategy 15.2.4 GAIL Kaushal	Chapter 11: Our Employee  Chapter 15: Our Community
<b>SDG 09</b> Industry, innovation and infrastructure	Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	9. Installation and commissioning of Solar, Power Plants, Green Co Assessment of sites 13.7 Digital Transformation 15.2.1 GAIL Arogya (Healthcare Infrastructure) 15.2.2 GAIL Ujjwal (Education Infrastructure) 15.2.5 GAIL Unnati (Infrastructure for marginalized section)	Chapter 9: Energy and environment  Chapter 13: Responsible Supply Chain Chapter 15: Our Community
<b>SDG 10</b> Reduced inequalities	Reduce inequality within and among countries	15.2.6 GAIL Sashakt initiative under GAIL CSR 15.2.7 GAIL Saksham initiative under GAIL CSR 13.4 Sustainable Procurement: Procurement from MSEs owned by SC/ST entrepreneurs 13.2 Suppliers Governance Mechanisms	Chapter 13: Responsible Supply chain  Chapter 15: Our Community
<b>SDG 11</b> Sustainable cities and communities	Make cities and human settlements inclusive, safe, resilient and sustainable	15.2.1 GAIL Arogya initiative under GAIL CSR 15.2.5 GAIL Unnati initiative under GAIL CSR Mission LiFE initiative	Chapter 9: Energy and Environment Chapter 15: Our Community
<b>SDG 12</b> Responsible consumption and production	Ensure sustainable consumption and production patterns	9.3 Energy Management 9.4 Emission Management 9.5 Responsible Water Management 9.6 Responsible Waste Management 13.4.1 Sustainable Procurement 13.7 Digital Transformation	Chapter 9: Energy and environment  Chapter 13: Responsible Supply Chain



GAIL (India) Limited

# Sustainability Report 2023-24

New India New Energy

Sustainable development goals (SDGs)	Description	Description	Report Section/Chapter
<b>SDG 13</b> Climate action	Take urgent action to combat climate change and its impacts	4.2 Sustainability Policy 9.1 Mission LiFE: Themewise initiatives 10.1 Climate Change and Sustainable Development: Target to achieve net-zero (Scope 1 and Scope 2) status by 2035 while reducing Scope 3 emissions by 35% by 2040 .10.2 Vision and Action Pertaining to climate strategy: target to install 1.7 GW of renewable energy capacity by 2030. 10.2.1 Adaptation 10.4 Net Zero Action Plan 8.2.5 Environment Management System 9.2 Biodiversity Management 9.3 Emission Management	Chapter 4: Sustainability at GAIL Chapter 8: Operational Excellence Chapter 9: Energy and Environment Chapter 10: Climate Change
<b>SDG 14</b> Life below water	Conserve and sustainably use the oceans, seas and marine resources for sustainable development	9.5 Responsible Water Management 15.2.8 GAIL Harit initiative under GAIL CSR	Chapter 9: Energy and Environment Chapter 15: Our Community
<b>SDG 15</b> Life on Land	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification and halt and reverse land degradation and halt biodiversity loss	9.2 Biodiversity Management: 9.2.1 GAIL's Biodiversity Initiatives at various sites: Tree Plantation drive	Chapter 9: Energy and Environment
<b>SDG 16</b> Peace, justice and strong institutions	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels	6.1.6 Ethics and Integrity 6.1.8 Grievance Redressal Mechanism 11.8 Labour Practices 14.3 Customer Satisfaction	Chapter 6: Strong Governance and Business Resilience Chapter 11: Our Employees Chapter 14: Our Customer
<b>SDG 17</b> Partnerships for the goals	Strengthen the means of implementation and revitalise the global partnership for sustainable development	10.4.2 Energy Transition	Chapter 10: Climate Change

## Linkages to TCFD

Description	Section	Chapter; Section
<b>Governance</b>		
a) Describe the Board's oversight of climate-related risks and opportunities.	Sustainability at GAIL: Sustainable Development Committee	4; 4.3
b) Describe management's role in assessing and managing climate-related risks and opportunities.	Sustainability at GAIL: Sustainable Development Committee	4; 4.3
<b>Strategy</b>		
a) Describe the climate-related risks and opportunities the organization has identified over the short, medium and long term.	Climate Change: Vision and Action pertaining to climate strategy	10;10.2
b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy and financial planning.	Climate Change: Vision and Action pertaining to climate strategy	10;10.2
c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario	Climate Change: Vision and Action pertaining to climate strategy	10;10.1
<b>Risk Management</b>		
a) Describe the organization's processes for identifying and assessing climate-related risks	Strong Governance and Business Resilience: Risk Management	6;6.1,6.2
b) Describe the organization's processes for managing climate-related risks.	Climate Change: Vision and Action pertaining to climate strategy	10;10.2
c) Describe how processes for identifying, assessing and managing climate-related risks are integrated into the organization's overall risk management	Strong Governance and Business Resilience: Risk Management	6;6.1,6.2
<b>Metrics and Targets</b>		
a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.	Performance and Standards	16
b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions and the related risks	Performance and Standards	16



## Note

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