



SUSTAINABILITY

# Table of Contents





Our 18th Sustainability Report titled "Fuelling a Sustainable Future", for 2023 offers a comprehensive overview of our sustainability aspirations and progress. Throughout the report, IndianOil Corporation Limited is referred to as "IndianOil" or the "Company." The report has been meticulously prepared in accordance with the 'GRI Universal standards' for sustainability disclosures, ensuring transparency and adherence to international best practices. Additionally, the report adheres to the principles of the *National Voluntary Guidelines (NVG)* and the *United Nations' Sustainable Development Goals (SDGs)*, underscoring our dedication towards fulfilling social, environmental, and economic responsibilities.



## Boundary of the report

Unless otherwise specified, the reporting boundary is restricted to IndianOil's operational boundary, which includes our refineries, pipelines, product storage and distribution network, business diversification (alternate energy, cryogenics, explosives, exploration & production, gas, and petrochemicals), and Research & Development (R&D) facilities including corporate offices, all of which are located within the Indian subcontinent. The scope of this report does not include the assets that are situated outside of India, as well as its joint venture firms and subsidiaries.

For Further details on reporting boundary as a percentage of operations & revenue covered, refer Integrated Annual Report.



## What's inside this report

IndianOil's environmental, social and governance performance for the period starting from 1 April 2022 to 31 March 2023 is disclosed in the report.

The Report highlights specific initiatives taken by IndianOil as we transform into a provider of clean energy solutions in line with our aspirations to address global climate change. It also shares the progress made by us in meeting our sustainability goals and our contributions to the UN Sustainable Development Goals (UN SDGs). The report adheres to the Business Responsibility and Sustainability Reporting (BRSR) Guidelines of the Securities and Exchange Board of India (SEBI), and other global standards and frameworks including GRI Universal Standards, GRI Oil and Gas Sector Standards (GRI 11), IPICEA, SASB, UNGC, IOGP, API and CDP. Through compliance with these rigorous reporting frameworks, the report underscores our commitment to transparency, accountability, and responsible business practices in tackling environmental and social challenges while striving for a sustainable future.



#### External Assurance

All the data and information gathered from the scope are included in the report. The material has been systematically analysed, presented, and reviewed internally. A limited assurance on certain agreed/identified sustainability indicators in this Report has been provided by Price Waterhouse Chartered Accountants LLP. in accordance with the International Standards on Assurance Engagements (ISAE) 3000 (revised) Assurance Engagements Other than Audits or Reviews of Historical Financial Information, International Standard on Assurance Engagements (ISAE) 3410, Assurance Engagements on Greenhouse Gas Statements. The subject matter, criteria, procedures performed, and limited assurance conclusion are presented in the assurance report attached at the end of this Report.



#### Website and Feedback information

For additional information about our sustainability initiatives and to share your feedback/concerns/ queries, please reach out to us at **sustainability@indianoil.in.** You can also visit our website at **www.iocl.com** or scan QR code for more details about our company. IndianOil appreciates your feedback on the report.





### Forward-looking statement

This report includes information about future expectations, historical data, and forecasts. It also contains predictions and data related to these forecasts, as well as projections and statements about what may happen in the future. These statements are focused on the company's financial health, operational results, business activities, and goals for the future. These statements may generally, but not always include words such as "plan", "anticipates", "expect", "is expected to", "shall", "should", "aim", "intends", "is likely to", "believes" or similar expressions. Some statements may include, but not limited to, statements relating to company's purpose, values, ambition, aims, objectives, and targets. This also includes statements related to expectations for IndianOil strategy and plans and ambition & target for Net Zero by 2046. The actual result may differ from the forecast, as with all forward-looking statements. As a result, we are unable to assure the accuracy, completeness, or timeliness of the information in our forward-looking statements or those indicated to have been obtained from third parties. As a result, readers should use appropriate caution. We make no commitment to publicly update any forwardlooking statements, whether because of new information, future events, or other factors.



















# Our Theme Fuelling a Sustainable Future

This report encapsulates **IndianOil's** unwavering commitment to shaping a **sustainable energy landscape**. The theme itself, **"Fuelling a Sustainable Future"**, underscores IndianOil's pivotal role in propelling the energy sector towards a more environmentally conscious trajectory. The report outlines IndianOil's strategic endeavours in forging a balanced synergy between **energy production** and **ecological well-being**, thereby contributing to a **greener** and **cleaner planet**. The approach resonates with IndianOil's commitment to advancing cleaner alternatives in the **automotive sector**, contributing to both **emissions reduction** and **energy security**.

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Our multifaceted approach to sustainability, encompasses innovative technologies, renewable energy ventures, and responsible resource management. It underscores our dedication to forging a future where energy needs are met without compromising the environment's health. In the context of sustainability, "fuelling" goes beyond the literal sense of providing fuel for energy; it symbolizes the actions, investments, and efforts taken to propel society towards a future that ensures the well-being of both current and

future generations

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In this Section		

IndianOil stands as India's leading integrated energy company major with a presence in various sectors, including oil, gas, petrochemicals, and alternative energy sources, known as the 'Energy of India'. We are committed to delivering responsible and affordable energy solutions. Established in 1959 as a Public Sector Undertaking (PSU) under the Ministry of Petroleum and Natural Gas (MoP&NG), Government of India, we hold the prestigious 'Maharatna' status. Leveraging our cutting-edge technologies and a talented workforce, we responsibly tap into all forms of energy and provides them to consumers at affordable prices. With an ideology of being 'Pehle Indian Phir Oil', IndianOil prioritises the well-being and progress of the nation above all.

With a steadfast focus on customer satisfaction, quality, and transparency, IndianOil has emerged as largest corporations globally, recognized in Fortune's 'Global 500' list, ranked 94, Achieved highest recorded revenue of ₹9,34,953 Crores and a net profit of ₹8,242 Crores for the financial year FY 2022-23. IndianOil's business spans the entire hydrocarbon value chain, encompassing exploration and production, refining, pipeline transportation, marketing, natural gas, petrochemicals, alternative energy sources, and global downstream operations including presence in global market with operations in Sri Lanka, Mauritius, the UAE, and other countries. Our refineries have consistently expanded their product range and

implemented new energy solutions, achieving several notable 'firsts'. We are scaling up operations to foster a steady supply of natural gas to our expanding customer base. We recorded highest sales volume of 95.71 MMT in FY 2022-23.

Our R&D Centre is contributory in shaping the success of our Company. Over the past years, we have made remarkable developments in our pursuit of innovation, driven by a team of skilled professionals and the constant development and adoption of advanced technology. Our research is focused on fuels and lubricants, refining, petrochemicals, pipeline transportation technology and polymers, as well as emerging fields like Nano Tech, Solar, Bioenergy, Hydrogen, and Fuel Cell technologies.

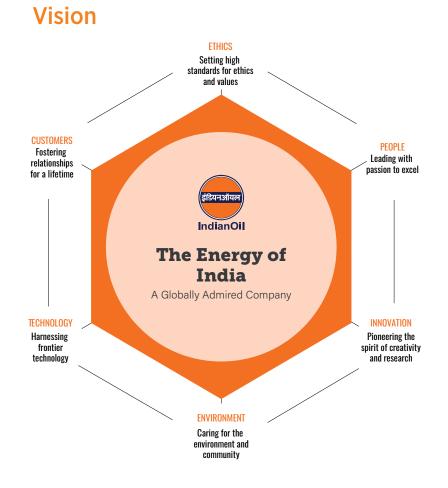
We are committed towards integrating sustainability initiatives into its business strategy. At IndianOil, we understand that value creation cannot happen in a vacuum. It is possible only through careful consideration of the relationship between the capitals that we use and the potential linkages between our strategic choices and actions that we undertake to deliver on our vision. In addition, our activities also contribute to the United Nations Sustainable Development Goals (SDGs) covering a range of multi-stakeholder goals that we aspire to achieve.



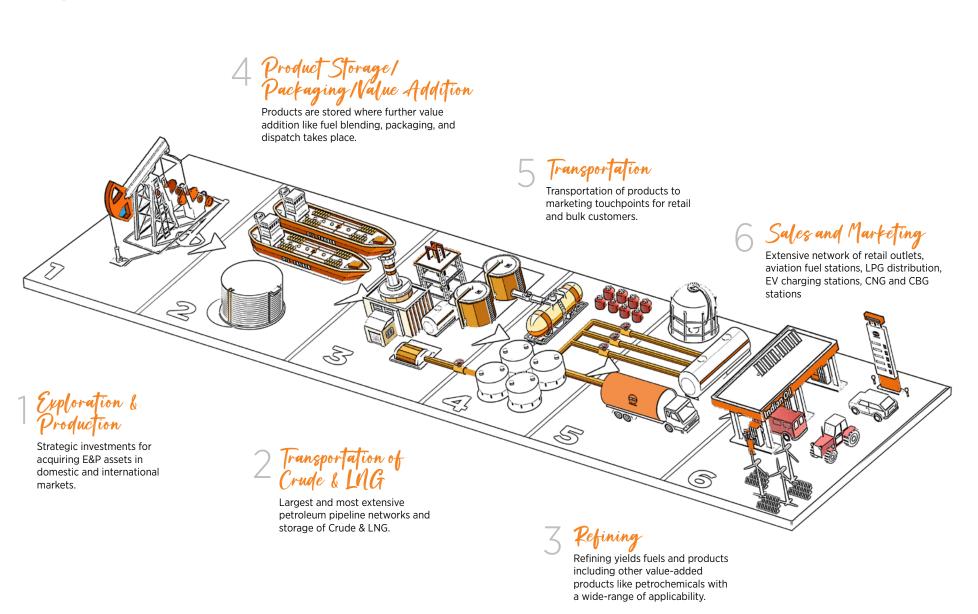
#### **Our Values & Vision**

Our actions are rooted in our vision and values, driving our achievements. We are committed to meeting the dual aspirations of being India's energy cornerstone and a globally admired company. We embody the philosophy of 'Phele Indian Phir Oil,' aligning with our core value of 'Nation First'.





#### **Integrated Value Chain**



#### IndianOil's presence in India













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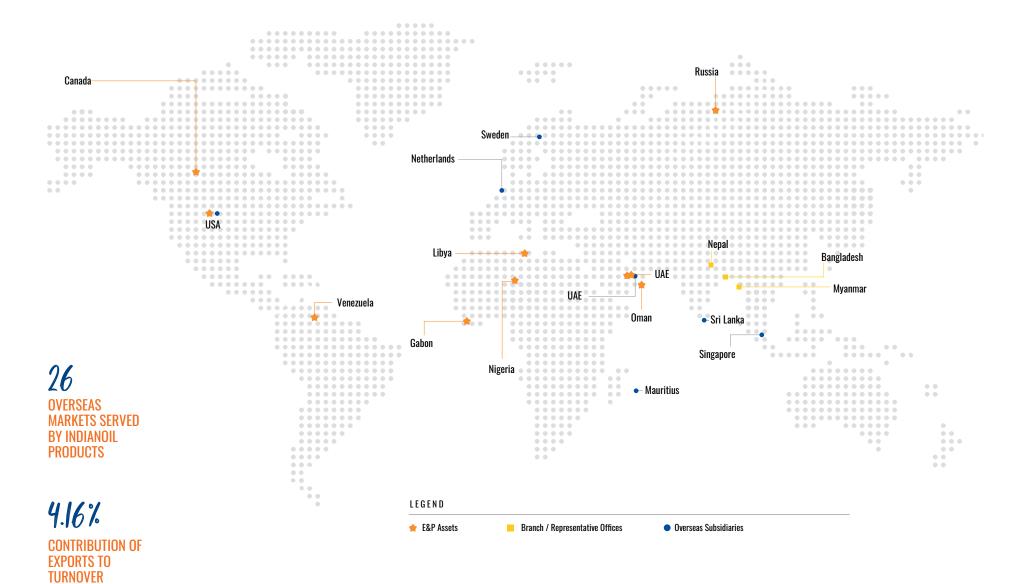








#### IndianOil's Global Presence



# Letter from Chairman

"Our story of success is not written in letters of gold, but in green, as we march towards our goal of achieving net zero operational emissions by 2046. To realize this vision, we have committed to undertake an investment of over ₹2 lakh crore."

#### Dear Stakeholders.

I am delighted to present our 18<sup>th</sup> Sustainability Report, a testament to IndianOil's unwavering commitment to building a sustainable and greener future. As we navigate through the dynamic and ever-evolving energy landscape, our responsibility towards the environment, society, and future generations remains at the forefront of our actions.

As India's flagship energy public sector enterprise, IndianOil is steering India's green future. In today's world, the pursuit of sustainability is not merely a choice; but an imperative that shapes the very core of businesses. We recognize that sustainability is a journey which requires dedicated and consistent efforts. With each passing year we are growing stronger in our actions towards achieving a greener tomorrow that'll be crucial for India's energy security and clean energy journey.

#### Accelerating progress towards Net Zero

At IndianOil, we are taking concrete steps to become a leading integrated green energy company. In line with India's goal of achieving Net-Zero emissions by the year 2070, we are committed to net zero operational emissions by 2046. This declaration demonstrates our commitment towards a sustainable tomorrow, one which will also have a significant impact on India's energy transition blueprint.

We recognize the potential that green fuels have in shaping a cleaner future. The Company is developing a range of green energy solutions encompassing biofuels, renewables, and green hydrogen, delivered with a low-carbon value chain. We are also venturing into innovative carbon negative solutions such as Carbon Capture, Utilization, and Storage (CCUS).



Hydrogen is a key input in our processes and also provides significant opportunities as a green fuel. We are establishing a cutting-edge 10 KTA Green Hydrogen Plant at Panipat Refinery. Furthermore, we have set up India's first Hydrogen dispensing station at our R&D Centre in Faridabad, NCR, followed by a station in Gujarat Refinery, to promote hydrogen mobility. Additionally, recognising the immense potential of green hydrogen, we have joined hands with ReNew and Larsen & Toubro (L&T) Limited to strengthen the green hydrogen ecosystem in India.

IndianOil is leading the charge in India's sustainable aviation fuel (SAF) segment. A SAF Plant of 86.8 Thousand Metric Tonnes Per Annum (TMTPA) capacity is being set-up at Panipat based on LanzaJet technology. The Company has formed a Joint Venture with Praj Industries Ltd., to develop SAF and other biofuels.

Oil Marketing Companies have started to sell petrol blended with up to 20% ethanol (E-20), from April 01, 2023. Subsequently, E-20 was formally launched by the Prime Minister on February 06, 2023 at select fuel stations. IndianOil has already commenced the supply of E20 fuel from more than 1,000 fuel stations and is currently blending about 12% ethanol in petrol.

IndianOil has been enhancing its Compressed Biogas (CBG) network through its retail brand 'Indigreen'. By the end of 2022-23, your Company had commissioned 22 CBG plants, offering Biogas through 52 Indigreen outlets. We have also set up a 200 Tonnes Per Day (TPD) plant in Gorakhpur using agri-crop residue and providing an eco-friendly solution for disposal of rice straw. In addition, in Jaipur, Rajasthan a 100 TPD cattle dung based CBG plant has been set up at the Hingonia Cattle Rehabilitation Centre. The biogas will fuel the kitchens of Akshay Patra Foundation and

provide meals to school children.

IndianOil has a current renewables portfolio of about 240 MW, but has significant ambitions for scale-up and augment renewable power use in the Company. We are collaborating with NTPC Green Energy Limited, for providing 650 MW of round-the-clock green power for the upcoming refinery projects, IndianOil is venturing towards securing renewable power for operations. We are also collaborating with SJVN Limited for expanding the renewable bouquet with solar, wind, hydro and hybrid power. The JV will also develop Energy Storage Systems for the supply of 24X7 power.

In support of its net zero commitments, IndianOil has embraced an ambitious target towards development of a green energy portfolio of 31 GW of renewable energy, 4 MMT of biofuels, and 1 MMT of biogas by the year 2030, which will be increased to 200 GW of renewable energy, 7 MMT of biofuels, and 9 MMT of biogas by the year 2050.

#### Caring for the Environment

IndianOil's commitment to a greener future goes beyond our operations, supply chain, and product offerings. Our Sustainable Development Goals are not mere aspirations; they are actionable commitments that we pursue relentlessly. From our comprehensive water stewardship initiatives to our ambitious efforts in waste management and circular economy, every step we take is geared towards minimizing our ecological footprint. Our resolve to enhance the environmental performance of the Company remains steadfast, as demonstrated by our commitment to responsibly manage waste, curb methane emissions, and promote circular economy.

The Company has developed strong mechanisms to reduce waste generated from its operations and products. We are offering improved products with lower waste footprint. In operations, the

Company is committed to ensure responsible waste management, from segregation and measurement to waste recycling and sanitary landfilling, adhering to the due compliance requirements. The Company has also introduced paperless working and billing systems, utilising the benefits of a digital economy. In 2022-23, the Company was again able to divert more than 90% of the generated waste away from landfills. During the year, IndianOil also undertook new initiatives like the Unbottled - a brand for sustainable garments launched for merchandise made from recycled polyester. The 'Unbottled' campaign aims to convert 100 million PET bottles annually into uniforms for our on-ground teams and non-combat uniforms for our armed forces, and other stakeholders.

In terms of water management efforts, in FY 22-23, our total water consumption is approximately 146 billion litres of which close to 26% water requirement was met through the use of treated wastewater. IndianOil is undertaking efforts to source treated wastewater in place of freshwater for refinery operations. In a first-of-its-kind endeavour, a Sewage Treatment Plant (STP) has been established under Public-Private-Partnership (PPP) model at Laxmi Nagar, Mathura. With this, our Mathura Refinery is now meeting around 50% of its water requirement for operations, from the treated sewage water. This has resulted in the conservation of

Our rainwater harvesting systems covering a total area of over 2,900 hectares are estimated to have harvested 7.2 billion litres of rainwater during the reporting period.

fresh water from the River Yamuna. Necessary arrangements are also in place to source treated waste water from Vadodara Municipal Corporation's Rajiv Nagar STP for use in Gujarat Refinery. Besides wastewater recycling, the Company has also implemented rainwater harvesting systems across locations including a large watershed project at its Digboi Refinery, Assam. The Company also undertakes efforts to improve water use efficiency in operations through third-party water audits.

We are actively engaged in biodiversity conservation and ecosystem restoration, making significant strides in the last fiscal year. As part of our efforts to contribute to a greener planet, we have planted over 50 Lakhs trees within and beyond our organisational boundaries. In a landmark effort, IndianOil played a crucial role by funding the project for reintroduction of cheetahs to India in collaboration with the National Tiger Conservation Authority. IndianOil has also taken keen efforts to conserve the majestic Indian single-horned rhino, which was also adopted as the Company's mascot in 2021. In addition, the Company has also undertaken other ecosystem and species conservation projects like protection of Olive Ridley turtles, planting mangroves, coral translocation, and the protection of tiger habitats in the Sunderbans (West Bengal). These efforts reflect our unwavering commitment to safeguarding the environment and its precious wildlife.

# Meeting the energy needs of a growing nation responsibly and sustainably

IndianOil has a rich legacy of over six decades in delivering fuels to the farthest corners of our nation. The Company has over 60,000 customer touch-points which help us fulfil our energy commitments. We touch lives and create history, every single day. We delight

over three crore customers who visit our fuel stations every day. Over 26 lakh households receive Indane cylinders every day. We fuel over 2300 flights every day. 16 thousand tank trucks travel almost 15 lakh km to deliver our products and 24,600 vehicles for bulk & packed LPG ply almost 25 lakh km to fuel the kitchens.

The past year marked an extraordinary milestone - with the Company now credited with installation of 18.000+ kilometers of oil & gas pipelines network in the country. This network, akin to the veins of our nation. carrying the lifeblood of energy. During the year 1,490 Retail Outlets (ROs) were solarised, taking the total count of solarised ROs to 20.992. Further, to fulfil our commitment to a greener future, more than 2,700 ROs have been provided with a Vapour Recovery System (VRS) to arrest leakage of volatile organic compounds and petroleum fumes to the environment. Each new retail outlet represents a gateway to opportunity, a lifeline to energy, and a testament to our pledge of delivering precious resources to our customers in a sustainable harmony.

In this fiscal year, we achieved a remarkable milestone by recording our highest-ever Revenue from Operations, reaching an impressive figure of INR 9,34,953 Crore. IndianOil retained its position as the top ranked energy PSU from India in the prestigious Fortune 500 rankings. These accomplishments come at an even greater sense of responsibility - the profound obligation to ensure sustainability in every facet of our operations. As we continue to thrive and contribute to the economic and industrial landscape, we remain cognisant of the environmental and societal impacts of our actions. The Company has committed to undertake a CAPEX expenditure in excess of ₹2 lakh crore by the year 2046 to achieve its ambitions of net zero operations. In FY 2022-23. IndianOil undertook an investment of over 582.80 Crore to develop renewable energy and greening initiatives.

#### Forging Ahead Through Innovation, Adaptation, and Transformation

As we reflect on our journey over the years, it is evident that our commitment to sustainability has driven us to innovate, adapt, and transform. Through rigorous research and development, we have pioneered ground-breaking technologies that convert waste plastics into valuable fuels, introduced sustainable

aviation fuel, and embarked on the path of green hydrogen. These initiatives are not just technological advancements; they are powerful expressions of our commitment to a cleaner, more sustainable future. We are aligning our business to offer a range of green energy solutions including greener fossil fuels and lubricants, natural gas, biofuels, renewables, and green hydrogen, all within a low-carbon value chain. Notably, we have patented the IndEcoP2F technology, which converts ecofriendly plastic into fuel, contributing to waste management and resource optimization.

Our R&D has also been instrumental in offering higher efficiency solutions in refining & petrochemical processes, catalysts, and pipeline research. The R&D Centre's work

One shining example of our dedication to sustainability is the launch of our new brand of polymer recyclate, **Cycloplast**, on IndianOil Day 2022.

for the development of catalysts and process technologies has made a significant impact towards 'Atmanirbhar Bharat'. Major developments were made in production & supply of catalysts, additives and adsorbent to IndianOil refineries, deployment of Ind-CokerAT® technology, installation of a biomethanation plant at Jaipur based on in-house technology, development of solar cook stoves, besides undertaking research in new energy areas like hydrogen, CCU, renewables and biofuels. R&D's collective research endeavours resulted in filing of 127 patents, bringing the total number of filed patents to 1.646 as on March 31, 2023. Further, the Company was granted 155 patents during the year, bringing the total effective patent portfolio to 1,554.

The R&D Centre also spearheads the Company's StartUp scheme which has seen incubation of 24 start-ups in two rounds of funding. IndianOil is closely involved in mentoring the start-ups through handholding by internal Process Owners till the achievement of Proof of Concept. The milestone of 50 IPs (Patents, Trademarks, Copyrights) has been achieved for the StartUp Scheme. Twelve new start-ups have been on-boarded for incubation under Round-3 of the StartUp Scheme, with a committed fund value of about ₹ 18 Crore. Further, considering the Company's current thrust on meeting Net-Zero 2046 goals, a Startup Round with theme 'Green Resolve - Amrit Kaal Adhyay' was launched in March 2023, inviting proposals.

#### Nurturing Bonds with our Workforce, the Customers and the society at large

Our success in creating shared value for our employees, extended family of workforce indirectly connected to the Company, customers and the society at large, has been the bedrock of our success. We believe in



empowering our workforce with knowledge and tools to drive a positive change, fostering a culture of environmental consciousness and social responsibility. By integrating sustainability metrics into performance evaluation, we have been able to align the workforce's aspirations with the collective goal of a greener tomorrow. Through our collaborative partnerships and talent development efforts, we are building a capable workforce which can fulfil the energy needs of the country over the long term.

At IndianOil, we have robust people centric processes aligned with global best practices to create an inclusive, engaged, and diverse work culture. We believe in upholding human rights and offering equal employment opportunities without differentiating on the basis of gender, caste, creed, nationality or physical ability. Besides, we have developed a comprehensive Diversity, Equity and Inclusion (DE&I) Index to create an inclusive working environment.

At IndianOil, we remain committed to fulfil the energy requirements of the nation while enhancing customer experiences. Our continuous efforts in customer engagement, fuel improvements, supply chain optimization, transparent communications, safety priority and focus on taking care of customer needs, is a testament to that. As part of digital transformations in ensuring customer satisfaction, we have implemented 'ePIC' portal, an electronic platform for improving customer service. Further, we recognize the crucial role played by our suppliers and business partners in delivering quality services to our customers and ensure uninterrupted energy supplies. Our commitment to fostering a healthy relationship with our suppliers and business partners helps us to ensure operational excellence.

IndianOil's Corporate Social Responsibility (CSR) programs are instrumental in creating a positive and lasting impact on our communities. During 2022-23, the Company has sponsored and supported a wide range of community development projects, making a positive impact on numerous stakeholders across the nation with more than 460 projects. We have touched the lives of around 57 lakh beneficiaries through our community development projects, ranging from

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Chairman, IndianOil presenting the 'Unbottled' jacket to the Prime Minister of India

healthcare, sanitation, and rural development projects to educational, art & culture, and environment sustainability projects.

The IndianOil Foundation spearheads heritage conservation projects, preserving our rich cultural legacy for future generations. In line with the nation's TB Mukt initiative, we are actively involved in the vital mission of TB elimination, contributing to the nation's healthcare goals. The Parivartan-Prison to Pride campaign uplifts prison inmates, providing them with opportunities for growth and rehabilitation. Through our new program "Nayi Disha- Smile for Juvenile", we reach out to juvenile inmates through sports, guiding them towards a brighter future. This initiative has positively impacted approximately 4.500 inmates within over 105 correctional facilities and prisons across 24 states & 5 Union Territories nationwide. Additionally. our programs to promote gender equity demonstrate our commitment to fostering an inclusive and equitable society. These CSR initiatives are a testament to our dedication to creating a positive impact on society, reflecting the core values that define us as a Company.

#### Pehle Indian, Phir Oil

IndianOil takes pride in its contributions to a stronger nation by ensuring regular and seamless delivery of precious fuels across the country, a legacy that has been built on many years of trust of millions of Indians. With fast-changing times for the country, we understand the role of the Company in fuelling sustainable growth. Over 3 lakh members in the extended family of IndianOil workforce dedicatedly working together to deliver the aspirations of clean and sustainable fuel in the country, I am confident that we can create a brighter and better future for all, where opportunities are abundant, and prosperity is shared. In

conclusion, I am reminded of the words of Ban Ki-Moon, the former Secretary-General of the UN, who eloquently stated that sustainable development is the pathway to the future we all desire. It provides us with a framework to achieve economic growth, foster social justice, exercise environmental stewardship, and strengthen governance. This resonates deeply with our vision at IndianOil, where we strive to strike a harmonious balance between economic progress, social well-being, environmental responsibility, and strong governance.

All our milestones, and honours were attained by our highly motivated energy soldiers, who exemplified the principle of "Pehle Indian Phir Oil" (Nation before business) in letter and spirit. Beyond our widely recognized core values of Care, Innovation, Passion, and Trust, the 'Nation-First' ethos is ingrained in our DNA and has made our Company the formidable force it is today.

I would like to thank each one of our patrons for their support as we move forward on this transformative journey to build a sustainable tomorrow. With your continued support, we are confident that we can create a positive and lasting impact on the world we share. Together, let us shape a brighter and greener future for all.

In our relentless pursuit of sustainability, let us be the architects of a future where every drop of progress nourishes the soil of responsibility, fostering a world that thrives long after we have left our mark.

sd/-

#### (Shrikant Madhav Vaidya) Chairman



## **ENERGY BRANDS**

That make a difference



#### The Year at a Glance

# Environment Social

297 Trillion BTU ENERGY CONSUMED

89%

**REUSE OF TREATED WASTEWATER** 

₹582.80 Crore INVESTMENT IN RENEWABLE **ENERGY AND GREENING EFFORTS** 

3.80 MMTC02e OPERATIONAL EMISSIONS AVOIDED/ OFFSET

31,095

TOTAL WORKFORCE

₹264.03 Crore

CSR EXPENDITURE FOR 57 LAKHS CSR BENEFICIARIES

7,75,868 hrs OF TRAINING PROVIDED TO EMPLOYEES

₹2,40,185 Crore **CONTRIBUTION TO EXCHEQUER**  Governance

1:14

**BOARD DIVERSITY RATIO** 

1:4.25

MEDIAN TO HIGHEST SALARY RATIO

ZERO INCIDENT OF INFORMATION SECURITY/ DATA BREACHES

ZERO INCIDENTS OF HUMAN RIGHTS VIOLATION

100%

LOCATIONS SCREENED THROUGH INTERNAL SAFETY AUDITS

Finance & Operations

₹9,34,953 Crore **TOTAL TURNOVER** 

₹37,287 Crore

CAPEX

₹8,242 Crore PROFIT AFTER TAX

72.41 MMT REFINERY THROUGHPUT

97.38 MMT PIPELINE THROUGHPUT





Accelerating Progress Enriching Lives

# FUELLING INDIA'S GROWTH STORY



# Our Approach To Sustainability

In this Section

IndianOil recognizes sustainable growth not as a mere obligation but as a transformative opportunity to improve its business processes and practices. By embracing sustainability, we can have a positive impact on every aspect of our operations. Guided by our core values, we firmly believe that responsible businesses can achieve profitability while contributing to a low-carbon future. This conviction drives our investments in green technologies, eco-friendly products, and sustainable energy infrastructure.

At IndianOil, people and environmental sustainability are the driving forces behind every decision we make. We are acutely aware of the impact of our actions on the environment and society. This consciousness reflects in our product offerings, procurement practices, and sales strategies. We strive to ensure that our operations have a minimal ecological footprint,

and we actively pursue initiatives that benefit both our stakeholders and the planet.

By prioritizing sustainability, we aim to deliver long-term benefits that extend beyond mere economic profits. Our approach is focused on creating value for our shareholders, employees, customers, and the communities we serve. We believe that sustainable practices drive efficiency, innovation, and competitiveness. positioning us for lasting success. As we move forward, IndianOil is committed to harness the power of sustainability to shape a better and more prosperous future for all. By integrating sustainability into every aspect of our business. we aim to create a positive legacy that endures and contributes to the well-being of our planet and its people. Together, we can pave the way for a sustainable and thriving future, benefiting both the present and future generations.







#### Stakeholder Engagement & Materiality Assessment

IndianOil recognizes the significance of engaging with its internal and external stakeholders across our operations. Through various communication channels. we strive to gain insights into their needs, concerns, and expectations while sharing our performance and goals with utmost transparency. This active engagement allows us to align our business practices, accordingly, fostering mutual understanding and cooperation. We value their input and recognize the vital role they play in influencing our operations and outcomes. Through this ongoing dialogue, we foster trust, credibility, and accountability, enhancing our relationships and nurturing a sense of shared responsibility. By proactively addressing concerns and seeking feedback, we continuously strive to improve our practices, meet societal expectations, and contribute positively to the wellbeing of our stakeholders and the communities we serve.

#### Stakeholder Engagement Process

At IndianOil, we recognize the importance of engaging with our identified stakeholder groups through diverse platforms. This two-way communication is essential for continually improving our ambitions and operational performance. We consider all stakeholders equally important in our journey to achieve our business and sustainability goals. Our focus areas for stakeholder engagement are clearly defined, and all activities are aligned with these objectives. We place great emphasis on effective grievance redressal mechanisms, ensuring transparency, and upholding accountability throughout the engagement process.

IndianOil's commitment to stakeholder engagement extends beyond mere compliance. It is a core element of our responsible and sustainable business practices. By involving stakeholders in our decision-making processes. we seek to create a positive impact on society and work towards a brighter and more inclusive future for all. Through open and transparent communication, we endeavour to forge lasting partnerships that drive mutual growth and benefit, while ensuring that our actions are in harmony with the needs and expectations of our stakeholders.

#### **Our Stakeholders**

Government

Regulatory Bodies

nvestors and

Industry Group/Trade
Associations

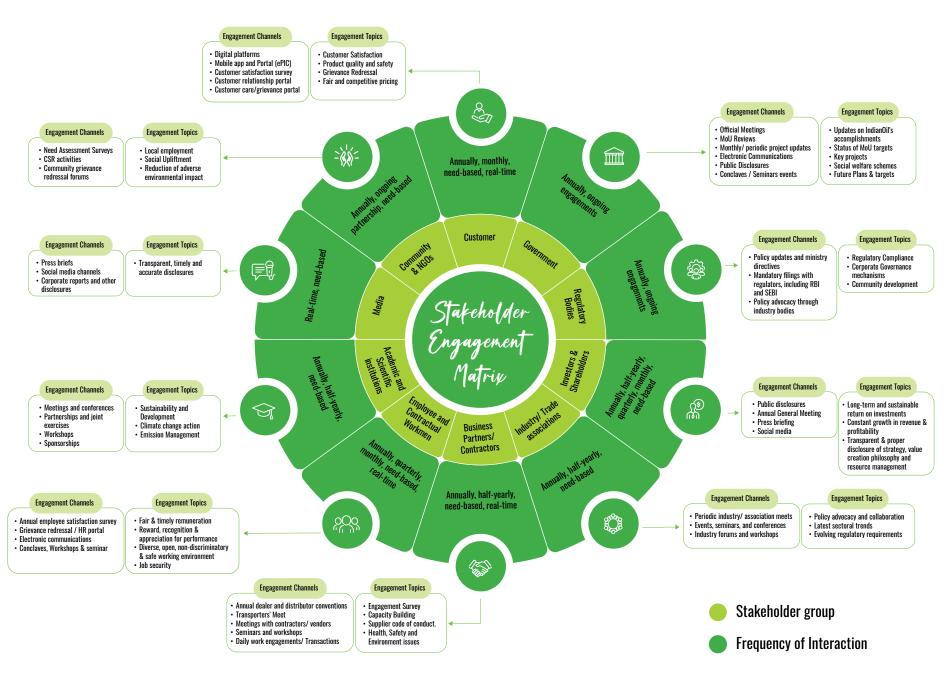
Employee and
Contractual Workforce

Business Partners

Media

- St. Community and NGOs & Customers





#### **Materiality Assessment**

IndianOil conducted an in-depth materiality assessment & stakeholder engagement process in FY 2021-22 to assess the vital issues that hold significance for our stakeholders and changing business dynamics.

The materiality approach included analysis of key trends in Oil & gas space, peer benchmarking for material issues, analysis of key risks and opportunities and Feedback & Validation from stakeholders. To identify material issues, we utilized globally recognized frameworks such as GRI (Global Reporting

Initiative), UNGC (United Nations Global Compact), and UNSDGs (United Nations Sustainable Development Goals). These frameworks helped in developing a universe of critical issues that were relevant to our stakeholders. The material issues were further validated through discussions with stakeholders, considering their primary concerns and expectations. This ensured that the identified issues truly represented the significant topics which mattered most to our stakeholders. Additionally, we followed

a structured process to identify business risks, involving internal consultations with stakeholders and discussions with the management. This approach allowed us to gain insights into potential risks and challenges that could impact our business.

Throughout the year, we continuously monitor stakeholder interactions through various channels to ensure an ongoing understanding of their concerns and needs. If any new issues arise that were not previously identified, we promptly add them to our list of material issues

and take appropriate actions to address them. As we move forward, we remain steadfast in our commitment to engage stakeholders, conduct materiality analyses, and proactively address sustainability issues. By incorporating stakeholder perspectives into our decision-making processes, we aim to create lasting positive impact, enhance stakeholder trust, and contribute to a more sustainable and responsible future. Our senior management oversees the materiality assessment and provides appropriate mitigation strategies.

#### **Material Issues**

# Economic Performance Market Volatility Sustainable Supply Chain Signification







Among these 16 topics, Health & Safety, Climate Change Mitigation, and Managing Environmental Impact considered as the most crucial areas and emerging risks for IndianOil and its stakeholders. Comprehensive insights into these subjects can be found in the subsequent sections of this report.

#### **Our Sustainability Strategy**

By aligning our business practices with our sustainability strategy, we aim to create a positive impact on society, the environment, and stakeholders, driving the transition towards a greener and more sustainable future. Our holistic sustainability strategy is driven by many elements which strive to be a catalyst for positive change, creating a brighter and more sustainable future for all.



## Vision

IndianOil's vision is to provide energy solutions to its customers in a manner that is efficient, safe and ethical, which minimises negative impact on environment and enhances quality of life of the community, towards sustaining a holistic business.



## Mission

Its core purpose is to 'Meet Stakeholders' aspirations for value creation. Ensure a safe and healthy working environment. Incorporate environmental and social considerations in business decisions. Build a reputation as a responsible corporate citizen. Conduct business with ethics and transparency.



# Sustainability

The priorities form the basis of IndianOil's commitments to integrate sustainability into its operations. They also guide the company in the development of associated policies and initiatives as well as their implementation.



# Internal Policies

The company's mission and priorities are integrated into its day-to-day operations through array of policies.







Empowered Leadership and Transparent Governance



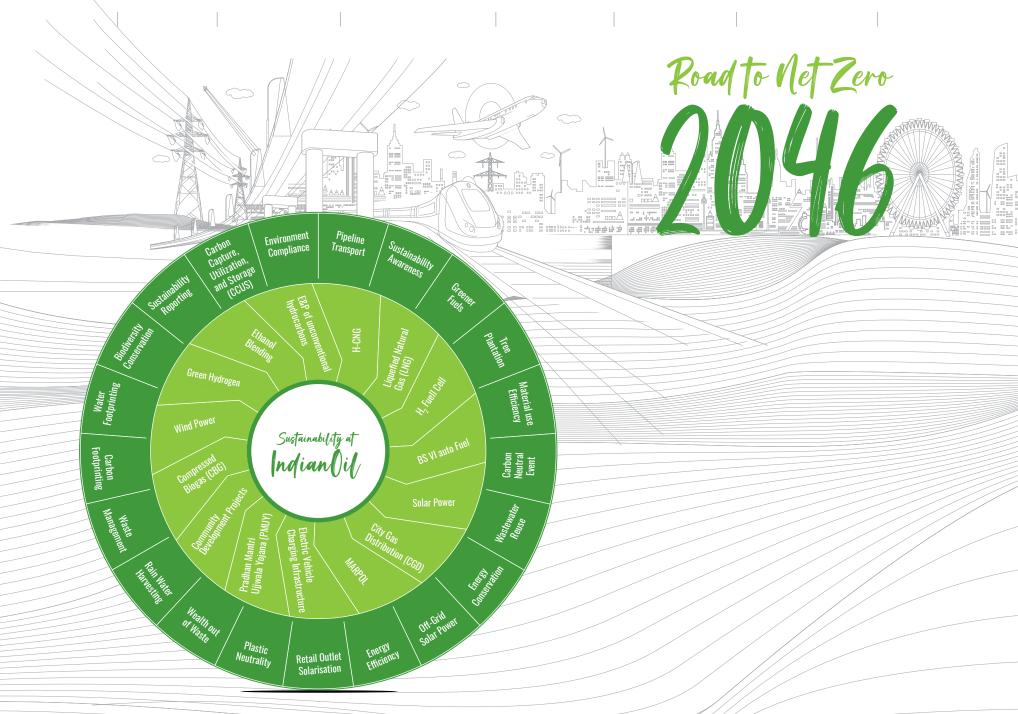








Our Sustainability & CSR Policy can be accessed at Sustainability & CSR Policy



#### **Aspects covered under sustainability**









#### IndianOil Contribution to UN Sustainable Development Goals (SDGs)

#### **Linkages to SDGs**

The 17 goals of the UN Sustainable Development Goals (SDGs) outline the desired global future. IndianOil, as a responsible public sector energy company, actively contributes to all SDGs in diverse ways. We are actively working on aligning our activities with the SDGs. Our activities' effects on the environment, societies, and economic advancement are clearly outlined.

Moreover, there are indirect advantages, such as job creation, upliftment of marginalized segments, fulfilling the energy requirements of

a large populace, and favourable environmental effects. While not directly monitored, these aspects exemplify the company's contribution to SDGs.

India, as a participant in the Paris agreement (stringent goal to restrict climate change to  $2^{\circ}\text{C}$ , and preferably 1.5°C by 2100), aims to reduce emission intensity, boost non-fossil power capacity, and expand carbon sinks via tree plantation. This strategy is being extended to public sector firms for swift implementation. For instance, IndianOil is modernizing refineries,

adopting natural gas over fuel oil, increasing renewables, and enhancing energy efficiency to cut carbon intensity. The company also plants trees on its premises. India emphasizes better vehicle fuels and electric transport, transitioning to BS-VI fuels, promoting biofuel blends, extending LPG and natural gas access, and encouraging electric vehicles. IndianOil actively pursues these areas alongside infrastructure and technology enhancements to meet energy and climate goals.





































#### Why does it matter to us?

Establishing peaceful and inclusive societies requires organisations to combat corruption and ensure transparency and accountability.

#### IndianOil's Contribution

**Business Ethics and Accountability** 

#### Why does it matter to us?

Achieving the SDGs and solving the world's problems requires partnerships among government, private sector, civil society, academic, and scientists.

#### IndianOil's Contribution

Stakeholder Engagement and Materiality Assessment **Community Development** 

#### Why does it matter to us?

Biodiversity is declining faster than any other time in history. At the same time. more than one-fifth of our land area is degrading. Associated impacts include increased carbon emissions, health outbreaks, and loss of livelihoods for dependent communities. Biodiversity conservation and ecosystem restoration forms the basis of climate action.

#### IndianOil's Contribution

**Biodiversity Conservation** Circular Economy

#### Why does it matter to us?

Governments and businesses are cutting emissions to move to a Net Zero existence and keep global temperature rise below 1.5°C.

#### IndianOil's Contribution

**Energy Management** Accelerating towards Net Zero

#### Why does it matter to us?

Transitioning to sustainable consumption and production patterns will reduce economic, environmental, and social costs.

#### IndianOil's Contribution

**Energy Management** 

Decarbonization

**Product Stewardship** 



•

#### Why does it matter to us?

Creating decent jobs for all and improving living standards is the need of the hour.

#### IndianOil's Contribution

**Empowering Employees Responsible Supply Chain Business Ethics and Accountability** 

#### Why does it matter to us?

Good Health and Well-being is significant as it aligns with our commitment to ensure a safe and healthy work environment for our employees and promoting the well-being of the communities, we operate in.

#### IndianOil's Contribution

**Empowering Employees Health and Safety** Community Development

#### Why does it matter to us?

Countries are increasingly dealing with issues like water scarcity, pollution, and ecological deterioration. India is ranked 13th out of the world's 17 most water-stressed nations.

#### IndianOil's Contribution

Water Stewardship Community Development

#### Why does it matter to us?

Societal and economic activities across sectors primarily use fossil fuels leading to GHG emissions and climate change. It is essential to accelerate the global transition to clean energy.

#### IndianOil's Contribution

**Product Stewardship Accelerating towards Net Zero Energy Management** Decarbonization

#### Why does it matter to us?

Investments in infrastructure, scientific research. and sustainable industrial development are crucial for economic growth, employment generation. climate action, and efficient use of resources.

#### IndianOil's Contribution

**R&D** and Innovation

Asia's first 2G Ethanol Plant based on Paddy straw feedstock at Panipat

# 3 CRORE LITRES PER ANNUM CAPACITY



# Empowered Leadership & Transparent



In this Section		

Our leadership is empowered with the responsibility to drive business success while upholding the highest standards of ethical conduct. Through transparent decision-making processes, we ensure that financial performance is aligned with our sustainability goals, prioritizing the well-being of our stakeholders and the environment. Our governance takes up a proactive role in identifying opportunities for growth and innovation, seeking ways to maximize financial returns while minimizing environmental impact. we embrace sustainable practices, recognizing that long-term financial success is intertwined with responsible resource management and community well-being.

Transparent governance practices are embedded throughout our financial and sustainability frameworks. We maintain open and accessible communication with all stakeholders, ensuring that they are well-informed.

By integrating empowered leadership and transparent governance, we create a sustainable business model that drives financial prosperity while contributing positively to society and the planet. We are committed to delivering sustainable growth that benefits all, shaping a brighter future for generations to come.







#### **Material Topics**





Business Ethics and Accountability



Compliance and Governance

#### **Notable Highlights**

BOARD COMMITTEES 12

BOARD MEETING HELD IN FY 2022-23

6

AVERAGE ATTENDANCE ACROSS ALL MEETINGS

96.80%

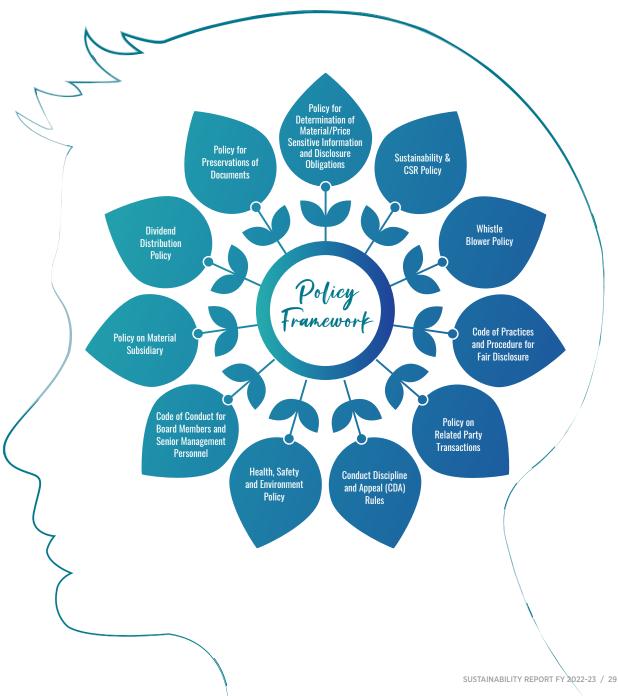
NO. OF EMPLOYEES ATTENDED VIGILANCE AWARENESS PROGRAMS OVER **7000** 



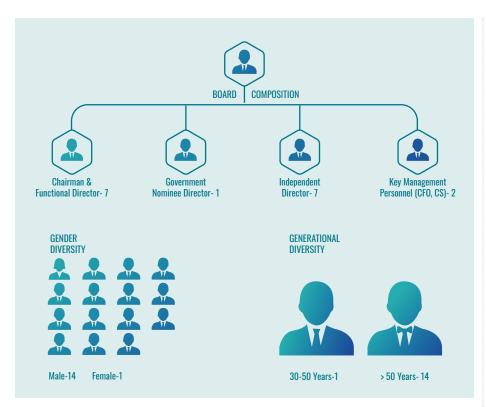
#### **Establishing Good** Governance

As a Maharatna corporation aspiring to be a global leader in the energy sector, IndianOil is committed to practice the highest levels of ethics, transparency, accountability, and responsible governance. Our foundation of strong governance ensures efficient management and long-term success, guided by an objective and strategic board of directors overseeing our commercial activities. Our corporate governance framework is designed for value-based management and oversight, focusing on long-term success, effective internal collaboration, safeguarding shareholders' and employees' interests, and implementing appropriate risk management systems. We have implemented several policies to support our governance framework in alignment with both national and international standards, guidelines, and protocols. IndianOil has a well-defined policy framework that is based on applicable statutes, guidelines, rules, and policies published by the Government of India from time to time, as well as comprehensive discussions with all relevant stakeholders. While developing policies, industry practises and national/ international standards are taken in consideration. All policies are evaluated on a regular basis to stay on top of any emerging trends and business models.

To reinforce ESG related governance, we have a board committee on CSR & Sustainable Development, emphasizing our commitment to responsible business practices and stakeholder value.



#### **Board Structure & Details**



#### **Role of Board and Composition**

Our Board of Directors comprises individuals with diverse expertise in areas like academia, energy, governance, and marketing. The Chairman also serves as the Chairperson-Executive, as per Central Public Sector Enterprise (CPSE) Policy. Non-Executive Government Nominee Directors are chosen by the Ministry, Independent Directors are selected through merit-based processes, and Executive Directors are domain experts leading specific functions. The Board's composition is based on essential skills,

expertise, and leadership qualities.

Executive Directors serve 5 years or until superannuation, while Independent Directors serve 3 years. The Board's structured responsibilities create enduring value for shareholders, employees, customers, partners, and communities. It guides IndianOil's strategy, addresses challenges, and makes decisions on policies, diversification, etc. Day-to-day management is led by the Chairman, Functional Directors, and senior leadership.

Executive Directors' compensation adheres to the Department of Public Enterprises'

(DPE) Guidelines for Central Public Sector Enterprises. Government Nominee Directors do not receive remuneration. Independent Directors are compensated with sitting fees for Board and Committee meetings. The Nomination and Remuneration Committee determines performance-linked incentives and other benefits for senior leadership. The Committee also sanctions positions, including promotions to the Executive Director level. New Independent Directors undergo orientation on IndianOil's constitution, vision, mission, core activities, Board procedures, and strategic directions.

The SEBI Listing Regulations 2015 provides that none of the Non-Executive Directors should serve as Independent Director in more than seven listed companies and none of the Executive or Whole-time Directors serve as Independent Directors on any listed Company. Further, none of the Directors on the Board should be a Member of more than 10 Committees or a Chairman of more than five Committees across all the companies in which they hold Directorships.

Board members stay informed about pertinent economic, environmental, and social issues through training programs hosted by reputable institutions and various platforms like conferences, seminars, and webinars. This ensures their up-to-date knowledge including Oil & Gas sector specific updates. The Government of India conducts performance assessments of the Board. Additionally, the Board has assigned crucial functions to several committees. The President of India (Central Government) is the promoter of IndianOil and holds 51.50% of the shares as on 31 March 2023. Additionally, 0.11% of the shares of IndianOil are held by Governor of Gujarat.

Our board members Attended 96.80% of the meetings of the Board and it is mandatory to attend at least one meeting of the board under the law.

Further details on the Board and Board committees, composition, responsibilities, nomination process, evaluation, and remuneration are available in the Corporate Governance section of our Integrated Annual Report 2023

Further information about our leadership can be obtained from IndianOil website-Our Leadership



#### **Board Committees**

The powers of the Board are conferred upon the Board Committees which ensure the efficient and smooth flow of the decision-making process. These Board Committees constitute full-time & independent directors.



#### Audit Committee

Examines, decides and deals with issues relating to Ethics in the company.



# Corporate Social Responsibility & Sustainable Development

Recommends, monitors and administers activities under Sustainability and CSR Policy and oversees its performance / implementation.



# Dispute Settlement Committee

Examines and gives recommendations on the settlement proposals having financial implication of more than ₹25 Crore for approval of the Board as per the Conciliation Policy of IndianOil.



#### Morination and Remuneration Committee

The board is responsible for approving perks for directors and executives below board level, along with endorsing Performance-Related Pay (PRP) following DPE guidelines. They also create and approve positions and evaluate motions for Senior Management Personnel.



# Planning and Projects

Considers and approves all Project Proposals above ₹100 Crore and upto ₹250 Crore



#### Stakeholders Relationship Committee

Examines and redresses the grievances of shareholders. investors and approves issuance of share certificates



#### Contract Committee

Approves contracts beyond certain limit as provided in the Delegation of Authority of the corporation



# De-leasing of immovable Properties Committee

Considers de-leasing of company leased Flats/ accommodation/ immovable properties



#### LMG Sourcing Committee

Reviews the terms and conditions of LNG Sales & Purchase Agreement and recommend the same to the Board for approval for purchase of LNG on long-term basis.



# Marketing Strategies & Information Technology oversite committee

Evolves the strategies, policies, guidelines and takes decisions on all matters relating to marketing activities including a revival of dealerships/distributorships.



# Project Evaluation

Appraises projects costing ₹250 Crore and above before the Projects are submitted to the Board for approval.



## Risk Management

Quarterly reviews the Risk Management Process involving risk assessment.

#### **Business Ethics and Accountability**

IndianOil believes that ethical business practices are essential for an effective organisation. Adopting ethical and transparent processes is critical for maintaining and restoring stakeholder trust in the Company. The basic values of IndianOil guide its corporate ethics and morals. It is dedicated to a zerotolerance policy towards fraud, bribery, and corruption. The Code of Conduct establishes the expected behaviour of Board members, senior management personnel, and employees. Employees are obligated to fully disclose any conflicts of interest to IndianOil. Senior management is also expected to disclose to the Chairman all material financial and commercial transactions in which they have a personal interest. Regular trainings are conducted on the Code of Conduct and acknowledgement on the same is taken from the employee at the completion of the training. At the end of FY 2022-23, there were no instances of potential conflict of interest between IndianOil and its Board members or senior leadership & no breach of code of conduct as well.

The Vigilance department ensures the greatest level of integrity across the organisation. It implements preventive, punitive, and participatory measures, as well as assists in the establishment of effective internal control systems and procedures for reducing systemic failures. The department also serves as a liaison between IndianOil and the Chief Vigilance Commission (CVC), the Indian government's primary anti-corruption body. IndianOil takes disciplinary action for irregularities/lapses under the appropriate Conduct, Discipline, and Appeal Rules, 1980, and Certified Standing Orders including termination of employment or employee performance and appraisal.

To address concerns about unethical behaviour.

fraud, and violations of the Code of Conduct. we have a robust whistle-blower policy in place wherein, employees are free to report any improper activity resulting in violations of laws, rules, regulations, or code of conduct by any of the employees, including leakage / misuse of unpublished price sensitive information in violation of IndianOil's Insider Trading Code, as the case may be. Employees are encouraged to report any improper activities or violations of laws, rules, regulations, or the code of conduct to the Competent Authority or Chairman of the Audit Committee. No whistle-blower complaints were received during FY 2022-23. and no employee has been denied access to the Audit Committee in this regard.

To combat corruption in all forms, including bribery, illicit gratification, and unfair rewards, we have implemented necessary measures in the Conduct Discipline and Appeal Rules/ Standing Orders that apply to employees.

#### **Human Rights**

Human Rights is a commitment by IndianOil to the people. As a signatory member of the United Nations Global Compact (UNGC) since 2001, we adhere to all UNGC principles and report its performance on the same. This includes compliance with the 10 principles of UNGC covering areas of human rights, labour, environment, and anti-corruption.

IndianOil, being the principal employer, ensures that proper adherence to the provisions of EPF & ESI covering social security aspects like PF. ESI etc is maintained for all contract labours. Abiding by the prevalent government guidelines, we ensure that regular and fair remuneration is paid to the employees and contractors. IndianOil has a dedicated equal opportunity and equal

remuneration policy. During FY 2022-23, the ratio of organization's highest paid individual to the median annual total compensation stood at 1:4.25.

All the vendors and suppliers are also made to submit a written declaration stating that no party has engaged child labour at his/ her facilities and any industry deploying child labour is discouraged from doing so. No form of forced or compulsory labour, human trafficking is supported by IndianOil. There is a Zero Tolerance Policy towards workplace harassment including sexual harassment and a stringent policy in this regard has been implemented across all locations and installations.

The provisions of the Sexual Harassment of Women at Workplace (Prevention, Prohibition, and Redressal) Act. 2013, have been implemented throughout our company with the clear goal of protecting women from sexual harassment at work and preventing

and resolving sexual harassment complaints. Internal Committees have been established at every Unit/Region/Head Office level, led by senior-level female employees, to handle any sexual harassment complaints. All reported cases of sexual harassment are inquired into by a Complaint Committee. If proved, a disciplinary action is taken in accordance with the Conduct, Discipline and Appeal Rules (CDA Rules) against the delinquent employee(s). During FY 2022-23, Eight complaints were received, and three were disposed of as on 31 March 2023, Five complaints are pending. Regular workshops are held, especially for women employees, to raise awareness about their rights and facilities at workplace and emphasising the provisions of the Act. Gender sensitization programmes for the male employees are also conducted regularly.

All statutory provisions and policy guidelines are followed strictly, without any discrimination while providing welfare facilities



Delivering responsibly across the nation

for employees' health, efficiency, financial wellbeing, employment, social status, growth, remuneration or development, satisfaction etc. Explicit terms and conditions are laid down in the General Conditions of Contract (GCC), with instructions to comply with human rights aspects including separate toilets, washing places for men and women, compulsory canteen facilities and medical services for all workers, which are binding on all the vendors and suppliers listed with IndianOil.

IndianOil treats all workers and employees with respect and dignity and provide favourable work conditions. We respect the right of labours and employees to collective bargaining. We believe that in one location one recognised union is allowed for the process of collective bargaining to be conducted in a cordial environment. Overall, about 95% of our permanent employees are covered under various Unions / Employee Associations.

Recruitment of contractual workforce is done as per the scope of work and the skill sets

During the year, no incidents of human rights violations were reported. laid down in the project contracts. It is the responsibility of successful bidder to deploy the labour as per

requirements. During the on-boarding process, the contract labours are imparted training on Company's policies, procedures, and safety aspects. Remuneration and incentives, including overtime payment are paid as per the Minimum Wages Act and other statutory requirements. Safe and favourable work conditions at site for the workforce are ensured by the Location-in-Charge. The relevant personnel conduct periodic audits such as Compliance Audit Programs (CAP) and OISD audits. Feedback

is also sought on a regular basis from the workforce as well. In addition, facilities such as potable water and subsidised food are provided. Yearly health check-ups are also a key component of labour welfare.

No incidents involving rights of indigenous people and discriminated practices or significant disputes involving local communities and indigenous people were reported during the FY 2022-23. No instances of forced, compulsory or bonded labour were reported during the year. No violation of Child Labour (Prohibition and Regulation) Amendment Act, 2016 has been reported and the minimum age limit of 18 years for permanent and contract labour was maintained. Being a Public Sector Undertaking (Government Organization), IndianOil made no financial and/or in-kind political contributions directly or indirectly by the organization to any country, recipient, or beneficiary.

#### **Grievance Redressal Mechanism**

We place high priority on ensuring that complaints from all stakeholder groups are addressed promptly and effectively. To achieve this, we have implemented a formal grievance redressal mechanism that caters to the concerns of all stakeholders. To oversee and manage stakeholder complaints, IndianOil has established a Stakeholders' Relationship Committee at the Board level. Additionally, we have set up a dedicated complaint portal on our corporate website, allowing vendors and suppliers to directly report any unethical or illegal behaviour to the contact person or the vigilance department.

For consumers, we offer multiple channels to register complaints or provide feedback. These include our website, customer service hotlines, IndianOil customer apps, and in-person submission of complaints or recommendations

at IndianOil customer touch points. By maintaining an efficient and accessible grievance redressal process, IndianOil aims to foster transparency, accountability, and responsiveness to the concerns of its valued stakeholders.

#### **Regulatory Compliance**

IndianOil focuses a high priority on adhering to the laws of the countries in which it operates. All operations are in accordance with the provisions of environmental and socioeconomic laws, guidelines, and norms imposed by the Government of India. IndianOil maps evolving laws on a regular basis, allowing to effortlessly migrate to an updated regulatory environment. During the reporting period, 14 cases of non-compliance with environmental laws and regulations were reported in FY 2022-23. Details of these cases can be accessed from BRSR 2022-23, Principle 6.

IndianOil does not engage in or encourage anti-competitive behaviour and abides by the Competition Act of 2002. It also includes tools for resolving stakeholder complaints about anti-competitive activities. There were no cases of anti-competitive behaviour received in FY202-23.

IndianOil conducts Environment Impact Assessment (EIA) for all of the greenfield and expansion projects as per applicability. IndianOil complies with all the local and national laws and regulations. IndianOil complies with all the environmental standards of the Ministry of Environment, Forest & Climate Change (MoEFCC), Central Pollution Control Board (CPCB) / State Pollution Control Board (SPCB) and also adheres to relevant national/ international guidelines for environmental pollution. We also conduct Impact Assessment for our CSR projects through third-party. BRSR 2022-23, Principle 6 can be referred for details of Environment Impact Assessment of recent project. Community Development section of this sustainability report can be referred for further details of Impact assessment of CSR projects.

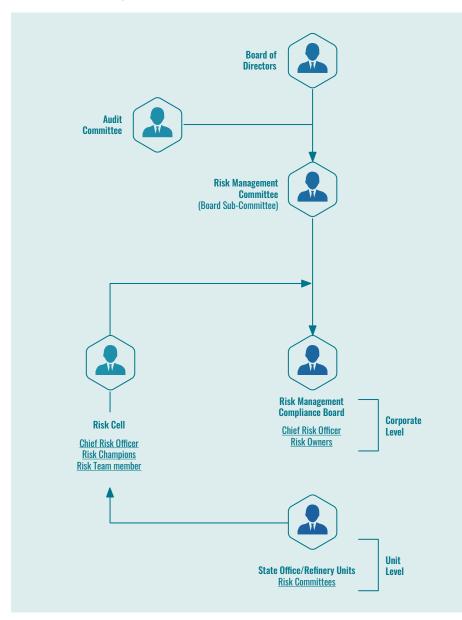
#### **Tax Compliance**

We at IndianOil, support increased tax transparency from the businesses we invest in, and thereby we adhere with the tax laws and regulations of India. We are committed to avoid tax arrangement structures with commercial substance. While being in transaction with foreign entities, we follow the Arm's length principle. Our tax policy is overlooked by Director of Finance.



Ensuring precision & safety at every step

#### **Risk Management Framework**



By adopting a comprehensive risk management framework, we strive to proactively identify and manage risks, ensuring resilience and sustainability in the face of potential challenges and uncertainties. The Key elements of our risk management framework are Risk Governance Structure, Risk portfolio (Risk Management Cycle includes risk identification followed by risk assessment, risk categorization & classification), Risk Optimizing and Risk Monitoring & Review. The Board has established a Risk Management Committee (RMC) responsible for developing, implementing, and overseeing the risk management strategy. The RMC focuses on regulatory and policy risks related to climate change and provides governance and guidance for IndianOil's ESG risk management, including the review of state and central regulations and policies.

IndianOil recognizes the vulnerability of the oil and gas business to various geopolitical and economic risks, such as petroleum supply, price fluctuations, and product pricing limitations. To ensure that the operations are reliable and future-ready, a robust risk governance structure and efficient Enterprise Risk Management (ERM) system are in place. The ERM framework is overseen by the Risk Management Committee. Each division has risk owners responsible for identifying and assessing risks in their respective areas (refineries, state offices), reporting this information to the Risk Management Compliance Board (RMCB). The ERM framework is continuously evaluated in the context of the evolving risk environment relevant to the business. Risk management data is submitted through an internal ERM website to provide real-time access to information for all stakeholders.

The KRA of the committee members and individuals involved have risk related KPIs

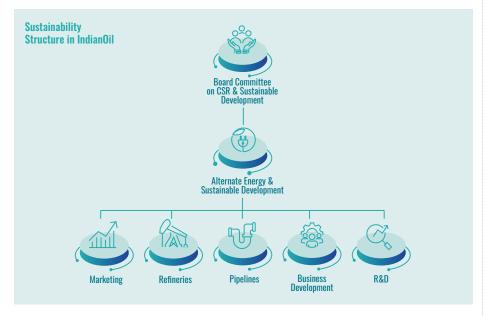
assigned and the same are reviewed at the time of periodic performance review. IndianOil provides performance-linked incentives to all senior executives. Each of the senior executives having the responsibilities related to ERM, their incentive is linked to the KRAs and KPIs related to enterprise risk management and their roles and responsibilities as mentioned in Risk Management Policy.

IndianOil also facilitates the periodic risk management trainings to relevant stakeholders to ensure risk management policy is well understood and followed effectively across the organization. The structure of risk management training program is aligned to the prevalent risk governance structure at IndianOil. IndianOil has identified key risks and has developed mitigation strategy for each, along with material issues addressed and capitals impact by the same.

Please refer Integrated Annual Report 2023, Page No. 24

#### **Climate Governance**

Our Board-level Committees are instrumental in spearheading, advancing, and overseeing our sustainability initiatives. The Sustainability & CSR Committee is entrusted with the responsibility of addressing climate risks and implementing mitigation measures. The Sustainability & CSR Committee is composed of at least three Directors, with one being an independent director. Details of the same given in <a href="Integrated Annual Report 2023 Page No. 162">Integrated Annual Report 2023 Page No. 162</a>. We have set ambitious climate goals for the current year, and in response, a robust governance framework has been established to collate relevant data on organizational performance and closely monitor the progress towards achieving these climate targets. The Committee ensures that Board-level reporting and supervision are in place to drive effective climate action throughout the organization.



The sustainability performance of IndianOil is reviewed by the Board of Directors during monthly meetings. The Alternate Energy and Sustainable Development (AE&SD) department identifies initiatives to embed sustainability within IndianOil. It also reviews the performance of the initiatives on a periodic basis and identify areas of improvement. Through defined engagement mechanisms, AE&SD in collaboration with other departments consults stakeholders on economic, social, and environmental topics of relevance. Critical concerns highlighted are integrated into its strategy and reviewed by the Board. Relevant personnel from locations act as Sustainability Champions by implementing sustainability initiatives, collecting ground-level data, and reporting on performance.

#### **Climate Risks**

Climate risks encompass threats like extreme weather events, rising sea levels, and disruptions to ecosystems and economies, stemming from the changing climate. These risks pose significant challenges to global sustainability and require proactive mitigation and adaptation measures.

#### Scenario analysis

IndianOil is consistently evaluating variety of global pathways to achieve the Paris objectives, considering varying implications for regions, industries, and sectors with respect to 1.5°C scenario. The climate risks consider uncertainty that business strategies must be adaptable.

#### Transition risks evaluation projects



Impact of change in consumer behaviour on business



The impact of technological interventions in the space of low carbon or alternate fuels and green hydrogen



Impact of change in government policies and regulations related to climate change and the level of transition they force upon the oil & gas sector The success of our strategy is contingent on how we respond to competitive forces. We perpetually evaluate the external environment – the markets and the underlying economic, political, social, and environmental forces that shape them – to evaluate the evolution of competitive forces and business models. Future scenarios are used to inform our strategy. We routinely assess our competitive position in the markets in which we operate by analysing trends, uncertainties, and the strengths and vulnerabilities of our traditional and non-

This analysis has provided valuable insights into the strategic preparedness and resilience in the face of the global energy transition, addressing three key focal questions, Investing in the Energy Transition, Value Creation, and Impact on business and financial planning. The results of the analysis have far-reaching implications for the company's future direction and approach to sustainability.

traditional competitors.

#### Investing in the Energy Transition

The climate-related scenario analysis has guided IndianOil's investment decisions in the energy transition. By assessing transition risks and opportunities across various climate scenarios, we have identified promising areas for investment in low-carbon technologies and sustainable energy sources. The analysis has revealed the potential for significant growth in renewable energy sectors, such as solar, wind, and biofuels, which align with the global drive for decarbonization. IndianOil recognizes the importance of diversifying its portfolio and transitioning toward cleaner energy solutions to secure a sustainable future and capitalize on emerging opportunities in the energy market.

#### Value Creation

One of the central objectives of the climate-related scenario analysis was to evaluate how IndianOil's strategy can continue to deliver value to shareholders under different climate scenarios, including well-below 2°C and 1.5°C outcomes. The results show that our strategic planning is resilient and capable of generating shareholder value in a range of transition pathways. By embracing a flexible approach that aligns with climate goals, IndianOil can mitigate risks associated with carbonintensive assets and focus on value creation in the context of a rapidly evolving energy landscape.

## Impact on Business and Financial Planning

The climate-related scenario analysis has been instrumental in assessing the potential impacts of different climate scenarios on IndianOil's business and financial planning. By considering variables such as oil prices, regulatory changes, and market dynamics, the analysis has provided valuable insights into the company's outlook and financial performance. IndianOil recognizes that climate-related risks can pose challenges, and therefore, the analysis has driven the implementation of measures to enhance its resilience

#### **Transition Risk**

IndianOil is consistently evaluating variety of global pathways to achieve the Paris objectives, considering varying implications for regions, industries, and sectors with respect to 1.5°C scenario. The climate risks consider uncertainty that business strategies must be adaptable. The transition risks are evaluated basis the following assumptions or projections.



#### Current Regulation Risk

Non-compliance with environmental and social regulations could impact profitability and operations.



#### Market Risk

Rising climate change concerns and the shift towards clean energy may impact the demand for oil and gas products, potentially affecting prices.



#### Reputation Risk

Slow transition to a lowcarbon future may harm the Company's reputation as customers may prefer companies offering cleaner energy solutions.



#### Technology Rist

Failure to adopt contemporary and relevant processing technology may impact operational efficiency and efforts to reduce environmental impact.

#### Mitigation Measures

Continuously monitor and ensure compliance with existing regulations to avoid any legal or reputational consequences.

Diversify investments in cleaner fuels such as renewable energy, biofuels, hydrogen-based fuels, and electric mobility to align with market trends and reduce dependence on traditional oil and gas products.

Invest in cleaner fuels and sustainable technologies like renewable energy, demonstrating commitment to environmental responsibility and a low-carbon future.

Invest in continuous research and development (R&D) to stay at the forefront of technology, upgrading processes, and adopting innovative solutions for sustainable operations.

#### **Physical Risk**

IndianOil has integrated physical threats such as floods, cyclones, and storm surges into its risk management framework, as determined from a scenario analysis conducted by TERI. This assessment utilized resources like the Cyclone e-Atlas and INCCA-MoEF. Similarly, we've incorporated risks like sea level fluctuations, temperature increases, and water scarcity into our risk management approach, informed by TERI's scenario analysis. This analysis leveraged the PRECIS model for temperature changes and the Aquaduct tool for assessing water scarcity.



#### Extreme Weather Risk

Extreme weather events can damage assets and disrupt the supply chain

#### Mitigation Measures

Develop alternative supply networks to ensure business continuity during extreme weather events. Implement location-level disaster management preparedness to minimize the impact of extreme weather.

Invest in climate-resilient assets and infrastructure to withstand extreme weather conditions.

Expand the pipelines network, which is relatively less exposed to climate risks.

Focus on digitalization and optimization to improve overall efficiency and adaptability during extreme weather events.

#### **Digitisation Revolution**

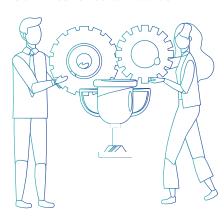
In today's dynamic business landscape, IndianOil recognizes the imperative of harnessing the potential of digital technologies. We firmly believe that an unwavering focus on digital transformation will position us at the forefront of the competition. As customer expectations evolve rapidly, IndianOil remains committed to modernizing and automating its Retail Outlets (ROs) and loyalty-based offerings, ensuring a seamless user experience and heightened brand loyalty.

Digital initiatives have emerged as a pivotal driver of customer satisfaction, with the introduction of analytics-based queue management, mobile-based loyalty programs, contactless payments, hyperlocal marketing, and an array of other innovations. Our Integrated Transaction Processing Server (ITPS) stands as a testament to this drive, facilitating more than 12 lakh transactions daily, a transformation from mere satisfaction to sheer customer delight.

Our innovation streak extends to our LPG sector, where we go beyond product customization. In a bid to ensure seamless tracking, transparency, and trust among Indane customers, we introduced a pioneering QR code-based 'Track N Trace' pilot initiative for LPG cylinders. This ground-breaking venture exemplifies our unwavering commitment to digital leadership, elevating the customer experience to unprecedented heights.

IndianOil proudly holds the distinction of being the industry's first to collaborate with National Payment Corporation of India (NPCI) for the implementation of cutting-edge digital payment solutions. Elevating the digital experience at our Retail Outlets, we introduced a software-defined wide area network (SD-WAN) based dual network connectivity solution at 15,112 ROs. Additionally, our Integrated Transaction Processing Server (ITPS) has been rolled out across 27,932 ROs, managing an impressive average of 12 lakh transactions daily. We've embarked on a transformative journey to implement a new Integrated Planning Tool endowed with AI/ML capabilities, revolutionizing end-to-end supply chain optimization.

#### **Our Excellence & Awards**

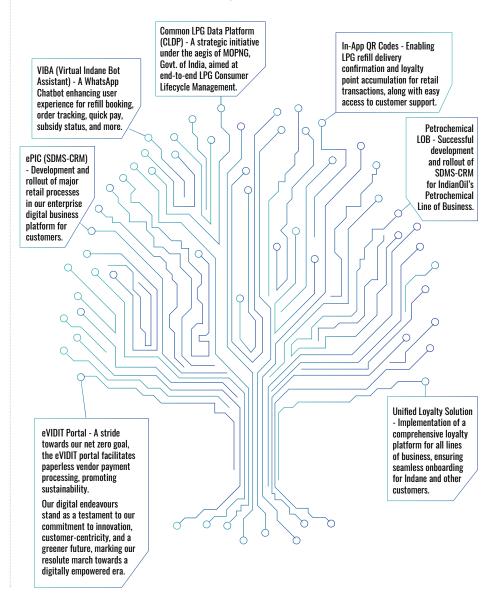


9th PSU IT awards from GovernanceNow on 16 February 2023 on various categories such as 'Digital PSU', 'Use of Emerging Technologies', 'Enterprise Security', 'CIO' and 'CISO'

IndianOil's ePIC project bagged SKOCH Awards under e-Governance category on 9 April 2022 and awarded with the Order of Merit and Gold Award.

SuSE India Innovation Hero Award under the category "Innovators with Scale" on 28 September 2023 for implementing Innovative solutions for SAP Landscape.

#### **Our Notable Milestones in the Digital Revolution**



#### **Security**

#### **Cyber Security**

In an age defined by digital interconnectedness, cybersecurity stands as a paramount concern for IndianOil. Our position as a custodian of one of the largest data networks in the country necessitates the establishment of a comprehensive and multi-layered cybersecurity framework. Our unwavering commitment to safeguarding the data of our esteemed customers, partners, suppliers, and employees forms the cornerstone of our cybersecurity endeavours. IndianOil's Privacy Policy is meticulously crafted to align with the prevailing laws and regulations in the nation. This policy unequivocally prohibits the collection of individual data for any purpose other than its originally intended use. Adhering to the principle of 'Reasonable Security Practices and Procedures,' we uphold the highest standards while processing, collecting, storing, or managing any information.

#### **Our Cybersecurity Practices**



Maintain vigilance over systems, actively seek vulnerabilities, identifying potential risks of cyber incursions, data breaches, and data privacy violations.



Established the Ready, Rapid, Responsive Cyber Action Team comprising fifteen skilled members.



Our proactive approach extends to our workforce, with regular training programs instilling a culture of cybersecurity awareness among our employees.



Implemented an array of security measures for our data and information across endpoints, networks, data centres, operational technology setups, and all digital resources.



Central to cybersecurity framework is a round-the-clock Security Operation Centre (SOC), fortified by a robust Security Incident & Event Monitoring (SIEM) and Security Orchestration, Automation, and Response (SOAR) capabilities.



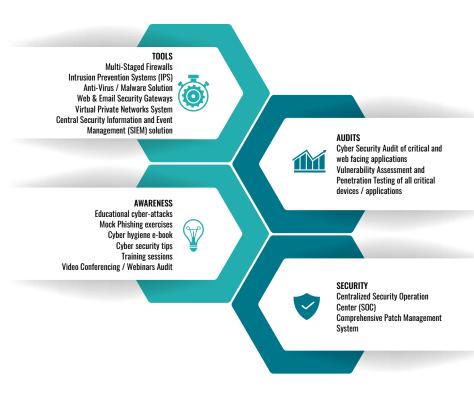
The SOC team remains steadfast in managing security alerts emanating from across the organization, promptly implementing necessary mitigation measures.



Forged partnerships with prominent cybersecurity entities such as CERT-In, NCIIPC, and IB. These strategic alliances serve as essential bulwarks against potential cyber threats, further enhancing our resilience and readiness.

All our data centres hold ISO 27001:2013 certification, signifying our commitment to maintaining robust security standards. There were no information security/ data breaches or any other breaches during FY 2022-23. No customer and employee got affected by company's data & no penalties/ fines paid for this by the company. To avoid the worst, we have insurance cover for information security breaches or other cybersecurity incidents.

#### **Resilient Cybersecurity System**



#### **Asset Security**

IndianOil possesses a widespread refining, distribution, and marketing network throughout the nation. Safeguarding IndianOil's infrastructure holds significance not only in economic terms but also concerning security. The company is dedicated to averting any form of asset loss, harm, or theft. The protection of IndianOil's facilities is ensured through the presence of security personnel, who are stationed by both the Central Industrial Security Force (CISF) and the Directorate General of Resettlement (DGR). Consistent training is given to security personnel.

#### ISO certified COMMITMENT TOWARDS data centres ROBUST SECURITY STANDARDS



## Environmental <u>empley ship</u>

In this Section		

IndianOil exemplifies environmental leadership through our unwavering commitment to sustainable practices and responsible energy solutions. As a frontrunner in the energy sector, we proactively seek to address the challenges posed by climate change through major efforts in green fuels, bringing operational efficiencies, optimizing the supply chain and setting ambitious targets. We ensure transparency and accountability in our sustainability efforts by engaging stakeholders and complying with environmental regulations. IndianOil's dedication to environmental leadership extends beyond our business boundaries, as we actively

contribute to biodiversity conservation and ecosystem restoration. Through innovation, continuous investment in research and technology, and fostering a culture of environmental stewardship, IndianOil standas a beacon of inspiration, driving the energy sector towards a greener and more sustainable future in the country.

All IndianOil refineries are certified under ISO 14064 and ISO 14001 standards. Majority of IndianOil's pipeline terminals and marketing installations are also certified under ISO 14001.

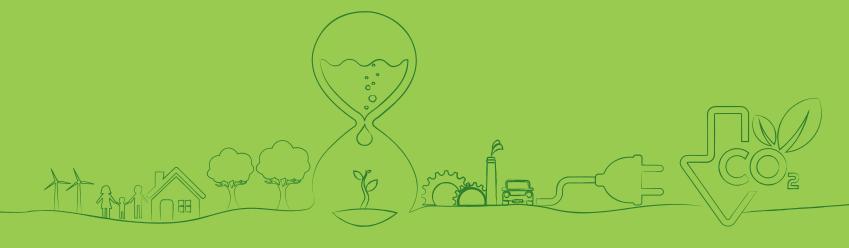












## Material Topics in Focus





Compliance and Governance



#### **Notable Highlights**

OPERATIONAL EMISSIONS AVOIDED

3.80 MMTCO2e

INVESTMENT IN RENEWABLE ENERGY

₹582.80 Crore

WASTE DIVERTED AWAY FROM LANDFILLS

98%

ESTIMATED SAVINGS FROM ENERGY CONSERVATION (ENCON) PROJECTS

₹840 Crore

RENEWABLE ENERGY PORTFOLIO

238.70 MW

TREATED WASTEWATER RECYCLED BACK INTO OPERATION

38.18 Billion Litres



#### Accelerating towards Net Zero



#### accurate accounting of liHli emissions

IndianOil acknowledges climate-related challenges

Climate strategy involves quantifying and reporting **GHG** emissions

Regular monitoring and disclosure of GHG footprint

Third-party assurance for disclosures



#### 👧 Achieve Net-Zero operational, emissions

119 ENCON (Energy Conservation) schemes implemented including hot feed increase, preheat improvement, loss reduction, and more

Venturing into innovative carbon negative solutions suchs as Carbon Capture, Utilization and Storage

Obtained GreenCo Certification for 50+ installations

Cumulative plantation within and beyond our organisational boundaries



#### Renewable Energy -Sourcing renewable power for expnasion of refineries

Renewable Energy portfolio of 238.70 MW with portfolio of 167.6 MW wind & 71.10 MW solar projects

Collaboration with NTPC Green Energy Limited, to form a JV for providing round-the-clock green power for the upcoming refinery projects

IndianOil undertook an investment of ₹582.80 Crore to develop renewable energy and greening initiatives



#### Technologies - Invest in technology and partnerships for developing low carbon energy solutions

Promoting entrepreneurship to set up CBG plants for automotive and industrial fuels.

Joined hands with ReNew and Larsen & Toubro (L&T) Limited to strengthen the green hydrogen ecosystem in India

Formed a Joint Venture with Prai Industries Ltd., to develop SAF and other biofuels

Collaboration with SJVN Limited for expanding the renewable bouquet.



## Value Chain Emission - Engage with value chain partners to reduce emissions

Cumulative of 5.461 EV Charging stations and 76 Battery Swapping Stations have been installed in our Retail Outletos (ROs)

Total 20.992 Retail Outlets (ROs) were solarised till 31 March 2023

Strategic focus on digitization, low-carbon transportation, strategic storage, energy efficiency, and renewable power utilization across value chain

Focus on responsible sourcing of material



### Enhancing Green Portfolio - Meet Demand for greener fuels in the product mix

IndianOil has commissioned 22 CBG plants, offering Biogas through 46 Indigreen outlets

SAF plant is being set up in Panipat with 86.8 TMTPA capacity

Setting up CBG plants at various locations.

Developing 10 KTA green hydrogen production capacity plant at Panipat Refinery.

Strive to achieve target of blending 2% biofuels in Aviation Turbine Fuel (ATF) by 2030



## fostering sustainable

Management oversight established to steer business greening efforts.

Workforce training and education to sensitize about environmental impact and climate risk

Product diversification and solutions linked to organizational goals.

Efforts towards Net Zero initiatives linked to employee performance.

Reward for loactions with lower environmental impact based on green parameters.



#### Establish Indian()il as a leader in environmental sustainability

In line with India's Goal of achieving Net-Zero emissions by the year 2070, IndianOil has committed to achieve net zero operational emissions by 2046.

Committed to undertake a CAPEX expenditure in excess of ₹2 lakh Crore to achieve its ambitions of net zero operations

IndianOil has embraced an ambitious target towards development of a green energy portfolio of 200 GW of renewable energy, 7 MMT of biofuels, and 9 MMT of biogas by the year 2050.

#### **Energy Management**

#### **Energy Consumption**

IndianOil is a downstream Oil & Gas major with most of the operational energy consumed in the crude refining and petrochemical production activities. This accounted for roughly 97% of the total operational energy utilized in FY 22-23. The other major activity undertaken is towards transportation, storage and sale of petroleum products. While the coverage of IndianOil's retailing activity is distributed across India, the company's retail outlets, dealer / distributor network and road & rail based product transport are all operated by our partners. Thus, majority of the emissions from product supply and marketing fall outside the purview of the operational boundary. The energy consumption in downstream transport and retailing of products, accordingly accounts for roughly 3% of the total operational energy consumption.

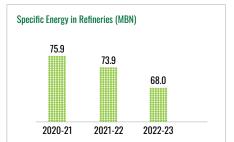
In the FY 2022-23, IndianOil's total energy consumption stood at ~302,000 TJ, which is around 4% less from FY 2021-22. The refineries have showcased exceptional energy utilisation performance to achieve a remarkable MBN¹ of 68. This achievement marks a significant improvement, with a 7.6% reduction compared to the previous year of 2021-22. Moreover, the refineries reached another milestone by attaining an outstanding Energy Intensity Index (EII) of 96.1. This accomplishment demonstrates a 7.6% decrease from the previous year. These achievements highlight the refineries'

Reduction in Energy Intensity from 104.1 in FY 2021-22 to 96.1 in FY 2022-23

<sup>1</sup> MBN is the short-form for MMBTU of Energy consumption / Billion Barrel of Crude processed / NRGF (Refinery complexity factor)

commitment to efficient energy utilisation and their continuous efforts to optimise operations. We witnessed a record capacity utilization of over 103% and a historic crude processing volume of 72.4 Million Metric Tonnes (MMT) during the period.

IndianOil undertakes suitable actions and mitigation efforts to reduce energy consumption from operations. Rigorous benchmarking studies and energy audits, conducted by both international and national bodies, aid in identifying energy-saving measures across operational locations and administrative buildings. Our strategy towards greening operations revolves around reducing energy consumption and transitioning to low-carbon fuels. Our proactive approach to energy conservation involves the deployment of designated energy managers at various locations, responsible for pinpointing and executing energy-saving measures. Additionally, regulatory compliance mechanisms, such as the reduction of specific energy consumption (MBN) and participation in the Perform, Achieve & Trade (PAT) scheme, further drive efficiency initiatives. Overall, the company's target is to attain Net-Zero operational emissions by 2046. This ambitious goal is being pursued through a multifaceted approach, involving energy efficiency projects. the adoption of low-carbon fuels such as natural gas, Compressed Biogas, green hydrogen, and renewable energy amongst others.



#### **Energy Conservation**

Energy conservation in the oil and gas sector is crucial for sustainable resource management and environmental protection. Implementing efficient extraction, refining, and distribution processes, along with investing in renewable alternatives, can significantly reduce the industry's carbon footprint and dependency on finite fossil fuels.

#### **Energy Saving Schemes**

Operating of HDT MUGC-B on Grid at Guwahati Refinery

Commissioning of WSA to generate steam and H<sub>2</sub>SO<sub>4</sub> at Haldia Refinery

Recovery of PSA-II off gas and routing to FG header at Gujarat Refinery

Coker De-ethanizer/Stripper inlet feed preheater for reduced MP Steam consumption in DCU at Paradip Refinery.

Crude preheat improvement by 5°C

**119** ENERGY CONSERVATION SCHEMES

ENERGY SAVING

2,55,379 SRFT/ Mear

MONETARY SAVINGS

₹840 Crore/ Mear

EMISSION REDUCTION ACHIEVED

0.81MMTCO2e/YEAR

#### Installation of LED lights

IndianOil has taken an initiative to replace all conventional lights with LEDs. Around 0.06 MMTCO<sub>2</sub>e emissions reduced from LED lights by replacement of conventional lights during FY 2022-23



IndianOil's Paradip Refinery

#### Improving energy intensity

Eight of IndianOil's owned refineries, excluding Digboi Refinery, were identified as Designated Consumers within the Perform-Achieve-Trade (PAT) Scheme (Round-VI) of the Bureau of Energy Efficiency. As part of this initiative, specific energy reduction targets (measured in MBN) have been assigned to refineries for the fiscal year 2022-23. Four refineries - Guwahati Refinery, Barauni Refinery, Mathura Refinery, and Paradip Refinery - have successfully attained their respective PAT-VI targets. Other refineries are working towards achieving the PAT target but remain steadfast in their pursuit to meet the energy reduction targets set. Regular

meetings are undertaken by the Ministry to follow-up on the progress and challenges faced by the mega units. Smaller marketing / pipeline locations and the retail network are becoming more efficient and energy prudent through adoption of measures such as energy audits, digitalisation and energy efficiency in processes & buildings.



IndianOil's Panipat Refinery

#### **Accounting and Management of emissions**

IndianOil regularly monitors and evaluates its GHG footprint across locations and transparently discloses the same. For GHG accounting, IndianOil has adopted the operational control approach and accounts for 100% of GHG emissions from its operating locations in India. The Company accounts for Scope-1 or Direct Emissions & Scope-2 or Energy Indirect emissions.

The most common GHGs from the oil & gas sector, i.e. carbon dioxide  $(CO_2)$ , methane  $(CH_4)$  and nitrous oxide  $(N_2O)$ , are considered for refineries and petrochemical plants (which account for 97% of our total operational emissions), whereas only carbon dioxide emissions are considered for other operations.

For estimating Scope-1 emissions, IndianOil considers fuel use in the stationary processes, captive electricity generation and mobile emissions from company owned vehicles.
Flaring emissions are limited in refinery operations but are still accounted for separately. Fugitive, N<sub>2</sub>O and methane emissions are calculated on overall direct emissions as per API's GHG Compendium 2009. Scope-2 or energy indirect emission is only on account of grid electricity imports. While refineries meet most of their energy requirement through captive generation and grid electricity is the most common energy in marketing and pipeline operations, which are at a much smaller scale.

Emissions (Scope 1 & Scope 2)

0.71

0.7

20.83

20.21

2020-21

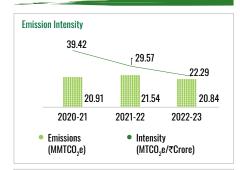
2021-22

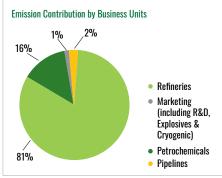
2022-23

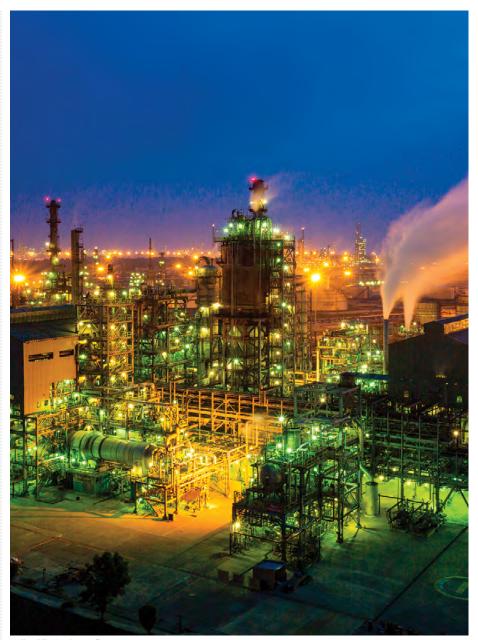
Scope 1 Emissions (MMTCO<sub>2</sub>e)

Scope 2 Emissions (MMTCO<sub>2</sub>e)

Refining activity accounts for over 81% of the operational emissions with additional 16% from petrochemicals operations. Within these, the units responsible for most emissions come from captive power plants and process furnaces. The company is undertaking efforts to increase grid electricity and renewable energy integration to meet its electricity requirement. For process fuels, IndianOil is exploring opportunities in transitioning to greener fuels like natural gas, compressed biogas and green hydrogen. Our combined Scope 1 and Scope 2 emissions were 20.84 MMtCO<sub>2</sub>e, a reduction of 3.25% is achieved from FY 2021-22 i.e., 21.54 MMtCO<sub>2</sub>e.





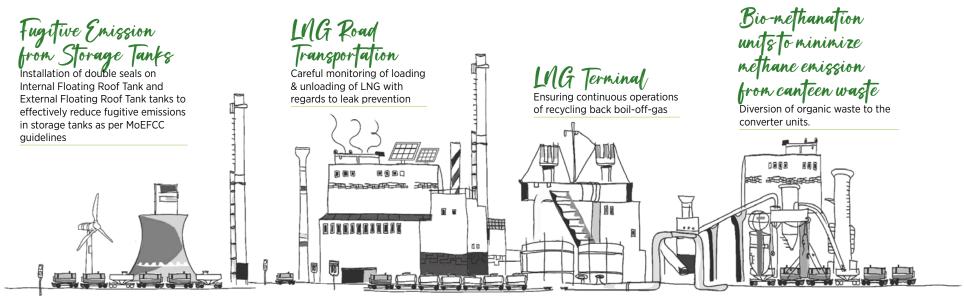


IndianOil's Panipat refinery

#### **Methane Emissions**

We recognize methane as a potent greenhouse gas (GHG) due to its higher impact towards global warming. The primary sources of methane emissions at IndianOil remain any unburnt hydrocarbon leakage from stacks, fugitive emissions and any leaks during LNG operations. Methane emissions are not actively measured in refineries and are only estimated values at present, using standardised emission factors. As per the API GHG Compendium, methane emissions account for a lowly 0.5% of stationary emissions. While emissions due to LNG operations are currently excluded from the scope of this report as they remain outside the boundary of the current report. While acknowledging the potency of methane gas and the growing regulations around methane emission reporting and its mitigation, IndianOil has undertaken suitable efforts to minimize methane leaks.

#### **Abatement measures for Methane emissions**



## Fugitive Emissions from Refineries

Implementation of Leak Detection and Repair (LDAR) program for rigorous monitoring.

Robust repairing of identified leaks within specified timeframes, particularly for general hydrocarbons.

Compilation and maintenance of leak inventory as part of comprehensive monitoring efforts

#### Fugitive Emissions in Wastewater Collection and Treatment

Installation of Volatile Organic Compound recovery systems at Guwahati, Barauni, Mathura, Panipat Naphtha Cracker and Paradip Refineries. At present, same is underway at the Effluent Treatment plants of Gujarat and Panipat Refineries

## Leakage / Losses from pipeline transport of Natural Gas

Conduction of patrolling and monitoring of pipeline network by line patrolmen.

Monitoring of operational parameters in pipelines are using Supervisory control and data acquisition, Leak Detection System, and other methods

## Methane abatment through actions outside boundary (Compressed Biogas)

3,267 Letter of Intent (LOIs) granted by IndianOil for the production and supply of 8.5 million metric tonnes per annum (MMTPA) of Compressed Biogas (CBG), as March 31, 2023

Commencement of CBG marketing from 22 CBG Plants, distributing through 46 Retail Outlets and serving 2 Industrial Consumers.

#### Scope 3 emission

IndianOil accounts for value chain emissions to understand the overall impact of its business. We have been primarily estimating the emissions from the use of sold products, against which green product offerings are being developed. This has been a major downstream value chain emission source contributing to significant emissions. This year, we have added three other sources of upstream value chain emissions, namely upstream transport (shipping of crude and natural gas), waste processed (hazardous and non-hazardous waste and emission from business travel (air travel undertaken by employees). The total GHG emissions from these four Scope-3 sources are estimated to be about 300 MMTCO2e, with the emissions from the use of sold products being the primary contributor with over 90% emission contribution. Thus, a primary effort made by the company is to increase its green product portfolio.

**TOTAL SCOPE-3 EMISSIONS** 

301.50 MMTCO2e

CATEGORY 4

Upstream Transportation
and Distribution

EMISSION

22.34 MMTCO<sub>2</sub>e

CATEGORY 5
Waste Generated at Operations

EMISSION
1.7 MMTCO<sub>2</sub>e

CATEGORY 6

Business Travel

EMISSION **0.02** MMTCO<sub>2</sub>e

CATEGORY 11
Use of Sold Products

EMISSION 277.44 MMTCO<sub>2</sub>e

#### **Assumptions**

Category-4 Only Shipping has been taken under consideration for calculations. Emission factor sourced from five-year plan (2012-2017) report for economic sector by Planning Commission, Government of India.

Category-5 Emission factor sourced from DEFRA, 2018. Emission factor for Oil waste has been taken as 1% of emission factor for Industrial and commercial waste.

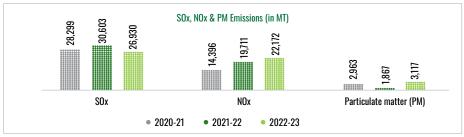
Category-6 Only Air Travel has been taken under consideration for calculations. Emission factor sourced from five-year plan (2012-2017) report for economic sector by Planning Commission, Government of India for Air Travel, and IPCC, 2006 for diesel.

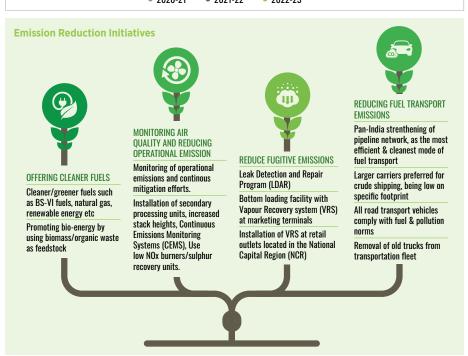
Category-11 Emission factor sourced from IPCC, 2006

#### **Air Emissions**

We are committed to our environmental stewardship, placing a strong emphasis on responsible air emissions management to safeguard local communities and the ecosystem. In the FY 2022-23, air emissions has been decreased in comparison to previous year. IndianOil has implemented a range of measures and strategic initiatives to curtail operational emissions, including fugitive emissions. These

endeavours not only prioritize the well-being of neighbouring communities but also align with our broader mission of combatting climate change and ensuring a sustainable environment for generations to come. Adhering to the regulatory standards outlined by the National Ambient Air Quality Standards (NAAQS), IndianOil diligently upholds statutory requirements concerning Ambient Air Quality (AAQ) parameters.





#### **Emission Mitigation Initiatives and their Impact**

Emission mitigation is a multifaceted and continuous endeavour that necessitates collaboration among governments, industries, local communities, and individuals. The imperative of addressing climate change has amplified the significance of such mitigation endeavours, aiming to curtail the extent of global warming and its consequential effects. We are conscious about our operational and product-associated emissions and is resolutely engaged in curtailing their magnitude.

## TOTAL EMISSIONS AVOIDED/ 3-80 MMTCO e



#### **Energy Conservation**

The energy conservation (ENCON) projects implemented in refineries and petrochemical plants during the reporting period have the potential to save 2,55,379 Standard Refinery Fuel Tonnes (SRFT) in refinery complexes.

More details given in section Energy Conservation (Energy Management)



#### **Efficient Lighting**

IndianOil has made a committment to replace all the conventional lights with LEDs, replaced approx 9 lakh non-LEDs with LED lights by end of FY 2022-23

More details given in section Energy Conservation (Energy Management)



#### **Fuel Replacement- Promoting Natural Gas**

In our refinery operations, we advocate the adoption of low carbon fuels like natural gas over fuel oil, naphtha, or high-speed diesel, recognizing natural gas as a cleaner alternative.

More details given in section Natural Gas (Product Stewardship)



#### Tree Plantation & Innovative Carbon Capture Initiatives

We conduct extensive tree plantations across various sites, resulting in an estimated 5 million trees thriving both within and beyond the premises.

<u>More details given in section</u> <u>Afforestation (Biodiversity Conservation)</u>



#### Renewable Energy

We have a total renewable energy portfolio of 238.70 MW capacity, comprising of both grid connected and off-grid solar projects. We are also promoting solarisation of our retail network as well.

More details given in section
Renewable Energy (Energy Management)



#### **Pipeline Transportation**

Pipeline transportation outperforms rail transit, emitting 75% fewer  $\mathrm{CO}_2$  and greenhouse gases for equivalent throughput, while ensuring control and efficiency. IndianOil's deliberate emphasis on eco-friendly modes like coastal shipping and pipelines is evident in our expansive 17,000+ kilometer network, facilitating the supply of crude and finished products.

More details given in section
Pipeline Transportation (Greening the Value Chain)

#### **Decarbonization**

At the forefront of IndianOil's sustainability agenda lies the imperative of decarbonization, a commitment underscored by our pursuit of the ambitious goal of achieving Net Zero by 2046. It is our unwavering resolve to attain Net-Zero status in operational emissions (Scope 1 & 2) by 2046 that drives our actions. Long preceding this formal commitment, our dedicated teams have been diligently forging green energy pathways, acting as catalysts for India's eco-friendly transformation. This multifaceted approach converges harmoniously with India's overarching aspiration of realizing Net Zero by 2070. We approach this mission with a profound sense of urgency, as evidenced by the swift implementation of measures aimed at curtailing operational emissions both within our facilities and across our extensive supply chain. Harnessing the power of innovation and cutting-edge technology, IndianOil is focused on not only refining our processes but also revolutionizing our product offerings to ensure a future that is greener and more sustainable. In this unwavering commitment, our dedication is fortified by significant investments in renewable energy, which serves as a pivotal driver in propelling the transition towards a low-carbon economy.

#### **Our Advancements in FY 2022-23**

We have demonstrated remarkable progress in reducing emissions, showcasing an unwavering dedication to environmental sustainability. We have successfully achieved substantial decrease in greenhouse gas emissions, making significant strides in curbing our carbon footprint and effectively addressing the challenges posed by climate change.

IndianOil is actively moving forward with the integration of the existing environmentally friendly assets under a unified initiative known as 'The Green Umbrella Entity.' This pivotal step was unveiled during the inaugural IndianOil Green Energy Summit in March 2023, 2023, marking the beginning of a dynamic expansion into various sustainable energy sectors. These encompass a diverse range of areas such as biofuels, renewable energy sources, green hydrogen, and low-carbon value chains, including initiatives like Carbon offsets and CCUS (Carbon Capture, Utilization, and Storage). This strategic move reflects IndianOil's commitment to accelerating its presence in the realm of sustainable energy and advancing its efforts towards a greener future.



Chairman launching IndianOil's Net Zero Action Plan

# Signi ToU if Revelope Renewab Renewab Cergy Projection of Large Renewab Ce

Signing of MoU with SJVN for renewable projects at Green Energy Summit

#### IndianOil's role in Oil & Gas sector green transition

We are an integral member of the *Energy Transition Advisory Committee (ETAC)*, a strategic body established under the guidance of the Ministry of Petroleum & Natural Gas (MoP&NG). This committee has been mandated to chart a definitive pathway for the energy transition within the Oil & Gas Public Sector Undertakings across the nation. In a recent development, ETAC has successfully curated a comprehensive report titled 'The Green Shift,' which outlines the low carbon trajectory for India's Oil & Gas sector.

Notably, we have made significant contributions to this pivotal endeavour by providing valuable insights and inputs across a spectrum of domains. These contributions encompass vital areas such as clean energy solutions, renewable energy integration, decarbonization strategies, and a host of other relevant facets. Through our active participation, we have played a pivotal role in shaping the roadmap for a sustainable and environmentally conscious evolution of the Oil & Gas sector in India.

#### **Renewable Energy**

IndianOil was amongst the first PSUs to adopt renewable energy in the country. From rooftop solar to large-scale grid connected renewables to innovative indoor solar cooking systems to deploying solar systems in distributed retail network, IndianOil has been growing its renewable energy portfolio. The company's current renewable energy capacity stands at 238.7 MW, which generated 367.82 GWh of energy in 2022-23, estimated to have resulted in emission mitigation of 299.77 thousand metric tonnes of carbon-dioxide equivalent. The company has set ambitious targets of establishing a portfolio of 31 GW Renewable Energy by the year 2050.

Through a recent collaboration with NTPC Green Energy Limited, we are poised to significantly augment our renewable energy capacity by a further 2 GW. The power generated from the project would be used as energy for planned refinery expansions. We are also collaborating with SJVN Limited for expanding the renewable bouquet with solar, wind, hydro and hybrid power. The proposed JV will also develop Energy Storage Systems for the supply of 24X7 power.

₹ 582.80 Crore
Investment in renewable energy and greening efforts

WIND CAPACITY

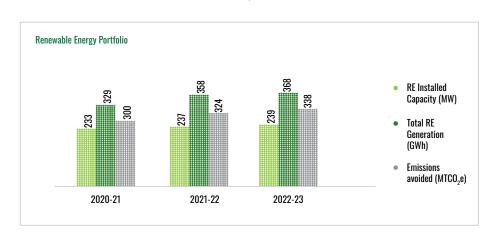
167.6 MW

SOLAR PHOTOVOLTAIC (PV) CAPACITY

71.10 MW

EMISSION AVOIDED IN FY 2022-23

0.34 MMTCO<sub>2</sub>e





#### **Bio-Energy**

#### **Compressed Biogas (CBG)**

We are leading the way in spearheading the Sustainable Alternative Towards Affordable Transportation (SATAT) program initiated by the Indian government to advance Compressed Biogas (CBG) as an eco-friendly fuel for vehicles. As a significant part of this ambitious endeavour, we have granted 3,267 Letters of Intent (LoIs) for the development of CBG plants, collectively capable of producing 8.5 Million Metric Tonnes Per Annum (MMTPA). Impressively, 22 CBG plants are already under commission, underscoring our steadfast dedication to sustainable energy solutions.

By leveraging our widespread retail infrastructure and distribution network for Compressed Natural Gas (CNG), IndianOil has assumed a pioneering role in the sale of CBG to consumers. Through 46 retail outlets across 9 states, we provide CBG under the banner 'IndiGreen.' This ground-breaking initiative has expedited the acceptance of CBG as a feasible and environmentally friendly vehicular fuel, playing a substantial role in curbing carbon emissions and fostering sustainable transportation options within the nation.



Signing of term sheet between IndianOil and Praj

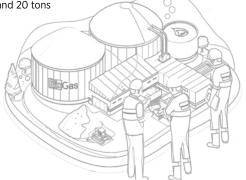
#### Hingonia Cattle Rehabilitation

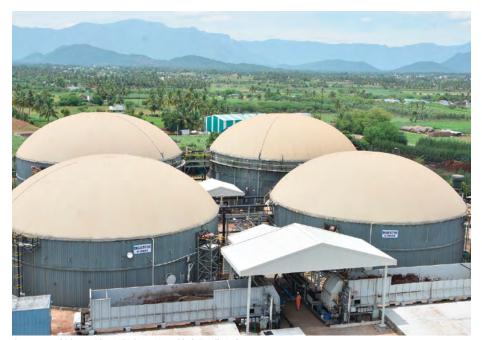
Embarking on a notable Corporate Social Responsibility (CSR) endeavour, we have successfully established an advanced cattle dung to biogas facility at the Hingonia Cattle Rehabilitation Centre (HCRC) in Jaipur. This ecologically sound solution not only enhances waste management efficiency but also contributes to the generation of sustainable energy. Managed by the Sri Krishna Balram Trust (SKBT), an affiliate of the Akshaya Patra Foundation, HCRC serves as a prominent gaushala accommodating around 20,000 cattle.

This state-of-the-art biogas plant based on our R&D technology has a processing capacity of 100 tons of cattle dung every day to produce

6 tons of Compressed Biogas (CBG) and 20 tons

of bio-manure. At full capacity, the plant will replace nearly 1 lakh LPG cylinders previously utilized for preparing mid-day meals for 1.5 lakh children and approximately 10,000 homeless people every day. This transformative transition towards CBG as a cooking fuel significantly diminishes the carbon footprint and ushers in positive environmental and socio-economic advantages.





Compressed Biogas Plant (CBG) at Namakkal, Tamil Nadu

#### 2G Ethanol

Our pioneering 100 kilo-litres per day 2G Ethanol plant at Panipat Refinery, to produce ethanol from rice straw, was dedicated to the nation by the Hon'ble Prime Minister in August 2022. This advance plant deploys cutting-edge indigenous technology, marking a transformative phase in India's waste-towealth initiatives. With a capacity to utilize two lakh tonnes of rice straw, it generates an annual yield of three Crore litres of Ethanol, destined for blending with gasoline. Distinguished as the first-of-its-kind project in Asia, it signifies a crucial step in combatting stubble burning and the consequent air pollution challenge. The ethanol produced will be blended into petrol to contribute towards achieving the Government of India's 20% ethanol blending target.

By employing 2.2 lakh MT of feedstock annually. this plant contributes to a reduction of approximately 3 lakh tonnes of GHG emissions. an environmental equivalent of removing over 63,000 cars from the nation's roads each vear.

#### **3G Ethanol**

IndianOil achieved a significant milestone by establishing a 128 kilo-litres per day 3G ethanol plant at Panipat. This innovative facility has been developed based on the technology provided by Lanzatech, USA for utilizing refinery off-gas to produce ethanol. With an annual production capability of 4.2 Crore litres of ethanol, the plant can contribute towards the avoidance of approximately 1.8 Lakh tonnes of GHG emissions per annum.

#### **Ethanol Blending**

During the FY 2022-23, India's Prime Minister inaugurated the sale of petrol with 20% blending of ethanol (E-20) from 84 fuel stations across 11 states and union territories. Cumulatively, IndianOil has achieved an overall ethanol blending of 12% as of end of FY 2023. This momentous stride in eco-friendly fuel reinforces India's steadfast dedication to sustainable energy practices.

In alignment with the Government of India's target of attaining 20% ethanol blending, we have taken the initiative of transporting ethanol-blended petrol through our product pipelines. Further, IndianOil has introduced E-100 standalone ethanol fuel at select retail outlets.

#### Sustainable Aviation Fuel (SAF)

Anticipating the surge in global demand for Sustainable Aviation Fuel (SAF) driven by preparations to meet CORSIA (Carbon Offsetting and Reduction Scheme for International Aviation) requirements, we are actively exploring avenues for SAF production. We have outlined plans for the establishment of 86.8 Thousand Metric Tonnes Per Annum (TMTPA) SAF Plant in collaboration with LanzaJet at Panipat, to be operated through a Joint Venture (JV) Company. Additionally, we are also in the process of forming a JV Company with Praj Industries Ltd. to facilitate the creation of SAF and other biofuel projects.

A significant milestone was achieved in May 2023, as India's petroleum minister witnessed the commencement of the country's inaugural commercial flight powered by Sustainable Aviation Fuel (SAF). This remarkable achievement signifies a substantial stride towards the reduction of carbon emissions in the aviation sector, symbolizing our commitment to decarbonizing air travel.



MOU signing with LanzaJet for exploring opportunities in Sustainable Aviation Fuel (SAF)



Setting the groundwork to help you fly high

#### **Circular Economy**

Our commitment to the Circular Economy is clear in our efforts to reduce, reuse, and recycle in our operations. In the energy industry, which relies on fossil fuels, we understand the importance of minimizing waste and using resources efficiently. We've worked closely with our supply chain partners to set up a strong system for collecting and recycling waste materials. some of the materials are then combined with new resources to create innovative products that contain a certain percentage of recycled content. This approach helps us support the Circular Economy by turning waste into valuable resources, reducing the pressure on limited natural resources, and lessening our impact on the environment.

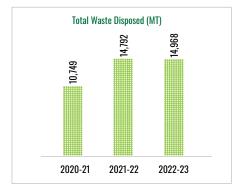
#### Reduce

At IndianOil, our unwavering commitment to environmental sustainability finds a powerful expression through our comprehensive waste management practices. Recognizing the critical role waste plays in shaping our ecological footprint, we are steadfastly dedicated to implementing efficient waste management strategies that minimize waste generation and mitigate its impact on the environment. Central to our endeavour is the resolute aim of curbing waste accumulation in landfills, thereby fostering a cleaner and healthier ecosystem. Through a series of well-thought-out initiatives, we are diligently working to divert both organic and plastic waste from reaching landfills, channelling them towards productive recycling and reuse avenues whenever feasible.

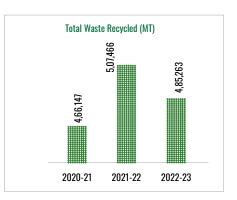
Our waste management journey commences with meticulous segregation into distinct categories - Hazardous and Non-hazardous waste. This strategic categorization empowers us to tailor precise handling and treatment processes, aligning with the rigorous standards established by the Central Pollution Control Board (CPCB) and State Pollution Control Boards (SPCBs).

2 lakh tonnes of agriculture waste is converted into ethanol every year in a 2G ethanol plant at Panipat.

98% WASTE DIVERTED AWAY FROM LANDFILLS IN FY 2022-23 280 MT WASTE PAPER RECYCLED IN FY 2022-23







#### Guwahati Refinery's 'Zero Waste Townships'

Guwahati Refinery (GR) has taken a momentous stride on the path of environmental sustainability by proudly designating its expansive three townships - Sectors I, II, and III - as 'Zero Waste Townships.' The transformative journey began in 2021, when GR embarked on a mission to redefine the waste management landscape within its townships. With an unwavering determination to minimize waste generation and ensure responsible waste disposal, a comprehensive waste management system was meticulously put into action. The core objective of this ambitious undertaking is to curtail waste at its source and ensure that every bit of waste is judiciously managed and seamlessly integrated into recycling mechanisms.

The collective dedication of the entire community has propelled Guwahati Refinery towards the realization of this milestone. By passionately embracing the principles of a circular economy, GR has skill-fully woven together the threads of waste management, resource conservation, and environmental stewardship. The innovative circular approach ensures that waste materials find new life and purpose, either by reincorporating them into the production cycle or channelling them into valuable applications, thus dissolving the very concept of waste. As we celebrate the success of our 'Zero Waste Townships,' we stand firm in our resolve to continue pioneering initiatives that champion environmental harmony and contribute to a brighter, more sustainable future for all.

#### Reuse

In FY 2022-23, IndianOil successfully met its Extended Producer Responsibility (EPR) targets pertaining to plastic packaging waste recycling. Specifically, the company achieved a commendable 70% recycling rate for the total plastic packaging utilized in their lubricant products. Furthermore, IndianOil obtained EPR certificates as recognition of their accomplishment in meeting this recycling milestone. This accomplishment underscores the company's commitment in line with global emphasis on reducing plastic waste and sustainability & responsible waste management practices within its operations

#### Recycling

Indian Oil is proactively seeking avenues to establish plastic neutrality through the expansive integration of recycling mechanisms for plastic waste and innovative reutilization of non-recyclable plastics into value-enhancing products. This strategic composition of a robust circular value chain underscores our resolute dedication to curtailing and repurposing plastics. further fortifying our enduring pledge to

#### **CYCLOPLAST - Elevating Sustainability Through Circular Innovation**

IndianOil proudly presents CYCLOPLAST, an innovative addition to our esteemed product portfolio. By seamlessly integrating recycled plastics into our offerings, we are actively championing a circular paradigm that transcends conventional boundaries. The essence of CYCLOPLAST lies in its unique composition, blending recycled petrochemicals with a carefully calibrated proportion of virgin or individual plastic components. This ingenious fusion not only bestows our products with enhanced utility but also serves as a powerful catalyst for diverting plastic waste away from overburdened landfills. Our dedication to quality and sustainability is evident in the meticulous sourcing of recyclates from established and reputable recyclers, which help us in achieving the production of plastic products comprised entirely of 100% recycled waste materials. With CYCLOPLAST, IndianOil is not just embracing innovation; we are shaping a more sustainable and harmonious future for generations to come.

environmental sustainability.

As a proud participant in the Ministry of Petroleum & Natural Gas's (MoP&NG's) Petroleum Conservation Research Association (PCRA), we actively engage in an array of promotional and awareness initiatives aimed at fostering sustainable consumption behaviour and practices. A landmark in our trajectory towards effective plastic waste

management is the pioneering development of the INDEcoP2F technology. This groundbreaking, patented innovation empowers us to ingeniously convert single-use plastic waste into premium-grade, valuable fuel. Through this transformative process of converting disposable plastic waste into a resource of significant value, we are making noteworthy strides towards nurturing a more sustainable and circular economy.

#### Introducing 'Unbottled' - Our Green Uniform Initiative

At IndianOil, our commitment to environmental stewardship has led us to take a momentous stride towards sustainability with the launch of our innovative and eco-conscious uniform, through our 'unbottled' initiative. This ground-breaking initiative marks a transformative shift in our approach by crafting uniforms entirely from recycled PET bottles, symbolizing our dedication to safeguarding the planet. Recognizing the alarming impact of plastic waste on our environment, 'unbottled' represents a tangible effort to combat the further degradation

caused by plastics. By repurposing discarded PET bottles into durable and functional uniforms, we are not only reducing plastic waste but also pioneering a new standard for sustainable practices within our industry. We have pledged to exclusively order eco-friendly uniforms made from recycled polyester.

Our commitment to this green initiative was further exemplified when we proudly presented the 'Unbottled' jacket to Prime Minister Shri Narendra Modi during Indian Energy Week, 2023. Moreover, this eco-friendly attire was graciously extended to Mr. Bill Gates by our Chairman, further underscoring the significance of this endeavour on a global stage.

This ambitious undertaking is projected to contribute to the recycling of 20 million PET bottles.



Launch of 'Unbottled'- Our Green Uniform Initiative

#### **Waste Management Initiatives**

IndianOil continues to make remarkable progress in reducing the environmental footprint demonstrating our commitment to responsible resource management. Our Purified Terepthalic Acid (PTA) plant has optimized its packaging capacity, reducing plastic usage by approximately 11,000 jumbo bags and 30.8 MT of plastic per year.

IndianOil remains committed to advancing plastic recycling efforts, including the innovative use of single-use plastic in the construction of durable bituminous roads. This pioneering approach not only ensures responsible disposal of single-use plastics but also contributes to the development of robust and eco-friendly road infrastructure

IndianOil SERVO has introduced a pioneering initiative by launching a container made with 30% PCR (Post-Consumer Recycled) plastic. This progressive step highlights our commitment to reducing plastic waste and championing the use of recycled materials in packaging, solidifying our reputation as an environmentally conscious brand. In our quest for a sustainable future, we are also diligently working towards responsible disposal of used lubricant oil containers. adhering to MoEFCC guidelines. Our initiatives extend to establishing statewise collection centres, embodying our ethos of environmental responsibility.

#### Waste Management at IndianOil

At IndianOil, our unwavering commitment to environmental sustainability finds a powerful expression through our comprehensive waste management practices. Recognizing the critical role waste plays in shaping our ecological footprint, we are dedicated to implementing efficient waste management strategies that minimize waste generation and mitigate its impact on the environment.



Recovered through various methods and processed in refinery.

Residues are bio-remediated, used as per requirement once reaches desirable limit.

#### Spent Catalyst

Recoverable metals is sold to authorised recyclers including SPCB approved cement manufacturing and producers of refractories, ceramics, and other materials.

Non-recyclable material either given to approved Treatment, Storage, and Disposal Facilities (TSDF) or kept at designated common hazardous waste disposal sites.

#### Bio-Medical Waste

Collected at designated area of the hospital for maximum upto 48 hours before disposing it through SPCB approved agency for treatment & disposal

#### E-Waste

Sold to authorised recyclers or collected under repurchase agreements by equipment providers

Hazardous Waste

Non-Hazardous Waste

#### Organic Waste

Either converted into compost and/ or biogas through use of biogas or organic waste converter units.

#### Waste Paper

Sold to designated recyclers.

Some offices have a tie-up with recyclers for provision of stationary in return of waste paper

#### Plastic Waste

As a petrochemical producer, IndianOil takes Extended Producer Responsibility (EPR) to undertake recycling of plastic waste.

Undertaking efforts for segregation and upcycling of plastic waste, developing process fuels and use in road making.

## Ferrous Scrap & Other Recylables

Other recyclable wastes such as metal, rubber, etc., are stored in scrapyards & sold to SPCB authorised recyclers.

#### Water Stewardship

Water holds an irreplaceable significance in our quest for sustainability. At IndianOil, our dedication to water stewardship runs deep. reflecting our profound understanding of water as a finite and invaluable natural asset, intricately interwoven with our production processes. Central to our ethos is a resolute commitment to sustainable water management. We have orchestrated a symphony of measures aimed at conserving and optimizing water utilization, fully recognizing its pivotal role in our operations. A cornerstone of our approach lies in the vigilant monitoring and measurement of our freshwater consumption—a foundation upon which our water stewardship practices are meticulously built.

Our endeavours extend to the realm of wastewater, where we champion the recycling of discharged water through advanced effluent treatment plants. This strategic recycling not only minimizes the burden on freshwater sources but also exemplifies our dedication to holistic resource management. Equally crucial is our acute awareness of local water intricacies—challenges of scarcity, policy dynamics, and quality concerns. In response, our water management strategies are thoughtfully tailored to align with the unique exigencies of each region, underscoring our flexible and adaptive approach. By embracing sustainable practices, we forge a formidable shield against water scarcity, champion the preservation of aquatic ecosystems, lend vital support to agriculture, and diligently secure a dependable water supply for both humanity and nature. A prime manifestation of this commitment is the monthly monitoring of freshwater consumption across IndianOil Refineries—a testament to our unwavering resolve.

TOTAL WATER CONSUMPTION

146.19 Billion Litres

RECYCLED WASTEWATER USAGE

38.18 Billion Litres

FRESHWATER CONSUMPTION

103.40 Billion Litres

YEAR-ON-YEAR REDUCTION IN SPECIFIC WATER CONSUMPTION

TOTAL WASTE WATER RECYCLED IN FY 2022-23

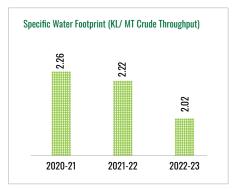
#### Water Withdrawal and discharge in water stress areas

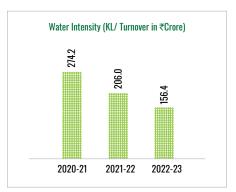
In water-stress areas, such as Mathura (Uttar Pradesh), Vadodara (Guiarat), and Panipat (Haryana), where we operate our refineries, we are taking proactive measures to address water scarcity challenges. The World Resources Institute's (WRI) Aqueduct Water Risk Atlas identifies these regions as areas with extremely high-water stress. To mitigate the impact on freshwater resources. our refineries in these locations have implemented several water management strategies. These include the adoption of advanced wastewater recycling techniques, improved water efficiency

practices, and the implementation of rainwater harvesting systems to reduce freshwater usage significantly.

Additionally, we maintain rigorous monitoring regime of the quality of all discharges from refineries. Through stringent tracking and management, the effluent discharge from the refineries has been marginally reduced, contributing to the company's commitment to environmental sustainability and responsible water stewardship in water-stressed regions.

#### **Specific Water Consumption**





#### Efforts towards minimizing freshwater Consumption

IndianOil is in cognizance of growing global water scarcity and have taken concreated efforts to reduce the freshwater consumption. We harmonize diverse efforts to make significant advancements in minimizing freshwater consumption.



Wastewater Recycling



Rainwater Harvesting



Water Conservation

#### **Wastewater Recycling**

We place great emphasis on wastewater recycling to ensure responsible water management and minimize our environmental impact. All our refineries are equipped with state-of-the-art Effluent Treatment Plants (ETP) that employ physical, chemical, biological, and tertiary treatment processes. IndianOil refineries continuously monitor effluent quality for parameters. We seek due consent from statutory bodies before any wastewater discharge.

#### Use of State-of-the-art technology for wastewater recycling

#### Effluent Quality Monitoring

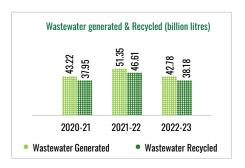
Our refineries consistently monitor the quality of effluent through various parameters, including pH (acidity/alkalinity), BOD (Biological Oxygen Demand), COD (Chemical Oxygen Demand), and TSS (Total Suspended Solids). This rigorous monitoring is conducted to ensure that the treated effluent meets the required standards.

#### Compliance with Regulations

In Marketing and Pipeline locations, effluent water undergoes additional treatment through an oil-water separator before being discharged in strict compliance with the regulations set by State Pollution Control Boards (SPCBs) and Minimum National Standards for Quality (MINAS) guidelines.

#### Reverse Osmosis (RO) Technology

To further enhance water reuse, we have implemented Reverse Osmosis (RO) plants at ETP facilities. The treated effluents are subjected to RO treatment, generating permeate water. This permeates water serves as a valuable resource used as feed for demineralization plants or makeup water for cooling towers.



#### **High Wastewater Reuse**

In FY 2022-23, an impressive 89% of the treated effluent/wastewater was recycled and reused within our refineries. This substantial level of wastewater recycling showcases IndianOil's commitment to sustainable practices and efficient water management.

#### **Reuse of Treated Effluent Water at Refineries**

IndianOil is actively promoting sustainable water management at its Mathura and Gujarat refineries. In Mathura, a groundbreaking Sewage Treatment Plant (STP) established through a Public-Private-Partnership model at Laxmi Nagar has reduced river water intake by 8 MLD, with plans to reach 20 MLD capacity. This innovative approach is reducing freshwater demand significantly. Following Mathura's success, Gujarat Refinery is set to utilize 21 MLD of treated wastewater from Vadodara Municipal Corporation's STP, further reducing reliance on freshwater sources. IndianOil aims to replicate these initiatives across its refineries, emphasizing environmental responsibility and water efficiency company-wide.



#### **Rainwater Harvesting**

Rainwater harvesting (RWH) is an integral part of IndianOil's commitment to water conservation and sustainable practices. Across our various locations and townships, we have implemented extensive rainwater harvesting systems and watershed projects to harness and manage rainwater effectively. The collected rainwater meets the demand for freshwater and as well as used to recharge the groundwater.

IndianOil has covered total of more than 2,900 hectares of catchment area through installation of rainwater harvesting systems. These systems are estimated to have harvested close to 7.2 billion litres of rainwater in 2022-23 (roughly equivalent to 5% of IndianOil's total water consumption).

TOTAL RAINWATER HARVESTING POTENTIAL DURING FY 2022-23

7.2 Billion Litres

OVER

2,900 hectares
CATCHEMENT AREA COVERED IN FY 2022-23

#### Installation of Rainwater Harvesting Systems in Vadodara, Gujarat

The installation of rooftop rainwater harvesting units in government schools has facilitated groundwater replenishment with minimal upkeep requirements, while concurrently enhancing water quality by reducing hardness. Vadodara has achieved the distinction of being the first district nationwide to adopt rainwater harvesting across all government primary and secondary schools, encompassing both urban and rural precincts. A comprehensive undertaking encompassing 732 government schools, this initiative involved the installation of rainwater harvesting systems. This innovative approach has the potential to amass an aggregate of 1,000 - 1,200 Lakh litres of rainwater.

#### **Water Conservation**

IndianOil recognizing the significance of freshwater as a precious resource, we conduct regular audits and checks to ensure responsible and sustainable management of water resources. By monitoring water usage patterns, we strive to reduce wastage and enhance conservation efforts. We have adopted water-efficient processes and practices to minimize freshwater consumption.

#### Water Conservation initiatives by Guwahati Refinery (Guwahati)

Guwahati Refinery (Guwahati) has taken significant strides in water conservation through its "Save Water for Better Future" campaign. With the primary objective of optimizing freshwater consumption for both industrial and domestic purposes, this campaign has garnered participation from all stakeholders, including employees, their families, and contractual workers. The water conservation initiatives undertaken by GR include various strategies to reuse water in refinery operations. This entails the reuse of steam condensate in the thermal power plant, utilizing stripped water in desalting processes, recycling boiler blow-down water in cooling towers, and recovering bearing cooling water from different process units. By implementing these measures, Guwahati ensures the efficient and sustainable use of water resources within its operations.

Additionally, Guwahati has taken steps to enhance water efficiency in its facilities. This involves installing water-efficient push-type taps and level gauges at various locations, ensuring the optimal use of drinking water. The "Save Water for Better Future" campaign also emphasizes the importance of raising awareness among all stakeholders. To this end, GR has conducted various awareness programs, including slogan competitions, quiz contests, and drawing competitions. These initiatives engage and educate employees, their families, and other participants about the significance of water conservation and the role they can play in safeguarding this precious resource.



Water conservation at IndianOil

#### **Biodiversity Conservation**

IndianOil recognizes the significant impact the operations can have on biodiversity and local ecosystems. Knowing that the planet's finite resources require decades to replenish, the preservation of biodiversity is crucial. As part of our commitment to sustainability, we have embarked on several long-term projects that are already yielding positive results.



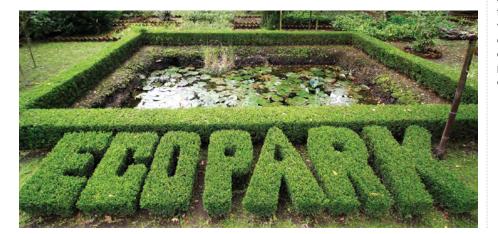
IndianOil is also a member of India Business & Biodiversity Initiative (IBBI), a business-led

initiative of Ministry of Environment, Forest, and Climate Change (MOEFCC), Govt. of India, serving as a national platform for business, to promote sharing and learning, and will ultimately lead to mainstreaming sustainable management of biological diversity by business.

In the realm of environmental stewardship, IndianOil places a paramount emphasis on conducting comprehensive Ecology and Biodiversity studies as an integral part

of the Environment Impact Assessment (EIA) for any new project. This meticulous undertaking is designed not only to ensure compliance with regulatory requirements but to uphold our unwavering commitment to safeguarding the delicate balance of nature. When assessing the potential impact of our projects and business on the local biodiversity, we follow a comprehensive impact assessment process and engage with relevant stakeholders to understand their perspectives and concerns. This approach allows us to identify appropriate solutions and take necessary actions to mitigate any adverse effects on biodiversity and ecosystems.

We along with our value chain partners including suppliers are committed to avoid operational activities near Biodiversity zones or Hotspots. We are steadfast to ensure that all our future operations avoid deforestation activities ensuring positive impact on environment reflected by the initiatives being taken under afforestation Programs.



#### **Tree Plantation**

Afforestation & Greenbelt Development

In FY 2022-23, we have planted approximately 6.6 Lakhs trees within and beyond the boundaries of IndianOil and over 50 Lakhs trees are estimated to be surviving at the end of FY 2022-23. These trees serve multiple purposes, from absorbing carbon dioxide and releasing oxygen to providing habitat for wildlife and improving the overall ecosystem health. Presently, our greenbelt initiative has resulted in a substantial tree cover of over 25 Lakhs. Emission offset in FY 2022-23 due to tree plantation is 0.10  $\rm MMTCO_2e$ .

#### Miyawaki Afforestation

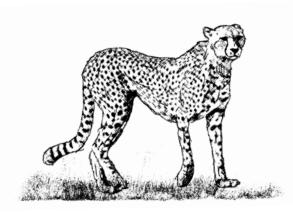
In the FY 2022-23, we have made remarkable strides in environmental conservation by planting approximately 3.6 lakhs trees using the innovative Miyawaki afforestation method, as well as other traditional methods. The Miyawaki afforestation approach involves transforming small areas and spaces into mini forests by closely planting seeds and saplings, maximizing space, and creating dense plant growth.

Van Mahotsav

IndianOil actively participates in the Van Mahotsav week celebrations every year. Last year during this event, we took a significant step towards greening India by planting around 50,000 trees, with over 2,000 of them being Miyawaki plantations across various locations. Additionally, IndianOil distributed 14,000 saplings to encourage the communities in which we operate to actively participate in environmental restoration and contribute to expanding the green cover.

#### Wildlife Conservation

Wildlife conservation and preserving species diversity are critical components of conserving biodiversity, and IndianOil is committed to making a significant impact in this area by contributing to the restoration and protection of natural habitats and ecosystems.

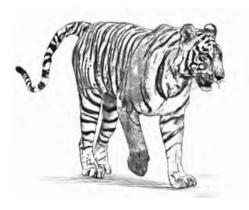


Project Cheetah stands as a shining example of IndianOil's dedication to wildlife conservation. As the first corporate entity to partner with the National Tiger Conservation Authority (NTCA), we played a major role in the ambitious initiative to reintroduce cheetahs to Indian soil. The Government of India's species recovery program selected Kuno National Park (KNP) in Madhya Pradesh as the site for rehabilitating cheetahs in their historic habitat. With our dedicated support, a total of 10 female and 10 male cheetahs were brought to India and were ceremoniously released by Prime Minister Shri Narendra Modi. IndianOil proudly serves as the finance partner for Project Cheetah, demonstrating our commitment to contributing to this noble cause. Over the next five years, we will provide ₹50.22 crore towards cheetah introduction, habitat management and protection, eco-development, staff training, and veterinary healthcare as well.



Rhino Adoption IndianOil's commitment to wildlife conservation extends to the protection and support of critically endangered species like the Indian one-horned Rhino. These majestic creatures have faced significant threats from human hunting over the years, leading to their critical status. We have taken the initiative to adopt one-horned rhinos in zoological parks across various states in the country. Through this adoption program, we provide essential funds for the care and upkeep of these magnificent native species. By actively contributing to their well-being, IndianOil demonstrates its deep-rooted concern for preserving India's unique biodiversity.

Moreover, the great one-horned Rhino holds a special place in the heart of IndianOil as our brand ambassador. The selection of the rhino as our brand ambassador represents the core values and qualities that the species embodies - strength, speed, agility, and longevity. This choice reflects the shared vision of IndianOil in being a force for positive change and sustainability, aligning with the rhino's intrinsic qualities.



**Tiger Conservation** The protection and conservation of tigers hold significant importance in preserving India's rich biodiversity and natural heritage. Recognizing the urgency and importance of tiger conservation, Haldia Refinery, under the banner of IndianOil, has taken a proactive step towards supporting the Sundarban Tiger Conservation Foundation Trust (STFCT) for the modernization of patrolling activities in the Sundarban Tiger Reserve. As part of this noble initiative, Haldia Refinery will contribute ₹2.04 crore to the project. The funds will be utilized to introduce state-of-the-art and high-tech resources to enhance patrolling efforts in the Sundarban Tiger Reserve. The project entails the acquisition of cutting-edge speed boats and multi-utility drones, along with the implementation of a GPS-based monitoring

system for the boats. Furthermore, the initiative will also

involve the construction of floating and concrete jetties

conservation efforts.

and water treatment plants, which will support the overall

#### **Ecosystem Conservation**

Ecosystem conservation is a vital aspect of our commitment towards building a sustainable future and preserving the planet's natural balance. With India's diverse and endangered range of ecosystems, the need to protect and restore them becomes even more crucial in mitigating the impacts of climate change and nurturing rich biodiversity. All refineries of IndianOil instrument various efforts for ecosystem conservation, out of all, our Barauni and Mathura refineries are exemplary models

of coexistence between humans and wildlife, serving as habitats for both indigenous and migratory bird species.

Barauni Refinery has created an eco-park along the banks of the Ganga River in Begusarai, Bihar. This eco-park has become a sanctuary for nearly 100 species of residents and migratory birds, including both water and terrestrial species, during the winter season. The park provides a nurturing environment for these 'winged visitors', with some choosing

to stay and rear their offspring, while others return to their summer homes in the Arctic region. The diverse array of bird species includes the White-Throated Kingfisher, Indian Goldie Oriole, Yellow-Footed Green Pigeon, Eurasian Coot, Bearded Woodpecker, Indian Grey Hornbill, Red Wattled Lapwing, Red-Crested Pochard, Common Hill Myna, and Anhinga.

**Mathura Refinery** has established the Mathura Ecological Park, spanning an area of 18,000

square meters near the Effluent Treatment Plant (ETP). The park thrives on the treated effluent from the ETP, providing a nurturing habitat for approximately 1,500 native trees and shrubs of around 45 different species. The refinery is dedicated to continuous plantation efforts to further enhance the park's green cover and diversity. The Mathura Ecological Park serves as a peaceful sanctuary for a diverse range of flora and fauna.



#### IndianOil on Mission LiFE

Mission LiFE (Lifestyle for Environment) is a Ministry of Environment, Forests and Climate Change (MoEFCC), Govt. of India initiative, to mobilize individuals to become 'Pro-Planet People'. Mission LiFE acknowledges that the ecological wisdom ingrained within Indian culture and customary practices is fundamentally eco-friendly. The significance of safeguarding our invaluable natural resources and coexisting

harmoniously with the environment is strongly underscored in our age-old scriptures. What is currently imperative revolves around drawing insights from this age-old sagacity and proliferating this ideology extensively. Mission LiFE aspires to unify the endeavours of individuals and communities, steering them towards a worldwide collective initiative that fosters affirmative shifts in behaviour.

"Mission LiFE can become a mass movement of Environmental Conscious Lifestyle. What is needed today is Mindful and Deliberate Utilisation, instead of Mindless and Destructive Consumption."

> Hon'ble Prime Minister Shri Narendra Modi Introduces Mission Life to the world at the 26th UN Climate Change Conference of the Parties (COP26) in Glasgow.



#### Initiatives under LiFE themes

#### Conserve Energy & Save Energy

- Display of banners and posters in IndianOil retail outlets.
- Distribution of LED bulbs in villages under Government-Supported Oil (GSO) initiatives.
- Introduction of high thermal efficiency (74%) stoves at Pan India level, impacting more than 1.000 customers.
- · Organizing awareness meetings nationwide.
- · Solar panel cleaning for enhanced efficiency managed by Maintenance Services Organization (MSO), with around 20 participants.
- Adoption of Electric Vehicles (EVs) for delivery purposes at Madurai IndianOil Depot
- Installation of LED lighting in Noonmati Janata Hindi School, Guwahati, as a replacement for conventional lights.

#### Ek Socch Hai Jaari

- · Conducted Nukkad Natak (street plays) Pan India, engaging more than 750 participants to address critical environmental concerns.
- · Distribution of seed balls at the Indane LPG Bottling Plant in Udayamperoor to promote biodiversity. With approximately 200 participants involved, this initiative aims to enhance local ecosystems and raise ecological awareness.
- Undertaken tree plantation initiatives across India with physical presence of around 200 participants.

## Save Energy. Save Water & Reduce Single Use Plastic

- Conducted "Nukkad-natak" performances addressing the pivotal themes of Save Energy, Save Water, and Reduce Single-Use
- Installation of cloth bag dispensers at Paradip Refinery market and Digboi Refinery market, as well as Digboi New Market, this is aimed at promoting sustainable practices and reducing plastic waste.
- To amplify awareness and engagement, all Mission LiFE videos are digitally displayed at Digboi Refinery Bazar Gate through LCD TV installations. This dynamic approach seeks to ensure that the messages of energy conservation, water preservation, and plastic reduction are effectively conveyed and deeply ingrained.











IndianOil-Committed towards

#### BIODIVERSITY CONSERVATION



# Strengthening our Malue Chain

In this Section		

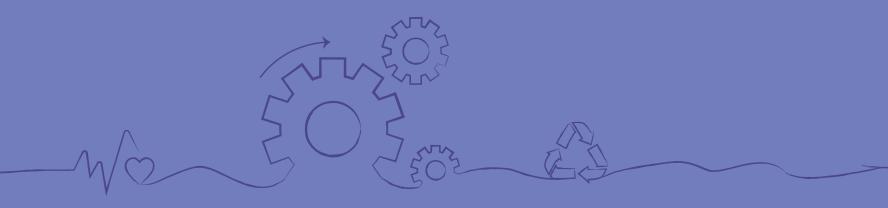
In an era where prioritizing environmental stewardship and ethical business conduct is of utmost importance, we lead the way in driving positive change. Our path is one of transformation, as we envision a future that is both prosperous and sustainable. We achieve this by fortifying our value chain through meticulous Product Stewardship, infusing

environmental consciousness into every facet of our operations, pioneering Research and Development, and nurturing a Supply Chain marked by true responsibility. These foundational pillars underscore our unwavering dedication to forging a future that is not only brighter but also greener and more sustainable, benefiting all.









## Material Topics in Focus



Product Stewardship



Sustainable Supply Chain

#### **Notable Highlights**

**R&D EXPENDITURE** 

₹698 Crore

CAPEX SPEND

₹37,287 Crore

NO. OF PATENTS FILLED DURING FY 2022-23

1,646

MATERIALS PROCURED FROM MSME VENDORS

29.21 %

NO. OF RO SOLARISED

1,490

EV CHARGING STATIONS

5,46 AND 76 BATTERY SWAPPING STATIONS

PIPELINE NETWORK
17,564 km



#### **Product Stewardship**

IndianOil takes the responsibility towards the environment seriously and has harnessed technological capabilities for continuous product innovation. Understanding the negative impact of petroleum products on the environment, we are committed to minimizing these effects as much as possible. Through relentless efforts, we have successfully developed a range of products with improved efficiency and lower carbon footprint. IndianOil has built a portfolio of leading brands, including Indane, SERVO, XTRAPREMIUM, XTRAMILE, PROPEL, Durapave, Xtratej, etc.

We are taking the lead in responsible product stewardship by diversifying into low carbon products with exclusive brands. We are committed to introducing greener products and expanding our green product portfolio. IndianOil has array of product mix with launch of new products in FY 2022-23, which are designed to be environment friendly, affordable, increase efficiency and reduce emissions, to contribute in our decarbonization journey and that of the country.







#### **Our Servo Portfolio**

Recognized in "Brand Finance Award" & "Readers Digest Most Trusted Brand Award 2022"



## Greening our product portfolio

#### **Methanol Blended Fuels**

We are making notable efforts in expanding our portfolio of alternative fuels, particularly in the realm of Biodiesel. Biodiesel is an eco-friendly alternative to conventional diesel, produced through a simple chemical reaction of alcohols with vegetable oils. In pursuit of sustainable and cleaner fuel solutions, we have introduced a pilot project at the Digboi Terminal in Assam. for methanol blended petrol, M15, which contains 15% Methanol blend.

Also, IndianOil in collaboration with Ashok Leyland conducting pilot trials of MD15 (Methanol blended Diesel) buses in Bengaluru. Additionally, a prototype of an M100- 100% Methanol run truck was launched. These initiatives demonstrate our commitment to revolutionizing India's transportation landscape, aiming to reduce vehicular diesel emissions significantly- and contribute to India's vision of becoming 'Atmanirbhar Bharat'.





Launch of pilot Methanol blended diesel (MD-15) at Bengaluru

#### **Natural Gas**

IndianOil is actively integrating Natural Gas (NG) into the energy strategy as a 'transition fuel,' recognizing the potential to significantly reduce both air pollutants and greenhouse gas emissions. To enhance our gas portfolio, we are investing in the development of a robust natural gas pipeline grid. Additionally, we aim to increase our share in the Regasified Liquefied Natural Gas (R-LNG) business to 40% from 20% market share at present by the end of the decade. We are proactively engaged in the expansion of Compressed Natural Gas (CNG) distribution capacities.

With our comprehensive network encompassing 49 Geographic Areas (GAs) and 112 districts across 21 States and Union Territories, IndianOil, in collaboration with two Joint Venture Companies (JVCs), has firmly positioned as one of the most prominent players in the domain of City Gas Distribution (CGD) across the nation, reinforcing our steadfast dedication to shaping a greener and more sustainable future.

COMMISSIONED

303 CNG Stations

COMMISSIONED

71 CMG POS

TOTAL CNG STATIONS

#### Lubricants

Our IndianOil's SERVO range of lubricants offers a diverse selection of engine oils, catering to different performance criteria and industry specifications, including emission standards. A notable addition to our SERVO range is the SERVO 4T Xtra 10W-30, a new high-performance product for the 2-Wheeler segment.

During the FY 2022-23, we proudly introduced two revolutionary products - 'Servo 4T Green' for motorcycle engines and 'Servo Tractor Green' designed for tractor engines. These cutting-edge offerings have been meticulously crafted utilizing re-refined base oils.

IndianOil manufactures Diesel Exhaust Fluid (DEF) under the brand name ClearBlue. This DEF product is specifically formulated to reduce NOx (Nitrogen Oxide) emissions originating from diesel fuel as mandated by the BS-VI fuel regulations, evolving global exhaust emission regulation.



#### IO, IndianOil Flagship Merchandise Store

During the FY 2022-23, IndianOil made a significant stride by inaugurating our firstever Flagship Merchandise Store in Bangalore. This marked our corporation's entry into the merchandising of branded products, paving the way for exciting new business opportunities and enhanced customer engagement. With this pioneering initiative, IndianOil is venturing into the merchandising of branded products both through the retail outlets and online platforms.

By offering a unique and niche proposition in merchandise marketing, we aim to establish deeper connections with customers, projecting the brand image in a distinctive light and positioning itself as a forward-looking aspirational brand. The Flagship Merchandise Stores not only serve as a valuable engagement point for customers who visit IndianOil's retail outlets for various services, such as EV charging, battery swapping, or non-fuel services, but also present a compelling opportunity to generate additional revenue for IndianOil.

#### **Greening the Value Chain**

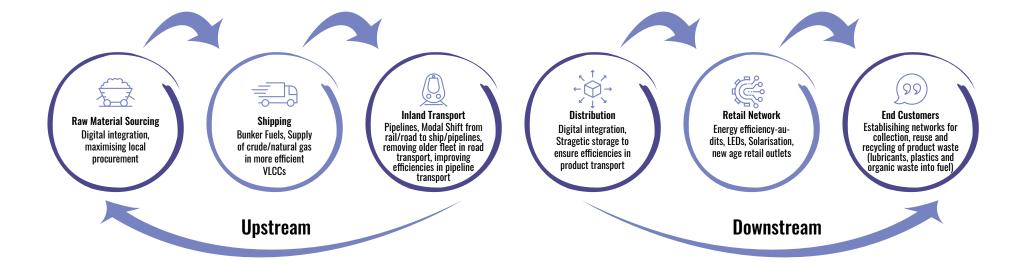
IndianOil's commitment to sustainability and environmental responsibility is evident in the efforts to optimize and enhance the supply chain. We focus on sourcing raw materials locally and sustainably to minimize the supply chain's carbon footprint and emissions. Embracing technology solutions, rapid digitalization has been deployed to improve operational efficiencies across our dealer network, driven by active policy and solution

interventions. Regular upgrades to processes and systems, along with an increasing use of renewable energy to power operations, demonstrate our dedication to reducing the environmental impact.

Our robust supply chain network plays a pivotal role in supporting our operations, enabling the distribution of products to even the most remote areas, benefiting communities across the country. By meticulously mapping

the entire supply chain network, identifying bottlenecks, and supporting an expanded network of value chain partners, we ensure a resilient and secure supply chain. With a strategic focus on digitization, low-carbon transportation, strategic storage, energy efficiency, and renewable power utilization across dealer networks, we exemplify our commitment to increasing our green quotient and embracing sustainable practices.

A responsible and sustainable supply chain remains a driving force behind IndianOil's success in enhancing energy security, reducing emissions, and promoting the adoption of green fuels. As responsible organization, we continue our journey towards decarbonization and Net Zero targets, a robust and responsible supply chain will play a critical role in realizing our ambitious environmental objectives.



#### Pipeline Transportation-Safeguarding Efficiency, Economy, and Environment

Pipeline transportation stands as the epitome of safety, efficiency, cost-effectiveness, and environmental responsibility in fuel and gas conveyance, constituting an indispensable facet of IndianOil's robust energy infrastructure. The comprehensive network of pipeline boasts an impressive capacity of 119.20 MMTPA for crude and product pipelines, and an additional 48.73 MMSCMD for gas pipelines, as of the culmination of March 2023.

Pipeline transportation resonates with our ethos of progress. It signifies more than the mere conveyance of resources. As we forge ahead, we remain unwavering in our dedication to expanding and optimizing this critical infrastructure, ensuring the seamless flow of energy while minimizing our ecological footprint.

17,564 km PIPELINE NETWORK

2,454 Fm OF PIPELINE COMMISSIONED IN FY 2022-23

97.38 MMT

EMISSIONS AVOIDED

1.17 MMTCOe

**Solarisation of Retail Outlets** 

1,490 PO8
SOLARISED IN FY 2022-23

POWER GENERATION 159.10 GWh

INSTALLED CAPACITY
123.4 MW

emission avoided 0.15 MMTCO e





Pipeline Network of IndianOil



Solarization at IndianOil

#### **Driving Electric Mobility and Sustainable Transportation**

Embracing a proactive stance in the pursuit of electric mobility and environmental sustainability, IndianOil has forged partnerships with power suppliers, cab aggregators, and automotive companies to establish Electric Vehicle Charging Stations (EVCS) and Battery Swapping Stations at our Retail Outlets. Undoubtedly, this reaffirms our position as a leader among Oil Marketing Companies in the realm of EV charging infrastructure, with a flourishing network of nearly 5,500 stations—a number that is poised to escalate to an impressive 10,000 in the foreseeable future. Eager to extend the accessibility of EVCS, we are diligently exploring avenues to introduce charging facilities at public parking spaces within airports and tourist destinations.

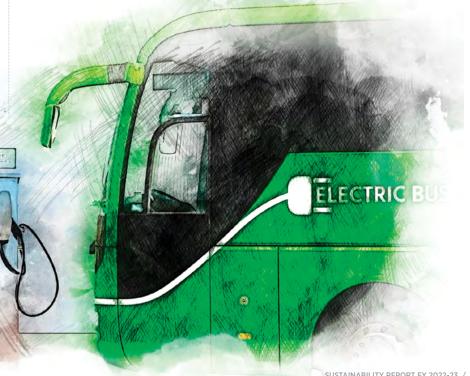
By championing electric vehicle charging and battery swapping, IndianOil is orchestrating a profound transformation. We are nurturing a more sustainable transportation ecosystem, enabling the reduction of carbon emissions, and laying the foundations for a greener future.

#### EV CHARGING STATION ESTABLISHED 5,461 AND 76 BATTERY SWAPPING STATIONS

The IndianOil Board has recently sanctioned the establishment of a joint venture company dedicated to the battery swapping business in India. This venture emerges as a Private Limited Company, marked by an equitable 50:50 collaboration between IndianOil and Sun Mobility, Singapore. Renowned globally, Sun Mobility is at the forefront of delivering energy infrastructure and services tailored for the transportation sector, facilitating swift, economical, and convenient electric vehicle charging. This strategic partnership lays the foundation for a transition towards a sustainable, pollution-free future, inviting a widespread shift towards ecologically responsible transportation alternatives. IndianOil is set to infuse ₹1,800 Crore in equity into the joint venture by the financial year 2026-27.

#### **Collaboration with Phinergy**

Our collaboration with Phinergy Israel through the establishment of IOC Phinergy Private Limited (IOP) is nothing short of ground-breaking. This venture focuses on the integration of Al-air battery technology into Electric Vehicles, encompassing both 3-wheelers and 4-wheelers, in partnership with leading Auto Original Equipment Manufacturers (OEMs) within India. Our prowess is evident in the successful incorporation of the Aluminium-Air system into vehicles, along with successful demonstrations of its application as an energy backup solution for telecom tower sites. As we unite forces with visionary partners and harness cutting-edge technologies, IndianOil continues to carve a pioneering path towards sustainable, green mobility. These ventures serve as testament to our resolute commitment to shaping a cleaner, greener, and more promising future for India's transportation landscape.



#### **R&D** and Innovation

IndianOil's R&D Centre in Faridabad stands as one of Asia's premier downstream petroleum research and development facilities, offering us a distinct competitive advantage. Through this cutting-edge centre, we leverage world-class technology and process solutions to develop innovative products that drive the nation's push towards self-reliance and sustainability under the vision of 'Atmanirbhar Bharat'. The R&D centre plays a pivotal role in developing costeffective, environmentally friendly alternative energy segments such as bioenergy, solar energy, hydrogen economy, energy storage, nanotechnology, carbon capture and utilisation and battery technologies, socially responsible technology solutions. It is at the forefront of research in core areas like fuels and lubricants, refining technologies and catalysts, and petrochemicals and polymers, contributing significantly to the growth and advancement of India's energy industry.



R&D and Innovation at IndianOil

Furthermore, the R&D centre actively explores and pioneers emerging trends and future technologies, focusing on areas such as Nano, Solar, Bioenergy, Hydrogen, and Fuel Cells. These efforts underline IndianOil's commitment to staying ahead of the curve and leading the way in the transition to sustainable energy solutions. Our dedication to innovation and research is evident in the impressive number of patents filed in FY 2022-23. Among these patents, we have been recognized for our pioneering ecofriendly plastic to fuel (IndEcoP2F) technology, a significant step towards addressing plastic waste and promoting circular economy principles. By continually pushing the boundaries of research and development, IndianOil's R&D Centre has become a driving force behind our success and contributions to India's energy security, environmental sustainability, and technological advancement.

₹698 Crore
R&D EXPENDITURE IN FY 2022-23

TOTAL NO. OF PATENTS FILED BY THE END FY 2022-23

1,646

PATENTS FILED IN FY 2022-23

EFFECTIVE PATENTS

1,554

PATENTS GRANTED IN FY 2022-23

#### **Technology Developments**

Produced certified Aviation Gasoline grade AVGAS 100 LL, first in India

Signed MoU with LanzaJet to explore Sustainable Aviation Fuel production using ATJ technology.

XtraFlo, in-house technology for drag reduction in pipeline transportation, was adopted for the first time in LPG pipeline to enhance its throughput

Explored 2G lignin residue in CRMB as bitumen substitute and completed successful lab testing.

Developed continuous process for Xylitol production from Xylose stream, achieving 100% conversion.

Validated Agri-Elite technology for premium bio-fertilizer production to increase rice yield by 22%.

Introduced StubVorous for stubble decomposition within 15 days, to enable timely crop rotation.

Developed Enzyme-assisted CO<sub>2</sub> capture technology (eCO<sub>2</sub>Sorb) for commercial-scale demonstration.

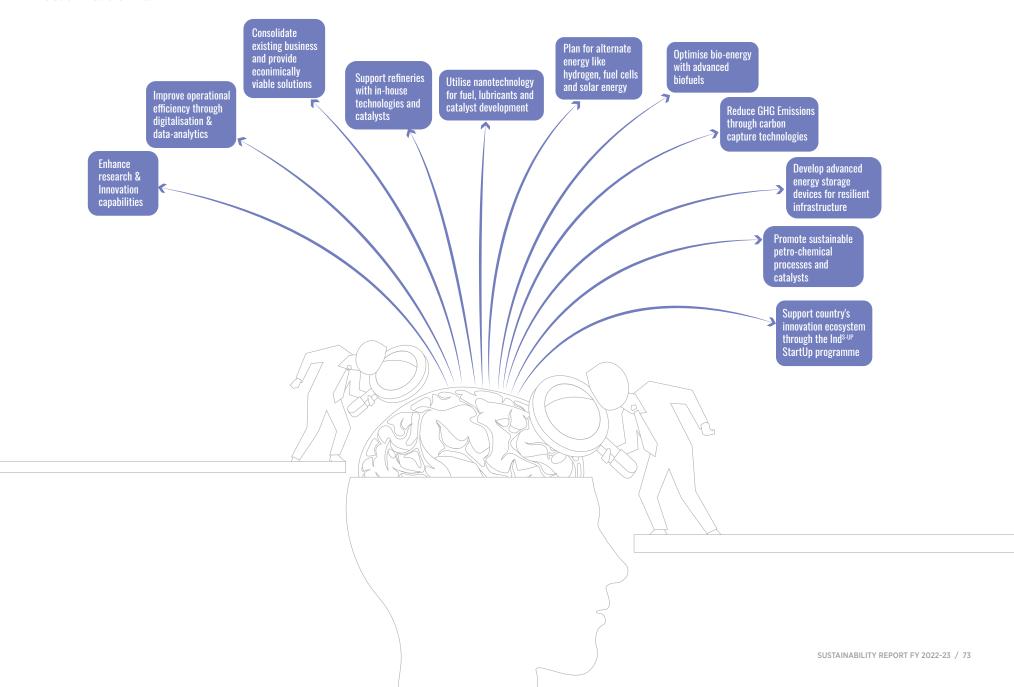
Validated ASP Kit-Microbiological for ETP biological health monitoring at two IndianOil refineries.

IndianOil successfully commissioned 80 kTA grassroots indSelectG® unit for cracked gasoline desulfurisation at Guwahati Refinery using in-house developed catalyst meeting product Sulphur of 5 ppmw & RON improvement of ~4.0 units

In-house developed Ind-CokerAT® technology selected for 170-220 kTA DCU revamp at Digboi Refinery to handle additional heavy vacuum residue

265 MT of composite INDMAX catalyst manufactured and supplied for trial at Mathura Refinery.

### Focus Areas of R&D



### **Alternate Energy Sources**

Our dedication is evident in the creation of our advanced Research and Development campus, i-Care, situated in Faridabad. Known as the IndianOil Technology Development & Deployment Centre, this visionary campus is set to become the world's largest Net-Zero facility. focusing on power and water sustainability. With a GRIHA 5-star rating and LEED platinum standards, it showcases our strong ecological commitment. This centre houses four excellence hubs, dedicated to pioneering research in areas like biofuels, waste-to-energy solutions, electric batteries, solar power, Corrosion Research, Nanotechnology, and Synthetic Biology. The IndianOil Technology Development & Deployment Centre underscores our holistic approach to a greener future, symbolizing our drive for eco-friendly solutions and transformative energy advancements.

### **Green Hydrogen Advancements**

We are making significant advancements in advancing a sustainable and eco-conscious future by harnessing the potential of Green Hydrogen. Embracing India's ambitious vision to establish itself as a global leader in Green Hydrogen production, we are at the forefront of driving this transformative energy sector. In alignment with our commitment to decarbonization and reducing reliance on carbon-emitting fuels. we are spearheading the creation of an advanced 10 KTA Green Hydrogen Plant at Panipat Refinery. This pioneering endeavour aims to redefine refinery processes by replacing carbon-intensive fuels with clean and environmentally friendly Green Hydrogen, propelling our agenda for sustainable growth.

Beyond the Green Hydrogen Plant, we have

embarked on a significant collaboration with Snam, Italy, during the India Energy Week 2023. This strategic partnership seeks to repurpose existing gas pipelines for the efficient transportation of hydrogen, establishing the groundwork for a more sustainable and eco-friendly hydrogen ecosystem. IndianOil's steadfast commitment to the Green Hydrogen revolution perfectly aligns with India's aspiration for a greener and more sustainable energy trajectory. By actively contributing to the nation's objective of becoming a global frontrunner in Green Hydrogen production, IndianOil is positioned to play a pivotal role in shaping India's sustainable energy landscape while mitigating the environmental impact of carbon emissions. Moreover, recognizing the immense potential of green hydrogen, we have forged alliances with ReNew and Larsen & Toubro (L&T) Limited to further strengthen the green hydrogen ecosystem in India.

# Carbon Capture Utilization and Storage (CCUS)

IndianOil is deeply committed to sustainable energy solutions, particularly in Carbon Capture Utilization and Storage (CCUS). Through visionary research, we're pioneering CO<sub>2</sub> capture via chemical, bio-chemical, and electro bio-catalytic routes. Our patented enzyme-solvent fusion significantly accelerates CO<sub>2</sub> capture, surpassing traditional aminebased methods. A world-first refinery off-gas to ethanol plant in Panipat exemplifies our innovation, using gas fermentation to convert CO<sub>2</sub>-enriched off-gases into fuel-grade ethanol. We're poised to harness captured CO<sub>2</sub> for oil recovery, transformative chemical conversions, and novel fuel molecules. Our breakthroughs extend to converting CO<sub>2</sub> into valuable Omega 3-fatty acids and biodiesel, alongside exploring electro-biocatalytic processes to synthesize alcohols like methanol, ethanol, and butanol.



IndianOil's Malom Depot

### Solar Cooktop, A Step towards 'Urja Atmanirbharta'

At the Indian Energy Week, we introduced our latest renewable innovation, the dual burner solar cooktop. This advanced appliance operates on both solar and auxiliary energy, ensuring cooking reliability and flexibility for Indian households. Developed by IndianOil's R&D, this economically viable option revolutionizes cooking and contributes to India's energy independence. By adopting this cooktop, the nation can make substantial progress

towards reducing reliance on imported LPG, a significant energy component and progress towards achieving 'Urja Atmanirbharta', Our partnerships with 10 Indian vendors cover all aspects of the Solar Cooktop ecosystem, from manufacturing to post-sales services.



### **Dynamic Start-Up Collaborations**

IndianOil's resolute focus on innovation and sustainability is highlighted by our strong Start-Up program, a platform that has yielded impressive results in nurturing emerging businesses. Demonstrating our commitment, we've seamlessly integrated 12 new start-ups, adding depth to our innovative ecosystem. We back this with significant financial support, total of ₹17.98 Crore, underscoring our dedication to fostering entrepreneurship and ground-breaking concepts. Adding momentum, a recent Start-Up Round was initiated in March 2023, themed 'Green Resolve - Amrit Kaal Adhyay'.

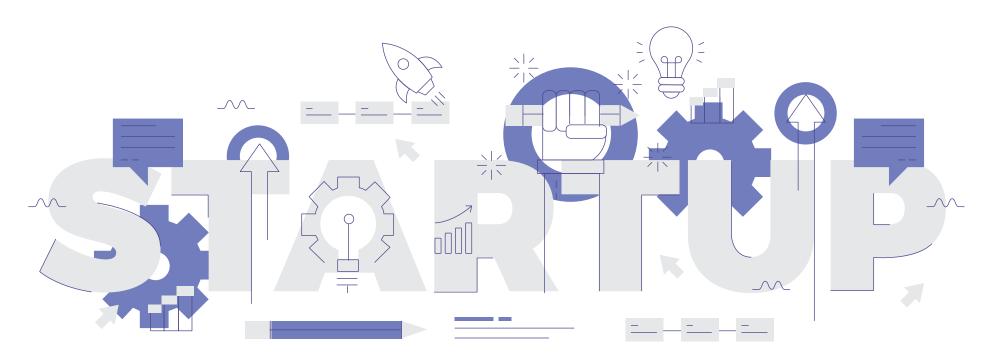
INCUBATION UNDER START-UP FUNDING SCHEME

24 start-ups

Attained 50

INTELLECTUAL PROPERTIES (IPs), SPANNING PATENTS, TRADEMARKS, AND COPYRIGHTS





# **Responsible Supply Chain**

We encourage dealers, contractors, and suppliers to conduct their business ethically and improve transparency and compliance with national, state, and international laws and regulations. We believe that sustainable business practices must be adopted at every point in the value chain to achieve the objective of creating a greener future for all. We strive to ensure quality control, risk management, supplier management and continuous improvement by regularly reviewing and improving safety processes. Our guidelines for safe working are not limited to the operating locations, it extends to contract labourers, our transport network, distribution network and frontline workers. We regularly organise awareness programmes. ESG related trainings, and health check-up camps so that safety-issues are addressed, and gaps are plugged throughout the value chain. Vendors are promoted through trainings, meetings, workshops / technical support to promote best practices, process improvement Initiatives, capacity building, ESG performance etc., and take corrective action as necessary.



IndianOil's responsible supply chain practices

# Responsible Marketing and Product Labelling

IndianOil is committed to responsible marketing and product labelling, ensuring that we provide customers with fair and accurate information about our products.

We are dedicated to avoid any promotion of unfair business practices or discriminatory advertising, promoting ethical and inclusive marketing practices. Throughout the year, IndianOil has adhered to marketing regulations and voluntary codes, with no instances of noncompliance. All the commercial products of IndianOil follow Bureau of Indian Standards (BIS), All the labels are tested as per Company specifications on quality and readability. This commitment to responsible marketing practices showcases our dedication to transparency and integrity in our communications with customers and stakeholders.

Regular workshops and seminars, traditional and social media campaigns, SMS outreach, banners, posters, and material published on our website disseminate information on product safety to retail and institutional consumers and channel partners. Product training, demonstrations, and seminars are held for large clients to educate them on the safe and responsible use of products. Additionally, LPG distributors and sales officers organise safety clinics. Important instructions are also placed on the body/cover of products like LPG, lubes to fulfil requirement of proper labelling, educating customers and digital reach for awareness.

### **Communication Channels**



Advertisments



Corporate Website



Mobile App



Customer Satisfaction Survey



Safety Clinics



Customer Care/ Grievance portal



Social Media



Product & Packaging Labels



Andio Visuals



Brochures

### **Initiatives Undertaken**

Information on product and service offerings are provided on our corporate website

Awareness exercises / trainings for customers / bulk product consumers on safety and efficient use of products

Safety labels, warning signs for hazardous material, product information provided to the end user. Safe handling methods including Do's & Dont's are sent along with every Cryo-container

Labelling for products is in line with BIS, Central Legal Metrology (Packaged Commodity) requirements and ISO 9000

For petrochemical products, release certificate is given by independent laboratory for each lot. The Certificate of Quality is provided to the customer

### **Promoting Local Procurement & Vendor Development**

IndianOil's commitment to ethical and sustainable business practices is deeply entrenched in our robust vendor selection process. In full compliance with national regulations, our stringent process underscores our unwavering commitment to social, ethical, and environmental responsibilities. Our vendor selection journey begins with a transparent and comprehensive tendering process, which embraces our General Conditions of Contract. These conditions encompass crucial aspects, including the prohibition of child labour and the welfare of contractual labour, reinforcing our dedication to ethical principles. Environmental considerations form an integral part of our procurement strategy. Each tender evaluation is underpinned by environmentrelated screening parameters, such as adherence to appropriate IS / BIS / OSHAS standards and performance criteria. Our active participation in the Petroleum Conservation Research Association (PCRA) further highlight our drive towards sustainable consumption behaviour and environmental stewardship.

Within our extensive supply chain, which encompasses raw material suppliers, vendors, and service providers, we are steadfast in our commitment to sourcing materials sustainably and locally. In alignment with the directives of the Government of India, we prioritize procurement from small and medium enterprises (SMEs) and champion local suppliers, Micro & Small Enterprises (MSEs), and Start-ups, in accordance with established government and company policies. Our procurement practices reflect our dedication to promoting local content. Preference is accorded to MSEs and Class I Local Suppliers, guided by the Public

Procurement Policy 2012 (PPP-2012) and the Purchase Preference linked to Local Content policy (PP-LC 2020). Certain items are exclusively earmarked for procurement from MSE vendors, while for non-critical procurement, pre-qualification criteria are eased for Start-ups and Micro & Small Enterprises.

We engage in training and workshops to illuminate potential opportunities and align expectations. Initiatives targeting the procurement of goods and services from MSEs owned by SC / ST and women enterprises further exemplify our commitment to inclusivity and empowerment. To foster

NO. OF VENDOR DEVELOPMENT PROGRAMS ORGANIZED

INCUBATION UNDER START-UP

**FUNDING SCHEME** 

TOTAL PROCUREMENT\* FROM MSMEs (GENERAL, SC/ST & WOMEN)

PROCUREMENT FROM SC/ST MSMFs

0.86%

PROCUREMENT FROM WOMEN **OWNED MSMFs** 

0.35%

seamless communication and collaboration. IndianOil has launched a dedicated e-site for suppliers and business partners. This digital interface serves as a gateway for obtaining crucial information about our requirements, further fortifying our relationships with supply chain partners. Additionally, a dedicated website was introduced to facilitate dialogue, address concerns, and offer solutions. affirming our commitment to transparent and constructive engagement.

\*Procurement from MSMEs (excluding crude oil, petroleum products & natural gas, API line pipes, proprietary items, and single line items of value greater than ₹50 Crore)



Procuring responsibly

### **SWAGAT RO- Elevating Highway Hospitality**

SWAGAT ROs are designed to meet the specific needs of truck drivers, providing facilities for Recharge, Refuel, and Refresh. These branded large format Highway Retail Outlets are strategically located along highways to cater to the requirements of highway travellers. By establishing SWAGAT ROs, IndianOil is not only addressing the needs of truck drivers and fleet owners but also enhancing the overall travel experience for highway travellers.

### A SWAGAT RO promises eight mandatory facilities





Separate Toilet Block



Bathing Facility for Truck



Laundry Facility





Pure Drinking Water



Separate Air Facility for



Parking Secured Truck Parking

No terrain too harsh for us to

# BRING ENERGY TO YOU



# Creating Shared Police Value for our

In this Section		

IndianOil's commitment to long-term sustainable growth goes beyond pursuing financial profits. We strive to create shared value for all our stakeholders. The ability to anticipate and fulfill stakeholder expectations is central to our success as an organisation. People form the core of our business strategy and success. From shareholders to customers and employees to local communities, we

strive to enhance the quality of their lives in meaningful ways. We provide a transparent, safe, and nurturing work environment to foster a culture of diversity, trust, innovation, and respect for all among our people. Strengthening our people by empowering them with knowledge and skills and creating self-sustaining, thriving communities will continue to be our way of functioning.









# **Material Topics** in Focus



Employment Practices



Health & Safety



Community Development



\* Customer Satisfaction

and Brand Loyalty

# **Notable Highlights**

PERMANENT 31,095

HOURS OF TRAINING PROVIDED TO EMPLOYEES

7,75,868 hrs

**CSR EXPENDITURE OF** 

₹264.03 Crore WITH 57 LAKHS BENEFICIARIES

CONTRIBUTION MADE TO EXCHEQUER

₹2,40,185

LOST TIME INJURY FREQUENCY RATE

0.181

SAFETY CLINICS ORGANISED FOR LPG CUSTOMERS

83,398

EYE TESTS CONDUCTED FOR TANK TRUCK DRIVERS WHO DELIVER OUR PRODUCTS

52,000

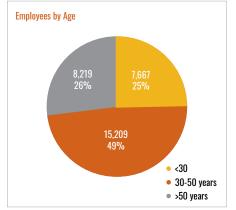


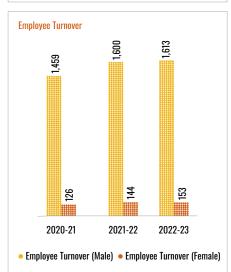
# **Empowering Employees**

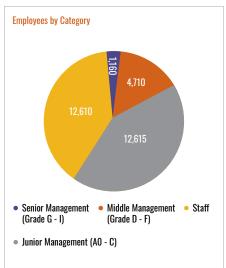
Employees are our most valuable asset. It is their talent and dedication that has enabled IndianOil's success over the years. We enable a fair and open work-culture and provide our people with the necessary skills and opportunities to achieve professional excellence and personal fulfilment. IndianOil is focused on the well-being of the partners and contractors, even though they do not fall under our direct purview. We have a robust HR framework and strong HR policies to manage, nurture and inspire our workforce.

### Workforce at glance









### **New Hires**

**NFW HIRFS** 

INCREASE IN WOMEN HIRE

HIRES BELOW 30 YEARS OF AGE

ATTRITION RATE

AVERAGE COST OF HIRING ₹34,210

OF VACANCIES FILLED BY INTERNAL CANDIDATES (INTER-DIVISIONAL TRANSFER)



### Improving Workforce efficiency

We are the first PSU in India to achieve Level-3 of the People Capability Maturity Model. The Company is focused on creating a better workplace where everyone can attain their full potential. The talent management is guided by the philosophy of of PACE comprising People, Adaptability, Communication and Energy,

### **Developing Manpower** Competency

The talent management function also extends to contractual workers, who form an integral part of IndianOil, besides its employees. IndianOil provides regular skill upgradation and other requisite training to its workforce. All our employees and workers are covered under mandatory training programs to boost their skills. Several training programs, both technical and behavioural are provided by internal and external partners. We have tied up with industry bodies like CII, FICCI, and the IIMs to conduct trainings. Advancing the Mission of Apprenticeship Training, IndianOil have enrolled apprentices across diverse categories such as Trade, Technician, Fresher, and Skill-certificate holders. This significant engagement represents 11.87% of our entire workforce. The apprentices have undergone comprehensive practical training, guided by a meticulously designed monitoring and evaluation approach.

MAN-DAYS INVFSTFD

1,29,311

HOURS INVESTED OF TRAINING AND DEVELOPMENT

7,75,868

**AVERAGE HOUR** OF TRAINING PER **EMPLOYEE** 

**EXPENDITURE** INCURRED ON THE TRAININGS IN FY 2022-23

**APPRENTICES FNROLLED** 

IndianOil administers training programs incorporating well-structured initiatives aimed at elevating the competencies, understanding, and effectiveness of its workforce, thus enhancing their value to the company. By dedicating resources to impactful employee training initiatives, IndianOil can foster the development of a more proficient workforce, elevate employee contentment, and respond to industry dynamics. We offer a diverse array of programs, elaborated upon below, with specific program details provided subsequently.

Cutting Edge For creating wealth

Threshold Leading in uncertain times

Saksham Leadership competency development program

Leadership simulation workshop / Business simulation games Executive MBA program

Senior Management

Advance Management Program

Madhyama

Saarthi

Harvard Manage Mentor (HMM)

Swadhyaya

Madhyama Our mid-career training initiative, stands as a cornerstone in our commitment to preparing IndianOil officers for the challenges of tomorrow. This transformative program entails a mandatory two-week training period. immersing executives in a comprehensive curriculum that encompasses diverse dimensions of our business, including crucial behavioural skills. A hallmark of Madhyama lies in its inclusivity and recognition of experience. Executives who have completed 12 years (Madhyama-1) or 22 years (Madhyama-2) in service, regardless of their Grade, Function, or Division, are granted the opportunity to partake in these vital mid-career training interventions. By offering this platform, we empower our executives with the skills, insights, and perspectives necessary to navigate the everevolving landscape of our industry and drive our collective success into the future.

NO. OF PROGRAMNS

NO. OF PARTICIPANTS

**Saarthi** A one-on-one Leadership Coaching initiative aimed to build and sustain an infallible IndianOil leadership pipeline and prepare them as future and change-ready officers.

Harvard Manage Mentor (HMM) An online resource launched in 2022. It comprises 43 modules broadly classified under 3 categories, i.e., Leading Yourself, Leading Others, & Leading the Business.

Swadhyaya A Technology aided e-Learning program to upskill and build technical competency has been upgraded in FY 2022-23. It now covers over 1600 modules and a milestone of 2.5 million course completions has been achieved. Under Swadhyaya 3.0 initiative, an elite group named as Director's HR Subject

Matter Experts Club for Swadhyaya was formed. This club consists of the Top 25 SMEs from different divisions selected on criteria based on the proficiency level and interactivity level of the modules developed by the SMEs.

SWADHYAYA COURSES COMPLETED

9.25 Lakhs

HOURS OF TRAINING

4,62,669

NO. OF EMPLOYEES PARTICIPATED

17,388

NO. OF COURSES COVERED

1,882

# Enhancing Mentorship through Guided Mentoring

Our focus remains resolute in elevating the quality of interactions between mentors and mentees, thereby enriching the overall mentoring experience. Through our Guided Mentoring program, we embark on a transformative journey to foster deeper connections and meaningful engagements. This endeavour encompasses five impactful sessions that are meticulously curated to refine the dynamics of mentor-mentee interactions. By delving into the intricacies of effective mentoring and cultivating a profound psychological connection, we are committed to fostering an environment where guidance, insights, and growth are nurtured harmoniously.

# Partnership with NMIMS Mumbai- Fostering Sustainable Development Champions

In a strategic collaboration, IndianOil's Sustainable Development Department has introduced an innovative program in association with Narsee Monjee Institute of Management Studies (NMIMS) Mumbai. This pioneering initiative is designed to instil a heightened awareness among our employees about pressing global social and environmental concerns. Beyond awareness, the program aims to nurture a dynamic community of advocates who champion the cause of sustainable development initiatives.

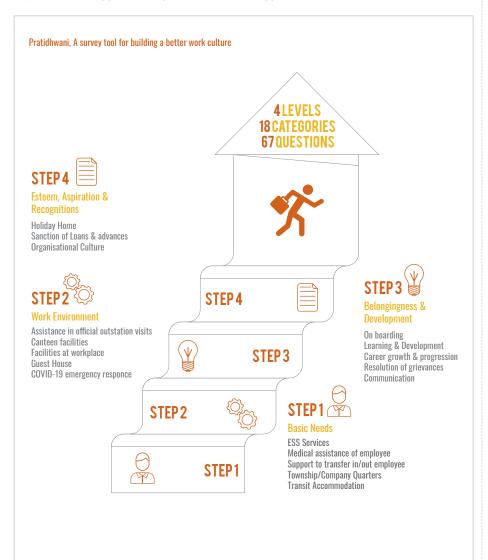
### **Employee engagement**

Employee engagement is crucial to building a collaborative and open culture in our organisation. We believe that it has a direct impact on both the individual employee's performance and overall company performance. Engaged employees are more willing to align with our overall vision and motivated to perform better and deliver results. We implement several engagement programs at various levels in the organisation to regularly gather opinions, insights and feedback from internal stakeholders.

We conduct an employee satisfaction survey known as 'Pratidwani' every year to identify concerns and solicit feedback to aid us in building a better work culture. Customer satisfaction and employee engagement- are

Employee Engagement Survey score of FY 2022-23 was 6.02 the two key components of the survey. In FY 2022-23 48% of employees registered their feedback on various employee satisfaction and engagement initiatives. We have also implemented a Suggestion Program, which

invites employees to make suggestions on any business and operations -related topics. Workers are rewarded based on the strength and implementation of their ideas and suggestions.



### **Employee Wellbeing**

Employee well-being is essential for our human resource practice. We have covered 100 % of employees and contract workers under health and accident insurance. Employees are also provided with disability and invalidity coverage, retirement provisions, maternity/paternity benefits, day-care facilities, and other related benefits. In addition to the statutory coverage provided by PF/ESI, contractual workers are protected by the Atal Pension Yojana, Pradhan Mantri Jeevan Jyoti Beema Yojna and Pradhan Mantri Suraksha Bima Yojana. We provide regular health and safety training to our workers, contractors, and value chain partners. We provide our employees and labourers with annual health check-ups. IndianOil recognizes the importance of work-life balance and employee well-being. As part of our commitment to supporting our workforce, we offer flexible working hours. Additionally,

we provide paid parental leave exceeding the minimum legal requirements for both primary and non-primary caregivers. (Paid leave for 2 weeks) We also prioritize the needs of working parents by offering childcare facilities and breast-feeding/ lactation facilities. These initiatives, along with other benefits, demonstrate our dedication to fostering a supportive and inclusive work environment at IndianOil. We have pension scheme and Post-Retirement Medical Benefit Facility (PRMBF) in place for superannuated employee, it provides medical coverage to retired employees and their eligible dependant family members. Resettlement benefit is allowed to employees to facilitate them to settle down upon retirement.

Employees and their representatives are usually given a notice period of 21 days before implementing major operational changes that could have a significant impact on them.

# Social Security Benefit to all employees

Provident Fund/Gratuity

Insurance

Compensation on Death Superannuation Benefit

Post-retirement Medical Benefit

# Benefits to OBCISCIST

Relaxation in Recruitment/ Promotion SC/ST cell, Complaint Register to address grievances Specific Training

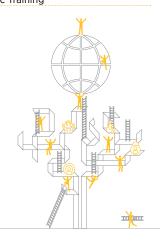
# Benefits to differently abled employees

Reservation in recruitment and Promotions Conveyance allowance, medical equipment special training

Provision of Barrier free access Preference in terms of Posting

# Benefits to temale employees

Maternity Benefit (180 days leave) Child Care Benefits (upto 2 years leave without pay) Husband Joining Leave



**e-Sambandh-** Comprehensive Retirement Companion

IndianOil proudly unveils 'e-Sambandh.' an integrated portal poised to revolutionize the retirement journey for our esteemed employees. This innovative platform serves as a singular touchpoint, addressing the diverse needs of both retiring and retired individuals. 'e-Sambandh' seamlessly navigates through a spectrum of essentials, including superannuation formalities, PRMBF requisites, SABF pension details, and comprehensive Ex-gratia related information, all consolidated within a single virtual space. Through its paperless claim system and centralized services. 'e-Sambandh' stands out as a symbol of convenience, precision, and time efficiency. By harnessing the power of technology-driven solutions, we uphold our promise to embrace innovation and provide holistic support throughout the various stages of an employee's career, ensuring a smooth and gratifying transition into retirement.



Paramarsh- At IndianOil, we have established a resilient framework to safeguard the physical health of our team, we have embarked on a new journey to further elevate our support system. Introducing counselling services through our pioneering Employee Assistance Programme, 'Paramarsh,' we are taking proactive strides to prioritize the mental wellness of our dedicated energy soldiers. This transformative initiative is being launched as a pilot project in selected offices within the bustling Delhi-NCR region. The objective is clear to provide a fortified foundation of mental well-being for our workforce. As our energy soldiers navigate the intricate challenges that define our industry, we stand firm in our commitment to equip them with the tools to confront these trials with renewed self-confidence.

### **Performance Management**

IndianOil's performance management program stands as a well-orchestrated framework, meticulously designed to ensure transparency, acknowledge achievements, and provide constructive feedback to our valued employees. Central to our performance management strategy is the innovative e-performance management system (e-PMS), a technological marvel that seamlessly maps employee competencies and performance ratings. This system serves as a cornerstone for determining assignments and promotions, allowing us to recognize and reward talent based on a robust and data-driven assessment.

Our commitment to comprehensive leadership evaluation is reflected through our utilization of the Leadership Competency Framework. By fostering a 360-degree appraisal process for C-E (Chief-Executive) roles, along with appraisal by objectives and team-based performance. we have increased the efficacy of leadership assessments, nurturing a cadre of proficient and empowered leaders. Furthermore, we

take immense pride in facilitating direct communication between our employees and the apex management through the Chairman's Connect to Chairman Portal. This innovative platform empowers our workforce to share their insights and ideas directly, transcending hierarchies. The feedback/suggestions are assessed by a high-level committee, undergo meticulous evaluation and implementation if deemed feasible. The portal's versatile structure categorizes suggestions under four distinct groups "I have an idea," "Can we Collaborate," "I want to learn," and "I have a dream."

100% of our workforce is actively engaged in regular performance and career development reviews. This reflective practice embodies our ethos of continuous improvement, fostering a culture of ongoing learning and enhancement.

### Inclusiveness at Work

IndianOil aims to create an inclusive, engaged, open, and diverse work culture in which employees can rise to their highest potential. Maintaining Human Rights, generating employment, and being an equal-opportunity employer are central to our policies and practices. We prioritize inclusivity at work through practices such as promoting freedom of association, enabling collective bargaining, fostering a safe environment with measures like the Prevention of Sexual Harassment at Work (POSH), and adhering to our Whistleblower Policy. Human Rights provisions are also considered in our acquisitions, mergers, and investment decisions.

We firmly believe that a diverse, equitable, and inclusive workplace fosters more innovation and resilience than a homogeneous one. We aim to provide an environment that promotes teamwork, cooperation, broader thinking, and better decision though elimination of discrimination & harassment, and following fair

practices & behaviour in the workplace, well defined selection processes for recruitment & promotion, equal access to benefits & conditions, equitable distribution of workloads, and structured processes to deal with workrelated companies and grievances.

A Diversity, Equity, and Inclusion (DE&I) Index has been established to track DEI progress through metrics to consolidate workforce capacity and improve productivity. This DEI Index is calculated using 15 items from our current employee engagement and satisfaction survey (Pratidhwani). The seven aspects of the DE&I Index are treating all our employees equally and fairly, integrating differences, decision-making, providing psychological safety, instilling trust, belonging, and meaningful work. As a forward-thinking ethical business, we have always sought to create an inclusive work culture.

IndianOil upholds the labor and employee entitlement to collective bargaining, valuing the principle of a single recognized union per location, which has fostered a harmonious atmosphere for conducting collective bargaining. over 95% of our permanent workforce are encompassed by different unions or employee associations.

### **Promoting Women Empowerment**

Women are promoted not only within our workforce, but also throughout our supply chain. Women are given preference when it comes to retail outlet dealerships at IndianOil. Many of our retail outlets are currently solely run by women. In addition, we have implemented extensive community welfare programs to promote girl-child education.

On International Women's Day 2023, IndianOil proudly unveils three pivotal policy changes, underscoring our unwavering dedication to achieving workplace equity.

These transformative modifications pivot around providing enhanced flexibility and compassion in our maternity policies, bolstering our ongoing endeavours to empower women within our organizational fabric. Our commitment to empowering women is a multi-faceted endeavour that encompasses various initiatives, including transportation support for women employees stationed at touring locations and access to fully equipped creche facilities. However, we recognize that a profound cultural shift is imperative—one that fosters an environment where both men and women wholeheartedly embrace shared family responsibilities. In a resolute effort to curtail socio-economic disparities and nurture thriving communities, IndianOil champions diversity within its supply chain. Our commitment finds expression in the provision of reserved opportunities for vulnerable and marginalized stakeholders in the selection of LPG distributorships.

Increase in cumulative limit for female employees availing Sick Leave in a calendar year from 10 to 24 days.

Reimbursement policy for travel expenses of the infants and one attendant for female employees

The provisions of the Sexual Harassment of Women at Workplace (Prevention, Prohibition, and Redressal) Act, 2013, have been implemented throughout our company with the clear goal of prohibiting sexual

harassment at work and resolving sexual harassment complaints. Internal Committees have been established at every Unit/Region/Head Office level. led by senior-level female employees, to handle any sexual harassment complaints. Regular workshops are conducted, especially for women employees, to raise awareness about their rights and facilities at workplace and emphasising the provisions of the Act. Gender sensitisation programmes for the male employees are also conducted regularly.

### Grievance Redressal Mechanism

To record and resolve Human Rights complaints, we have a structured grievance redressal procedure in place. The procedure begins with the aggrieved officer filing a written complaint to their superior officer, who can then forward the complaint to the head of department or respond. On the recommendation of the department head, the matter is escalated to the Grievance Redressal Committee. If the aggreeved officer is dissatisfied with the response / decision on the grievance at any stage, they can escalate the matter to the Appellate Authority (Director / Chairman level). The Appellate Authority's decision is considered final.



### Aarohi- Women Leadership Program

A customised, strategic Learning & Development intervention was crafted and delivered for grooming high-performing, mid-level women managers to take on future leadership roles at IndianOil. Participants were exposed to multidimensional managerial inputs covering leadership competencies, challenges, innovation, and self-awareness techniques. A first-of-its-kind women leadership programme amongst Indian PSUs through a one-time training programme, Aarohi is a 6-monthlong, unique intervention with several facets and different built in modules, to drive home the inputs. The programme has four phases of 3-4 days each, wherein vital inputs on the functional (business) areas as well as behavioural aspects are included.

The fifth edition of IndianOil's flagship programme on women leadership development 'Aarohi 5.0', was inaugurated by the Chairman in September 2022. The intervention comprises of a judicious mix of developmental and functional inputs, to enable the participants to become future business leaders. The inputs are customized to each individual right from the beginning based on Hogan profiling. During the programme, the learnings are reinforced through group activities, role plays, case studies, business simulations, and personality tests.

# **Health & Safety**

### **Our Safety Culture**

Our efforts to be a leader in safe operations are guided by IndianOil's robust Health, Safety, and Environment (HSE) Policy. As per Corporate Occupational Health Guidelines and Guidelines on Safety Management System, an Occupational Health and Safety (OHS) system has been implemented across all locations. The OHS system covers all IndianOil's employees and contract workers. We follow all applicable standards as stated by the Oil Industry Safety Directorate (OISD). All refineries and petrochemical plants are also OHSAS 18001 / ISO 45001:2018 certified by third party for Occupational Health & Safety Management systems. We are currently focused on developing measures aimed at mitigating risks to both health and life, with the ultimate goal of achieving zero incidents related to health and safety.

**Elements of the Safety Management System** 



Operation and Maintenance Procedures



Work Permit System



Training, Risk Analysis and Management



Personnel Safety Using Personal Protective Equipments (PPEs)



Process Safety Information and Management

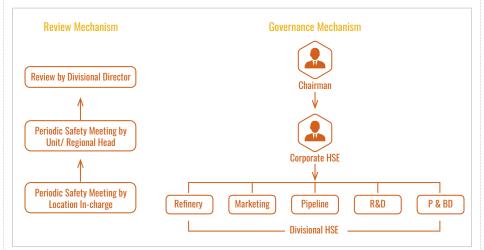
### **Safety Governance**

IndianOil's safety governance structure is led by the Chairman and supported by a dedicated HSE department, operating at the corporate, divisional, and unit levels. Corporate-level policies, targets, and guidelines are devised and then put into action by unit-level teams.

To ensure compliance and effectiveness, directives from corporate departments are disseminated through various safety committees. These committees conduct regular meetings to assess implementation

and performance. Additionally, workforce representatives actively participate in these meetings to address issues and challenges they encounter.

To maintain company-wide HSE performance standards, periodic reviews take place during Corporate Management Committee meetings, involving the Chairman and senior leaders. Key performance highlights and external safety audit recommendations from OISD are also presented to the Board of Directors in every meeting.

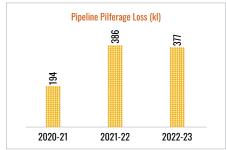


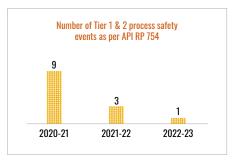
LOCATIONS HAVE APPROPRIATE SAFETY EQUIPMENTS

LOCATIONS SCREENED THROUGH INTERANL SAFETY AUDITS

### **Process Safety**

We are committed to ensuring safety in our operations. To monitor health & safety across our locations, we have launched OHS portal across all occupational health centres and divisions. We ensure the integrity of our operating systems and processes that deal with hazardous substances to keep people and the environment safe. We identify and evaluate areas for improvement in Process Safety for refining and production, including mechanical integrity and the necessary adherence to existing procedures. We have installed contemporary safety equipment and early warning systems. As a result of our robust health and safety management system, we targeted zero fatalities for the year 2023, and hence we successfully achieved the same.





Internal and external audits. conducted by the Oil Industry Safety Directorate (OISD), the Petroleum and Natural Gas Regulatory Board (PNGRB) and the Petroleum & Explosives Safety Organisation (PESO) aid in the monitoring of our process safety readiness and performance.

All incidents are investigated as per our guidelines issued across all business functions on incident categorisation, reporting, investigation & analysis. Learnings and recommendations from these investigations are implemented in a timebound manner. The learnings are shared across divisions to reduce the occurrence of such incidents. Refinery reporting kiosks encourage contract workers to provide details of near misses and immediate and appropriate steps are taken to prevent a recurrence.

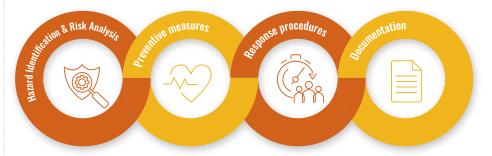


Regular safety checks at IndianOil

### **Emergency Preparedness**

We are well-prepared in the event of an emergency, such as spills, fires, leaks, or explosions. Our goal is to minimise the impact on human life, assets and properties, and the environment. We have developed Emergency Response and Disaster Management Plans (ERDMP) for all our locations and mutual aid agreements with neighbouring industries in accordance with the Petroleum and Natural Gas Regulatory Board's guidance. These ERDMPs elaborates about all types of emergencies and risk scenarios, as well as appropriate mitigation measures, actions to be taken to mobilise emergency services, and post-disaster recovery plans.

### Four phases of ERDMP



Regular personnel training, organizational exercises and mock drills are conducted by IndianOil. The plants have firefighting facilities and fire protection systems in place, which are maintained and inspected regularly. IndianOil works closely with National Disaster Response Force (NDRF) for emergency responses and disaster management.

IndianOil also conducts a Hazard and Operatability (HAZOP) study, before introducing any new process or equipment installation, to identify hazards and implement mitigation measures. In addition, for all new facilities, the teams conduct Quantitative Risk Analysis (QRA) in accordance with OISD and the Petroleum and Natural Gas Regulatory Board (PNGRB) standards. Such evaluations are conducted every five years.

100% locations equiped with ERDMP Plans, certified by PNGRB accrediated body and approved by the board

### **Workforce Health and Safety**

IndianOil has established a robust mechanism to create a safe working environment for employees to prevent injuries and fatalities

Right equipment/ technology and process

Engineering controls

Responsible waste management

Use of appropriate, adequate, and reliable Personnel Protective Equipment (PPE)

Monitoring of toxic gases and levels of hazards

Display boards with hazard signage displayed in identified areas

Hearing and vision conservation programme

Pre-employment, preplacement, and periodic medical check-ups

Dedicated facility for pre-examination of the people working at heights

Medical examination for people before allowing them to work in a confined space

Monitoring of occupational health and lifesaving equipment

Monitoring of Ambient Air and Water quality

### Safety in Supply Chain

Safety protocols extend beyond operational sites, encompassing contract laborers, transportation and distribution networks, and frontline workers. A range of initiatives, including awareness campaigns, training sessions, and health check-ups, are conducted to seamlessly embed safety measures throughout the value chain, mitigating potential concerns.

### Tank Truck (TT) Crew

Simulator-based training provided to 26,000+ TT crew to assess situational Reflex, Response, and Reaction.

Defensive driving training conducted for 36,706 TT crew as part of four safety campaigns.

52,200 TT crew underwent eye check-ups. Free spectacles and surgeries were organised as needed.

33,033 TT crew counselled on 'Anti Alcohol' habits.

TT crew enrolled using 'Sampark' App for safety trainings. During the financial year, 89,897 nos. of TT crew were enrolled, and 5,56,649 nos. of courses were completed on the App.

Night driving prohibitions introduced with call-centre based monitoring to sensitize the TT crew and Transporters

Increased visual content created through safety films uploaded on the 'Sampark' App for TT crew

'Driver Incentive scheme' implemented at 100% of the operating locations of POL & LPG to motivate drivers to be safe on the roads

Development of films on road safety, TT Checks at the Locations, Blind spot etc.

All tank trucks (TT) are checked on daily and quarterly basis as per OISD norms. Non-compliance to safety standards may render blacklisting of the TT as per provisions of Industry Transport Discipline Guidelines. All TTs are fitted with vehicle tracking system and anti-lock braking system.

TREM Card (Truck Rescue Emergency
Management Card for Road Transport)
providing information about the actions
required to be taken by the driver in the event
of spillage/ fires and list of emergency contact
numbers, is issued to TT Crew for use in case of
emergency.

### LPG delivery chain/domestic customers

83,398 safety clinics organised by distributors under the 3 'Prerana Campaigns'

2,56,661 customers contacted by mechanics

690 trucks inspected in godowns; safety indexing carried out at 686 distributors 12,278 delivery staff trained on Pre-Delivery Checks (PDC)

347 loaded trucks inspected by Area Office (AO) teams at LPG Bottling Plants

4,632 godown staff trained on loading/unloading of cylinders.

Conducted 27,874 LPG Panchayat for end customers

22,442 training programs conducted for delivery boys

### Retail Network/Dealers/Distributors

Campaigns for safe decantation of TTs conducted at ROs across India.

1,38,165 mock drills to enhance the emergency preparedness capabilities of RO staff.

Modifications introduced in the RO work permit system for bridging the existing gaps based on lessons learnt from incidents ensuring safety during all work carried out at the retail outlet.

Safety inspection of ROs by safety officers introduced to assess the level of safety adherence at ROs and advise for compliance on shortcoming.

Monthly safety day observed with specific themes identified to sensitize the dealers, managers, contractors, and customer attendants, to increase safety awareness within retail group, ro dealers, managers, contractors & customer attendants.

Development of safety films on construction safety, CNG/CBG product handling, work permit system, safety precautions during festival etc. to get the training on product handling, operation of the safety equipment & maintenance



Prioritizing safety across Value Chain

# **Our Customer-Centric Approach**

IndianOil is steadfast in meeting the nation's energy demands while continuously enhancing the customer journey across residential, industrial, and institutional sectors. Our expanding product and service repertoire underscores our commitment. Customer contentment remains paramount at IndianOil, driving us to engage and address inquiries through diverse channels including personal interactions, mobile apps, chatbots, and feedback systems. 'ePIC', our digital transformation cornerstone, empowers users across LPG, Retail Sales, Lubes, Petrochemicals, Institutional Business, and Aviation domains through mobile and web access. The XTRAREWARDS loyalty program thrives on this platform, fostering an extensive digital ecosystem with collaborations such as Amazon, Dominos, PayTm, Hyundai Motors, and Suzuki Motors for cross-integration of loyalty points.

Our digital expertise encompasses focused campaigns and a WhatsApp project concerning household composite cylinders, accompanied by VIBA, our WhatsApp chatbot, and predictive notifications for LPG refills. Customer-centric brand awareness initiatives effectively communicate crucial information, safety protocols, promotions, and deals. Regular brand awareness drives for customers are carried out to provide insights into new features, safety protocols, loyalty incentives, and promotions. Moreover, we proactively interact with customers across diverse social media channels.

Over 26 Lakh household received LPG Cylinders at their doorsteps IndianOil catered 14 crore customers through ePIC platform About 25,000 Retail Outlets have been onboarded to the platform



Delivering our customers in all terrains

### Safeguarding Customer Well-being

At IndianOil, customer safety takes precedence. Rigorous evaluations are conducted on all our products to assess potential health risks, aligned with relevant standards. Equipping customers with the requisite understanding, we provide information and instructions on use and handling of products. Physical demonstrations and advertising campaigns on social media and television are provided for users, ensuring responsible consumption. Safety advisories and Dos and Don'ts are prominently communicated to customers refuelling at our retail outlets. Our diligent efforts extend to regular programs for customer attendants, including dealers, guaranteeing accurate product information

dissemination.

IndianOil's active participation in the Sanrakshan Kshamta Mahotsav (SAKSHAM) which spearheads a spectrum of activities encompassing awareness campaigns, competitions, dialogues, and consultations with customers, employees, and dealers. This underscores our commitment to fuel conservation, health, and environmental protection. This month-long campaign engages citizens in reducing India's crude oil import dependency, fostering a collective movement toward sustainable energy practices.

### **Customer Feedback and Redressal Mechanism**

Our customers have the avenue to express feedback, suggestions, or grievances regarding any product or service through a range of channels



Utilizing the complaint register/suggestion book accessible at Indane distributors or Retail Outlets (Petrol Pumps).



Engaging the user-friendly online grievance management portal and IndianOil ONE mobile app.



CRM- Complaint Module in the CARE Customer Relationship Management (CRM) interfacetimebound response against the complaints received



Establishing direct contact with retail outlets or Indane distributorships via the contact details showcased at these locations.



Leveraging the tollfree Call Centre number.



99.9 % of Customer Complaints successfully resouled during FU 2022-23

# **Community Development**

As a dedicated corporate entity, our commitment to community engagement and support remains priority. We take pride in our role as a catalyst for social transformation, persistently fortifying our legacy by empowering communities, fostering optimism, and positively impacting the lives of millions. Our foundational belief at IndianOil rests on people-centricity, forming the bedrock of our pursuit of excellence. We recognize that our accomplishments stem not solely from strategic frameworks and investments, but from the collective ardour and commitment of everyone contributing to our triumph.

Our dedication to Corporate Social Responsibility (CSR) drives substantial investments into diverse community development projects. In this fiscal year, our CSR expenditure surpasses the prescribed budget stipulated by the Companies Act of 2013. These funds ensure the successful execution of planned CSR endeavours. Notably, during FY 2022-23, IndianOil allocated ₹167.85 Crore (accounting for approximately 64% of the total CSR expenditure) towards the critical thematic area of 'Health and Nutrition,' constituting a significant portion of the total expenditure amounting to ₹264.03 Crore.

**CSR FXPFNDITURF IN FY 2022-23** 

₹264.03 Crore

**PROJECTS** 

UNDFRTAKEN

11//

466

BENEFICIARY OF PROJECT VAYU AMRIT 3,530 FARMERS

TOTAL BENEFICIARIES 57 Lakhs

BENEFICIARY OF PROJECT GARIMA

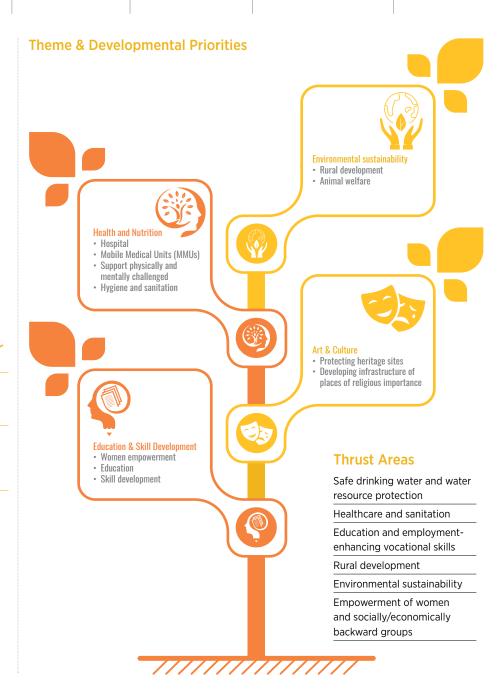
21,350 GIRLS

PATIENTS BENEFITTED FROM CANCER CARE PROJECT 68,000

### IndianOil's Sustainability & CSR Vision

IndianOil's Sustainability & Corporate Social Responsibility (S&CSR) vision is to conduct the operations in providing energy solutions to the customers in an efficient, safe, and ethical manner that minimises environmental impact and enhances the quality of life of the communities, while ensuring long-term growth of the business and the nation.

IndianOil Sustainability & CSR Policy



### **Details of CSR projects**

THRUST AREA	HEALTHCARE	EDUCATION		SPORTS		SKILL DEVELOPMENT	DRINKING WATER	ENVIRONN SUSTAINA		SANITATION	ART & CULTURE	RURAL DEVELOPMENT	EDUCATION & OTHERS
Project Category	IndianOil Aarogyam	IndianOil Gyanodaya	IndianOil Vidushi	IndianOil Acers	IndianOil Shresthtam	IndianOil Kaushal Vikas	IndianOil Jal Jeevan	IndianOil Surya Prakash	IndianOil Jaivik Urja	IndianOil Swachh Parivesh	Indian Oil Sanskriti	IndianOil Gramotthan	IndianOil Stree Shakti
Projects Type	Mobile Medical Unit Scheme at Bongaigaon/ Mathura/ Paradip; AOD Hospital-Digboi, Swarna Jyanti Hospital-Mathura (Flagship projects) & other healthcare initiatives	Scholarship Scheme for ITIs/ Polytechnics at 9 Refinery Units (Flagship projects) & other educational initiatives	Super 30 Girls at Bhubaneswar and NOIDA (Proposed)- (Flagship project)	Sports Scho Scheme (Fl	olarship agship project)	Skill development centres at Bhubaneswar/ Digboi/ Guwahati / Barauni (Flagship Projects) & other skill development initiatives	Drinking Water Initiatives	Solar Initiatives	Waste- to-Fuel / Bioenergy Related Initiatives	Sanitation/ Environment related Initiatives	Art & Culture related Initiatives/ IndianOil Foundation	Other Rural Development related initiatives	Assam Oil School of Nursing, Digboi (Flagship Project) & other Women Empowerment Initiatives
No. of Beneficiarie (in Lakhs)	s ~24.8	~4.5		~0.5		~0.5	~4.6	~7.9		~11	~2	-1	~0.5
% of beneficiaries from vulnerable ar marginalized grou		~35%		~51%		~56%	~56%	~43%		~31%	~49%	~39%	~50%



The Annual Action Plan for CSR projects during FY 2022-23 and their budget allocation details can be found here on IndianOil website: Annual Action Plan for CSR projects.

# The Indianoil Foundation

The IndianOil Foundation (IOF) is a non-profit trust and is mainly dedicated to providing tourist infrastructure facilities at heritage sites in collaboration with Archaeological Survey of India (ASI) and National Culture Fund (NCF) of Govt. of India. Funded by IndianOil, the Trust was established on 24 August 2000.

### Projects completed till March 2023

















**THANJAVUR** 



AT CELLULAR JAIL. PORT BLAIR





### Public friendly facilities at Khajekhalan Ghat, Patna

The Ghat in Patna Sahib, one of three officially registered cremation Ghats in the area apart from serving as a site for religious rituals, has been modernized by the IndianOil Foundation (IOF). IOF undertook this project with an investment of approximately ₹27 Crores, offering visitor-friendly amenities, including accessible steps to the Ganges, public facilities, and environmental protection measures. Completed in March 2023, IOF is also actively engaged in various projects across India, such as the Façade Illumination of Charminar and Golconda Fort, monument restoration in Bundi, and tourist infrastructure enhancements in Goa, emphasizing energy efficiency and sustainability in their initiatives.





Performance
Summary 2022-23

# Performance Summary 2022-23

### GRI 201-1 Direct economic value generated and distributed

Direct economic value generated, distributed, and retained (in ₹Cr.)	2020-21	2021-22	2022-23
Economic Value Generated	5,19,441	7,32,785	9,41,188
Economic Value Distributed	4,97,441	7,07,235	9,24,392
Operational Cost	4,65,773	6,73,901	9,03,579
Employee Wages and Benefits	10,712	10,992	8,770
Payment to providers of Capital	12,734	14,470	10,235
Taxes paid to government	7,880	7,550	1,456
Community Investment	460	298	351
Economic Value Retained	22,000	25,550	16,796

### Additional Information

Economic Performance (in ₹Cr.)	2020-21	2021-22	2022-23
Revenue from Operations	5,14,890	7,28,445	9,34,953
EBITDA (in ₹Cr.)	42,614	47,568	28,487
PAT (in ₹Cr.)	21,836	24,184	8,242
Earnings per share (in ₹)	23.78	17.56	5.98

### Note:

 The data for revenue from operations and earnings per share for FY 2021-22 has been restated. For more details, please see IndianOil's Integrated Annual Report 2022-23.

### Additional Information

Operational Performance (in MMT)	2020-21	2021-22	2022-23
Refinery Throughput	62.35	67.66	72.41
Pipelines Performance	76.02	85.52	97.38
Product Sales <sup>1</sup>	81.03	86.41	95.71

<sup>1</sup>Inclusive of Natural Gas, Petrochemical and Exports

Product Sales (in MMT)	2020-21	2021-22	2022-23
Total Sales	81.02	86.41	95.71
Domestic Sales	75.57	80.49	90.65
Petroleum Products	69.351	73.74¹	83.97
Petrochemicals	2.681	2.87	2.23
Natural Gas <sup>2</sup>	5.38	5.68	4.14
Explosives	0.27	0.29	0.34
Exports	5.45	5.91	5.06

<sup>1</sup>This data is a restatement from previous year <sup>2</sup>Data includes internal consumption of natural gas

### GRI-201-4 Financial assistance received from government (in ₹ Cr.)

Financial Assistance	2020-21	2021-22	2022-23
Capital Grants	580.66	113.201	262.45
Revenue Grants	190.86¹	188.92¹	221.69
Total	771.521	302.12 <sup>1</sup>	484.14

<sup>1</sup>This data is a restatement from previous year

### **GRI-203-2 Significant Indirect Impact**

Parameter	2020-21	2021-22	2022-23
Contribution to National & State Exchequer (in ₹Cr.)	2,38,786	2,64,436	2,40,185

### GRI-203-4 Proportion of spending on local suppliers

Procurement Details (%)	2020-21	2021-22	2022-23
From Local Suppliers <sup>1</sup>	94%	94%	98%
From MSME Suppliers <sup>2</sup>	28%	37%	29%

<sup>1</sup>Local is defined as procurement from Indian vendors. This excludes procurement of crude oil, petroleum products, and natural gas. Significant location of operations for IndianOil is India.

### GRI-205-1 Operations assessed for risks related to corruption

Parameter	2020-21	2021-22	2022-23
% of locations assessed for risk of	100%	100%	100%
corruption			

### GRI-205-2 Communication and training about anti-corruption policies and Procedures

Communication / Training	2020-21		2021-22		2022-23	
provided on Anti-Corruption Policies1 to -	Number	%	Number	%	Number	%
Board of Directors	11	100%	16	100%	15	100%
Permanent Employees	17,762	100%	17,929 <sup>2</sup>	100%	18,485	100%
Permanent Workers (Staff)	13,886	100%	13,325 <sup>2</sup>	100%	12,610	100%

<sup>1</sup>Data Pertains to FY 2022-23 and cover geographic boundary of India

### GRI-205-3 Confirmed incidents of corruption and actions taken

Data on vigilance cases	2020-21	2021-22	2022-23
Disciplinary cases related to vigilance disposed during FY (nos.)	44	57	75
Disciplinary cases related to vigilance pending as on end of FY (nos.)	16	27	34
Programs Conducted (nos.)	62	102	138
Employees attending (nos., rounded)	2,400	4,4041	7,000

¹This is a restatement from last year

Integrity Pact	2020-21	2021-22	2022-23
Tenders evaluated (nos.)	471	579	603
Complaints raised to IEMs for deliberation & recommendation (nos.)	33	28	10

Public Legal Cases	2020-21	2021-22	2022-23
Public legal cases against IndianOil or its employees related to corruption	NIL	NIL	NIL

### GRI 206-1 Legal actions for anticompetitive behaviour, anti-trust, and monopoly practices

Anti-Competitive Behaviour	2020-21	2021-22	2022-23
Number of legal actions pending or completed during FY	NIL	NIL	NIL

### GRI-301-1 Materials used by weight or volume

Parameter	Unit	2020-21	2021-22	2022-23
	Raw Material Consu	ımption		
Crude Oil Processed	(MMT)	62.35	67.66	72.41
Ethanol procured	'000 KL	972.7	1427.2	2021.7
Ethanol blending achieved	(%)	5.95%	7.96%	10.60%
Lubricant Base Oil sourced	('000 MT)	274.57	318.53	628
Lubricant Additives Sourced	('000 MT)	27.87	38.17	32.28
	Packaging Material Co	nsumption		
LUBES				
Metal Container	('000 MT)	7.10	7.78	13.61
Plastic Container	('000 MT)	9.02	6.46	9.90
Corrugated Boxes	('000 MT)	0.56	0.36	2.10
PETROCHEMICALS				
Plastic Bags	MT	6,786	7,556	7,761
LPG				
Cylinders Bottled	(nos.)	878	886	878

<sup>&</sup>lt;sup>2</sup>MSME is abbreviation for local Micro, Small and Medium Enterprises

<sup>&</sup>lt;sup>2</sup>This is a restatement from last year

### GRI-302-1 Energy consumption within the organization

Energy Consumption in TJ	2020-21	2021-22	2022-23
Total fuel consumption from Non- Renewable sources (a)	2,98,800	3,10,627	2,98,710
Total electricity consumption from Renewable sources (b)	340	391	395 <sup>1</sup>
Total electricity consumption from Grid (c)	3,202	3,373	3,201
Total Energy Consumption (a+b+c)	3,02,342	3,14,391	3,02,306

### Note

- Energy consumption from non-renewable sources has been derived from consumption of fuels such as Furnace Oil, Refinery Gas, Naphtha, Diesel, Process Coke and Natural Gas.
- The cumulative energy consumption for electricity, heating and steam generation for use in process units has been reported. Bifurcation is not currently included.
- The calorific value of fuel in major units such as refinery and petrochemical complexes have been arrived through testing of samples in internal NABL accredited labs.
- For indirect energy consumption due to use of grid electricity, a standard factor of 1MWh = 0.0036 TJ has been used for necessary conversions.

Nearly 50% Renewable Energy (RE)is being generated through 393 small RE plants which is being calculated using below mentioned scientific formula and remaining RE is being generated through 7 large RE plants which is being captured from installed meters.

While RE generation through large RE plants is captured from installed meters, RE generation through small RE plants is calculated using below mentioned scientific formula:

Solar Generation = Plant Capacity(kW) X Location Average Solar Generation per kW/day X Average Sunshine Days X 1st Year Degradation Factor X Degradation Factor for Remaining Year N

Solar Consumption = Solar Generation - 5% of Solar Generation on account of system losses

### Where,

Location Average Solar Generation per kW/day: Location Average Factor for Respective State from Ministry of New and Renewable Energy

Average Sunshine Days: Energy Efficiency Services Limited Website

Degradation Factors: MNRE Technical Specification Document and Solar Panel Manufacturer's Specification Sheet

N: Number of Years Based on Commissioning years

### GRI-302-2 Energy consumption outside of the organization

Parameters	2020-21	2021-22	2022-23
Energy consumption outside organisation (Trillion BTU)	3,228	3,445	3,884
Total energy consumption outside organisation (TJ)	34,05,9491	36,34,88411	40,97,624

<sup>1</sup>This is a restatement from previous year

### **GRI-302-3 Energy Intensity**

Parameters	2020-21	2021-22	2022-23
Specific energy consumption (MBN)	75.9	73.9	68
Energy Intensity Index (Refineries)	106.2	104.1	96.1

Energy Intensity	2020-21	2021-22	2022-23
PER UNIT CRUDE PROCESSED, IN TJ / MM	T CRUDE THROUGHPUT		
Total Energy Consumption Intensity	4849.11	4646.63	4174.92
Non-Renewable Sources	4843.66	4640.85	4169.47
Renewable Sources	5.45	5.78	5.46
PER UNIT REVENUE, IN TJ / ₹ '000 CR TUI	RNOVER		
Total Energy Consumption Intensity	587.20	431.59	323.34
Non-Renewable Sources	586.54	431.06	322.92
Renewable Sources	0.66	0.54	0.42
PER EMPLOYEE, IN TJ / EMPLOYEE			
Total Energy Consumption Intensity	9.55	10.06	9.72
Non-Renewable Sources	9.54	10.05	9.71
Renewable Sources	0.01	0.01	0.01

### Note

- Reported figures in the above table includes energy consumption in electricity, heating, and steam generation
  within the operational boundary. However, bifurcation of energy consumed exclusively for electricity, heating and
  steam is not being captured currently and hence not included.
- Assurance has been provided on Energy intensity based on crude throughput only.

### RI 302-4- Reduction in Energy Consumption

Reduction in Energy Consumption	2021-22	2022-23
Percentage Reduction in Energy Consumption	- 4%1	4 %

<sup>&</sup>lt;sup>1</sup> Energy consumption grew in FY 2021-22 from FY 2020-21, hence reported in negative

### GRI-303-3 Water Withdrawal

Source-wise water withdrawal (in '000 Megalitres)	2020-21	2021-22	2022-23
Surface Water	85.97	81.03	93.31
Groundwater	16.05	13.47	13.10
Third-party Water	1.33	9.33	1.26
Seawater/ desalinated water	0	0	0.02
Others	0.03	0.11	0.80
Total	103.38	103.94	108.50

### Note:

- · Total dissolved solids (TDS) is not being measured currently. We shall report in future Sustainability reports
- Major units of IndianOil i.e., refineries & petrochemicals are actively tracking their discharges and other units including business diversification are taking initiatives to track the same. Thus, for other units, the withdrawal has been considered as equal to consumption.

### GRI-303-3 Water Withdrawn from extremely high water-stressed areas (in '000 Megalitres)

Source-wise water withdrawn from extremely high water-stressed areas	2020-21	2021-22	2022-23
Surface Water	48.31	50.071	60.13

Note: 'This is a restatement from last year

- Major units of IndianOil i.e., refineries & petrochemicals are actively tracking their discharges and other units
  including business diversification are taking initiatives to track the same. Thus, for other units, the withdrawal has
  been considered as equal to consumption.
- · Wastewater discharged from the company complies with the Aqueduct water risk Atlas of WRI
- Total dissolved solids (TDS) is not being measured currently. We shall report in future Sustainability reports

### GRI-303-4 Water Discharge (in '000 Megalitres)

Source-wise water discharge	2020-21	2021-22	2022-23
Surface Water	2.24	3.28	3.30
Seawater	3.18	1.97	1.71
Groundwater	0.01	0	0.03
Third-party Water	0	0	0.06
Total	5.43	5.25	5.10

### Note:

- Wastewater discharged from the company complies with the Aqueduct water risk Atlas of WRI
- Major units of IndianOil i.e., refineries & petrochemicals are actively tracking their discharges and other units including business diversification are taking initiatives to track the same. Thus, for other units, the withdrawal has been considered as equal to consumption.
- Wastewater discharged from the water-stressed is in line with MINAS guideline parameters. Discharges are undertaken with due consent of statutory bodies
- · Total dissolved solids (TDS) is not being measured currently. We shall report in future Sustainability reports

### GRI-303-4 Water Discharge to all areas with water stress (in '000 Megalitres)

Source-wise water discharge in extremely high water-stressed areas	2020-21	2021-22	2022-23
Surface Water	3.42	3.43	4.11

### Note:

- Wastewater discharged from the water-stressed is in line with MINAS guideline parameters. Discharges are undertaken with due consent of statutory bodies
- Total dissolved solids (TDS) is not being measured currently. We shall report in future Sustainability reports

### GRI-303-5 Water Consumption (in '000 Megalitres)

Water Consumption (in '000 Megalitres)	2020-21	2021-22	2022-23
Freshwater consumed	97.95	98.68	103.40

### Note

Major units of IndianOil i.e., refineries & petrochemicals are actively tracking their discharges and other units
including business diversification are taking initiatives to track the same. Thus, for other units, the withdrawal has
been considered as equal to consumption.

### GRI-303-5 Water Consumption in water-stressed areas (in '000 Megalitres)

Water Consumption in water-stressed areas	2020-21	2021-22	2022-23
Freshwater consumed <sup>1</sup>	44.88	46.64	56.02

<sup>&</sup>lt;sup>1</sup> Freshwater consumed = Freshwater withdrawn - Water Discharged

### GRI-304-3 Habitats protected or restored

Cumulative trees surviving at the end of FY	2020-21	2021-22	2022-23
Total (lakh nos.)	24.29	40.59	50.36

### Note:

This data pertains to tree plantation undertaken within and beyond operational boundary.

### GRI-305-1 Direct (Scope 1) GHG emission

Parameter	2020-21	2021-22	2022-23
Total Emissions (MMTCO <sub>2</sub> e)	20.21	20.83	20.21
Refineries and Petrochemical Emissions (MMTCO <sub>2</sub> e)	20.05	20.67	19.99

### Note:

- GHGs considered: CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O
- The carbon dioxide emission factors for stationary emissions have been taken from IPCC, 2006. Emission from methane and N<sub>2</sub>O are reported as an aggregate % of these CO<sub>2</sub> emissions from stationary sources.
- Fugitive, N<sub>2</sub>O and methane emissions in refineries and petrochemical plants are estimated using the following standard factors as provided in API's GHG Compendium 2009:
- a. Fugitive Emissions (methane) = 0.19% of total stationary emissions
- b. Methane Emissions (from stack) = 0.5% of total stationary emissions
- c.  $N_2O$  Emissions = 1% of total stationary emissions

Since, the methane and  $N_2O$  emissions are estimated as a percentage of total stationary emissions, in  $CO_2$ eq terms, GWP are not considered separately in the calculations.

 The current GHG assessment includes emissions from stationary sources, mobile sources, flaring activities and fugitive emissions. Emissions from Biogenic Sources and Ozone Depleting Substances are currently excluded from estimates.

Parameter	2020-21	2021-22	2022-23
Stationary Combustion & Process Emission	19.66	20.39	19.79
Mobile Emissions	0.01	0.01	0.01
Flaring Emissions	0.20	0.09	0.08
Fugitive Emission <sup>1</sup>	0.03	0.03	0.03
CH <sub>4</sub>	0.10	0.10	0.10
N <sub>2</sub> O	0.20	0.21	0.20

<sup>1</sup> Reported figure pertains to methane fugitive emission from refineries and petrochemical, estimated as per API

Data Pertains to Refineries & petrochemicals units, except for Stationary combustion & process emission which
pertains to all units of IndianOil

### GRI-305-2 Indirect (Scope 2) GHG emissions

Parameter	2020-21	2021-22	2022-23
Total Emissions (MMTCO <sub>2</sub> e)	0.70	0.71	0.63
Refineries and Petrochemical Emissions (MMTCO <sub>2</sub> e)	0.25	0.24	0.16

### Note:

Grid emission factor has come down from 0.79 in 2021-22 to 0.71 in 2022-23, as per Central Electricity Authority's CO2 Baseline Database V 18.0. Thus, there is a drop in Scope-2 emissions despite an increase in grid power imports during the year.

### GRI-305-3 Indirect (Scope 3) GHG emissions

Scope-3 Emission (MMTCO <sub>2</sub> e)	2020-21	2021-22	2022-23
Emission from use of sold products	241.88	258.09	277.44
Upstream transportation and distribution <sup>1</sup>	-	-	22.34
Waste generated at operation <sup>1</sup>	-	-	1.7
Business Travel <sup>1</sup>	-		0.02
Total	241.88	258.09	301.50

<sup>1</sup>Data reporting started from FY 2022-23

### GRI-305-4 GHG emissions intensity

Scope-1 & 2 Emission Intensity	2020-21	2021-22	2022-23
Emission intensity per unit crude processed (in MTCO <sub>2</sub> e / MT of crude throughput)	0.335	0.318	0.288
Emission intensity per unit revenue (in MTCO <sub>2</sub> e / ₹ Crore)	39.42	29.57	22.29

### Note.

- GHGs considered: CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O
- Assurance has been provided on Émission intensity based on crude throughput only

Scope-3 Emission Intensity	2020-21	2021-22	2022-23
Emission intensity per unit revenue (in MTCO <sub>2</sub> e / ₹ Crore)	521	354	322

### **GRI-305-5 Reduction of GHG emissions**

Energy Efficiency Projects	2020-21	2021-22	2022-23
Annual savings potential of energy conservation (ENCON) projects implemented in refineries (SRFT)	92,589	66,886	2,55,379
Cumulative number of non-LED lights replaced with LED	7,19,090	7,92,738	8,86,431

Renewable Energy	/ Projects	2020-21	2021-22	2022-23
Installed Capacity	- Wind (MW)	167.6	167.6	167.6
Installed Capacity	- Solar (MW)	65.35	69.82	71.1
Installed Capacity	- Total RE (MW)	232.95	237.42	238.7
Renewable Energy	Generation (GWh)	329.46	358.2	367.82
Renewable power g to total electricity re	eneration as an equivalent quirement (%)	5%	5%	5%
Annual expenditur solar, wind, biofue	e on RE projects, i.e. Is (in ₹Cr.)	344.36	708.5	582.2
Retail Outlet Solar	risation	2020-21	2021-22	2022-23
Retail outlet solari	sed (as on end of FY)	18,336	19,502	20,992
Installed Solar Pov	ver capacity (MW)	102.4	111.7	123.4
Targeted Scope / Emission Boundary	Emission Avoidance / Mitigation / Offset (MMTCO2e)	2020-21	2021-22	2022-23
Scope-1	ENCON Projects	0.3	0.22	0.81
Scope-3	Pipeline Transport of Crude & Products <sup>1</sup>	1.04	1.13	1.17
Scope-1	Use of Natural Gas <sup>2</sup>	1.48	1.6	1.32
Scope-1&2	Renewable Energy	0.30	0.32	0.345
Scope-2	LED Implementation <sup>3</sup>	0.04	0.05	0.06
Scope-1&2	Tree Plantation <sup>4</sup>	0.05	0.08	0.1
	TOTAL	3.17	3.36	3.80

### Note:

Pipelines emission savings calculated as compared to rail transport. There is 75% savings in emissions when transporting products by pipelines as compared to rail. Emission Factors provided by the Twelfth Five Year Plan, Gol has been used for estimating the savings.

<sup>2</sup>Switching from Fuel Oil, Naphtha etc to Natural Gas

<sup>3</sup>For calculation of emissions avoided due to LED lights, load savings has been assumed to be 20 watt per light replaced and total operational hours to be 4,380 in a year

<sup>4</sup>For calculation, it has been assumed that a tree sequesters 20 kg of carbon every year

 $^5$ Emission factor for calculation emissions avoided from use of RE has been updated from 0.81 kgCO2e/kWh to 0.918 kg CO2e/kWh

### GRI-305-6 Emission of Ozone Depleting Substances (ODS)

ODS Purchased (MT)	2020-21	2021-22	2022-23
Quantity purchased	0.9	-	0.42

GRI-305-7 Nitrogen Oxides (NOX), Sulphur Oxides (SOX), and Other Significant Air Emissions

Air Emission (in tonnes)	2020-21	2021-22	2022-231
SO <sub>x</sub>	28,299	30,603 <sup>2</sup>	26,930
NO <sub>x</sub>	14,396	19,7112	22,172
Particulate Matter	2,963	1,867²	3,117
Volatile Organic Compound (VOC)	-	7	21
Flared Hydrocarbons	1,26,023	1,21,333	1,25,492
Hazardous Air Pollutants (HAP)	-	-	2,171
Persistent Organic Pollutants (POP)	-	-	-

### Note:

<sup>1</sup>The air quality data from refineries & petrochemical units are: SOx - 26,799 MT; NOx - 21,940 MT; Particular Matter - 2,658 MT; VOC - 8 MT; HAP - NIL; POP - NIL

<sup>2</sup>This is a restatement from last year

 Stack analyzers, sample testing of DG sets, continuous emission monitoring systems, etc are used in capturing the above data.

### GRI-306-3 Waste Generated

Hazardous Waste Generated (Tonnes) <sup>1</sup>	2020-21	2021-22	2022-23
Spent Catalyst	8,618	9,127	11,387
Oil sludge & Sludge (incl. ETP Sludge)	4,09,546	5,13,648	4,39,273
Biomedical Waste	8	11	9
E-waste	4,331	396	145
Other Hazardous Waste <sup>2</sup>	27,277	1,837	18,491
TOTAL	4,49,780	5,25,019	4,69,305

### Note:

<sup>1</sup> Some waste streams like e-waste, recyclables etc are stored before sale to recyclers. Generation quantity is estimated during sales.

<sup>2</sup>includes waste such as Oil Drums, Cotton waste, Battery waste etc

Non-Hazardous Waste Generated (Tonnes)	2020-21	2021-22	2022-23
Paper Waste	291	523	285
Organic Waste	1,326	1,174	371
Ferrous scrap	12,721	23,014	16,455
Non-Ferrous Scrap	54	204	3,747
Plastic	2,188	1,104	371
Others <sup>1</sup>	796	489	6,159
TOTAL	17,376	26,507	27,388

<sup>1</sup>Data includes (MS Drum, Aluminium sheet, Aluminium cut cable, Brass tube, wooden scrap, Jerry Cans, Wooden scrap, Pallets & Cardboards, etc)

### GRI-306-4 Waste diverted from disposal

Hazardous Waste Recycled (Tonnes)	2020-21	2021-22	2022-23
Spent Catalyst	8,767	6,733	12,280
Oil sludge & Sludge (incl. ETP Sludge)	4,07,638	4,75,050	4,94,449
Biomedical Waste <sup>1</sup>	8	42	7
E-waste	4,493	360	124
Others	26,345	1,230	17,675
TOTAL	4,47,251	4,83,376	4,58,712

<sup>1</sup> Sale to designated entities responsible for safe disposal of the waste

<sup>2</sup> This is a restatement from last year

Non-Hazardous Waste Recycled (Tonnes)	2020-21	2021-22	2022-23
Paper Waste	289	439	280
Organic Waste	1,134	805	343
Ferrous scrap	14433	21,551	15,562
Non-Ferrous Scrap	54	96	4,092
Plastic waste	2,189	1,022	328
Others	797	177	5,946
TOTAL	18,896	24,090	26,551

### GRI-306-5 Waste directed to disposal

· · · · · · · · · · · · · · · · · · ·			
Hazardous Waste Responsibly Disposed / Recycled (Tonnes)	2020-21	2021-22	2022-23
Spent Catalyst	1,326	2,200	1,175
Oil sludge & Sludge (incl. ETP Sludge)	7,774	12,430	11,049
Biomedical Waste	0	6	1
E-waste	0	1	0
Others	953	152	510
TOTAL	10,053	14,789	12,735

Non-Hazardous Waste Responsibly Disposed / Recycled (Tonnes)	2020-21	2021-22	2022-23
Paper Waste	2	1	4
Organic Waste	171	2	24
Ferrous scrap	70	0	0
Non-Ferrous Scrap	0	0	4
Plastic waste	453	0	0
Others	0	0	2,200
TOTAL	696	3	2,232

### GRI-307-1 Non-compliance with environmental laws and regulation

Environment Compliance related data	2020-21	2021-22	2022-23
No. of incidents of non-compliance	3	9	10
Value of Significant fines (INR Million)	250.09	0.5	0.01
Non-Monetary Sanctions	-	-	-
Environment Expenditure (INR Million)	400.7	1477	14851

### GRI 308-1, 414-1 New Suppliers Screened Using Environmental & Social Criteria

Screening of new suppliers	2022-23
Percentage of new suppliers screened using social and environmental criteria <sup>1</sup>	100%

'Terms and conditions related to screening of suppliers are included in the General Contract Conditions of suppliers. These include various clauses of social / environmental compliances in accordance with national standards. Adherence to the conditions is enforced by the Engineer-in- charge for the project / work. The Company is in the process of putting in a sustainable supply chain framework for assessment of suppliers.

2020-21

2021-22

2022-23

### GRI-401-1 New employee hires and employee turnover

New Employee Hires

New employee hires	490	1,407	1,455
Employees hired (male)	447	1,319	1,305
Employees hired (female)	43	88	150
Employees hired (<30 years)	442	1,323	1,275
Employees hired (30-50 years)	48	79	177
Employees hired (>50 years)	0	5	3
Rate of New Employee Hires	2020-21	2021-22	2022-23
Rate of new employee hire	1.55%	4.50%	4.68%
Rate of employees hired (male)	1.55%	4.62%	4.60%
Rate of employees hired (female)	1.55%	3.24%	5.50%
Rate of employees hired (<30 years)	5.96%	18.57%	16.63%
Rate of employees hired (30-50 years)	0.34%	0.53%	1.16%
Rate of employees hired (>50 years)	0.00%	0.05%	0.04%
Employee Turnover	2020-21	2021-22	2022-23
Total employee turnover	1,585	1,744	1,766
Employee turnover (male)	1,459	1,600	1,613
Employee turnover (female)	126	144	153
Employees turnover (<30 years)	161	176	252
Employees turnover (30-50 years)	34	107	107
Employees turnover (>50 years)	1390	1461	1407

Rate of Employee Turnover	2020-21	2021-22	2022-23
Rate of employee turnover	5.01%	5.58%	5.68%
Rate of employee turnover (male)	5.05%	5.61%	5.69%
Rate of employee turnover (female)	4.54%	5.30%	5.61%
Rate of employees turnover (<30 years)	2.17%	2.47%	3.29%
Rate of employees turnover (30-50 years)	0.24%	0.71%	0.70%
Rate of employees turnover (>50 years)	14.02%	15.97%	17.12%
Employee	2020-21	2021-22	2022-23
Permanent Employees - Officers & staff	31,648	31,254	31,095
By Gender			
Male	28,873	28,536	28,369
Female	2,775	2,718	2,726
By Age			
<30	7,410	7,126	7,667
30-50 years	14,324	14,979	15,209
>50 years	9,911	9,149	8,219
By Grade			
Senior Management (Grade G - I)	1,120	1,136	1,160
Middle Management (Grade D - F)	4,539	4,578	4,710
Junior Management (A0 - C)	12,103	12,215	12,615
Staff	13,886	13,325	12,610
By Category			
SC	5,428	5,367	5,339
ST	2,516	2,501	2,467
OBC	7,268	7,675	8,117
General	16,436	15,711	15,923
Employees with Disabilities	707	710	724
Temporary Employees	80,338	82,792	93,452
Ву Туре			
Consultants, liaison officers, doctors	255	33	51
Contract Labour	20,083	82,759	93,401

### GRI-401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees

Employee Benefits (₹ Crore)	2020-21	2021-22	2022-23
Provident Fund	637.11	840.27	513.2
Gratuity	81.1	47.46	55.26
Post-Retirement Medical Scheme (PRMS)	287.91	288.77	295.71
Resettlement allowance	28.39	27.15	25.55
Ex-gratia	14.9	14.95	17.77
Felicitation	32.11	35.63	36.31

### GRI-401-3 Parental leave

Parental Leaves	2020-21	2021-22	2022-23
Total number of employees that are entitled to parental leave	31,648	31,254	31,095
number of employees that are entitled to parental leave (males)	28,873	28,536	28,369
number of employees that are entitled to parental leave (females)	2,775	2,718	2,726
Employees that took parental leave (male)	936	525	1215
Employees that took parental leave (female)	74	137	158
Employees that returned to work after leave ended male	936	502	1175
Employees that returned to work after leave ended (female)	66	90	107
Return to work rate (male) (%)	-	96%	96.7%
Return to work rate (female) (%)	89.19%	65.69%	67.70%
Males that are still employed 12 months after their return to work	-	933	1011
Females that are still employed 12 months after their return to work	33	54	157
Retention rate (Male) (%)	-	99.7%	99.2%
Retention rate (Female) (%)	100%	99%	98%

### GRI-403-8 Workers covered by an occupational health and safety management system

Our health and safety management system cover 100% of our employees and workers." Also, employees and workers who are not employees but whose work and/or workplace is controlled by the organisation has been internally and externally audited. For example, we follow all applicable standards as stated by the Oil Industry Safety Directorate (OISD). All refineries and petrochemical plants are also ISO 45001:2018 certified for Occupational Health & Safety Management systems

### GRI-403-9 Work-related injuries

Work-related Injuries	2020-21	2021-22	2022-23
Fatal accidents	7	9	2
Fatalities	8	14	2
Rate of high consequence work related injuries <sup>1</sup>	0.014	0.048	0.0072
Major accidents (other than major fire related)	-	-	2
Near miss	98,417	1,31,385	1,24,537
Man-days lost	198	1,993	203
Number of lost time accidents	7	4	5
Major fire incidents	1	2	0
Minor fire incidents	12	6	8
Lost time injury frequency rate	0.038	0.175	0.181
Total recordable injury rate	0.038	0.175	0.181
Million man-hours worked	211.48	251.92	276.38

<sup>1</sup>Calculated using formula: Rate of high consequence work-related injuries = Number of high- consequence work-related injuries (excl. fatalities) / Number of hours worked (million hours)

### GRI-403-10 Work-related ill health

Work related ill-health	2020-21	2021-22	2022-23
Number of recordable cases of work-related ill-health / injuries	12	3	2
Number of fatalities related to work related ill-health <sup>1</sup>	-	-	-

<sup>1</sup>COVID related deaths were not considered as work related ill-health for reporting in this table

### GRI-404-1 Average hours of training per year per employee

Average hours of training	2020-21	2021-22	2022-23
Average hours of training	11.48	24.93	24.95

### GRI-404-2 Programs for upgrading employee skills and transition assistance programs

IndianOil conducts various skill development and transition assistance programs for the employees including senior executives such as

Madhyama- transformative program, entailing a mandatory two-week training period, immersing executives in a comprehensive curriculum that encompasses diverse dimensions of our business, including crucial behavioural skills.

Saarthi A one-on-one Leadership Coaching initiative aimed to build and sustain an infallible IndianOil leadership pipeline and prepare them as future and change-ready officers.

Swadhyaya A Technology aided e-Learning program to upskill and build technical competency

Harvard Manage Mentor (HMM) An online resource containing 43 modules broadly classified under 3 categories, i.e., Leading Yourself, Leading Others, & Leading the Business.

Others- Executive MBA program, Advance management program, Saksham Leadership competency development program, Leadership simulation workshop / Business simulation games, etc.

e-Sambandh: An integrated portal for the super annuated employees for addressing the diverse needs of retired individuals.

### GRI-405-1 Diversity of governance bodies and employees

Board of Directors (BoD) as on end of FY	2020-21	2021-22	2022-23
Number of Board members	11	16	15
Whole time	7	8	7
Independent	4	8	8
Percentage of male Board members	82.00%	87.50%	93.33%
Percentage of female Board members	18.00%	12.50%	6.67%
Percentage of BoD(<30 years)	0.00%	0.00%	0.00%
Percentage of BoD (30-50 years)	27.00%	18.80%	6.67%
Percentage of BoD (>50 years)	73.00%	81.20%	93.33%

Employees as on end of FY	2020-21	2021-22	2022-23
Permanent Employees - Officers & staff	31,648	31,254	31,095
Percentage of male employees	91.20%	91.30%	91.23%
Percentage of female employees	8.80%	8.70%	8.77%
Percentage of employees (<30 years)	23.40%	22.80%	24.66%
Percentage of employees (30-50 years)	45.30%	47.90%	48.91%
Percentage of employees (>50 years)	31.30%	29.30%	26.43%

### GRI-405-2 Ratio of basic salary and remuneration of women to men

Complaints made by employees and workers	2020-21	2021-22	2022-23
Employees (excl. Board of Directors)	01:01	0.94:1	0.93:1
Staff	-	1.16:1	1.17:1

Median Salary (total remuneration) is considered to estimate the ratios provided in the table above. This is to align the data to the absolute numbers provided in BRSR report 2022-23. The ratio is calculated by proportioning the median female employee salaries to the median salaries of male employees under respective categories.

### GRI-406-1 Incidents of discrimination and corrective actions taken

Complaints made by employees and workers	2020-21	2021-22	2022-23
Discrimination at workplace	Nil	Nil	NIL

# GRI-407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may

Right to freedom of association and collective bargaining	2020-21	2021-22	2022-23
Operations and suppliers in which workers' rights to exercise freedom of association or collective bargaining may be violated or at significant risk	NIL	NIL	NIL
Unions / employee associations recognised by IndianOil (nos.)	11	11	11
Permanent employees that are members of recognised employee associations (%)	96%	96%	95%

### GRI-408-1 Operations and suppliers at significant risk for incidents of child labour

NIL	NIL
	NIL

### GRI-409-1

Forced / Compulsory Labour	2020-21	2021-22	2022-23
Operations and suppliers considered to have significant risk of forced or compulsory labour	NIL	NIL	NIL

### GRI-410-1 Percentage of security personnel with formal training

Security personnel with formal training	2020-21	2021-22	2022-23
Number of Central Industrial Security Force (CISF) underwent training	4,115	3,858	3,421
Number of Director General of Resettlement (DGR) underwent training	6,061	10,534	8,895
Number of Indian Oil security officers who underwent training	43	193	579
Others	1,090	1,562	1,084

### GRI-412-1 Operations that have been subject to human rights reviews or impact assessments

Human Rights Assessment	2022-23
Operations that have been subject to human rights reviews or human rights impact assessments (%)	100%

### GRI-412-2 Employee training on human rights policies or procedures

Human Rights Training <sup>1</sup>	2022-23
Number of trainings	43
Training man-hours on human rights policies or procedures	10,3202
Employees trained in human rights policies or procedures	3.93 %3

 ${}^{1}\!Data\ pertains\ to\ trainings\ provided\ to\ employees\ towards\ sensitization\ on\ Sexual\ Harassment$ 

# GRI-412-3 Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening

Human Rights Clauses in Agreements <sup>1</sup>	2022-23
Significant investment agreements and contracts that include human rights clauses %	100
to the term of the	

<sup>1</sup> Includes clauses such as child labour, minimum wages etc

### GRI-413-1 Operations with local community engagement, impact assessments, and development programs

CSR Projects	2020-21	2021-22	2022-23
Girls enrolled under Vidushi Scheme (nos.)	120	120	119
Sportspersons supported through Sports Scholarship Scheme (nos.)	167	166	243
Women skilled in Nursing School at Assam (cumulative numbers)	469	498	497
Divyangjans supported (nos.)	18,250	3,940	6,211
Patient footfall under Arogyam (nos.)	1,06,634	2,72,273	2,51,000
Mathura Hospital: Patients treated (nos.)	30,707	41,224	45,000
Digboi Hospital: Patients treated (nos.)	4,120	6,030	6,500
Trees planted under 'Lungs of City' initiative (cumulative numbers)	1,28,900	1,50,000	1,52,000
Toilets constructed (nos.)	884	151	318
Total Expenditure	460	298	264

### GRI-413-2 Operations with significant actual and potential negative impacts on local communities

Operations with negative impact on local communities	2020-21	2021-22	2022-23
Number / Type of operations	NIL	NIL	NIL

### GRI-414-1 New suppliers that were screened using social criteria

Parameters	2020-21	2021-22	2022-23
New suppliers screened using social criteria	100%	100%	100%

### GRI-414-2 Negative social impacts in the supply chain and actions taken

Parameters	2021-22	2022-23
Negative social impacts in the supply chain and actions taken	NIL	NIL

### GRI-416-2 Incidents of noncompliance concerning the health and safety impacts of products and services

Incidents of product related health & safety non-compliances	2020-21	2021-22	2022-23
Health & safety impact of products (No. of incidents of non-compliance)	NIL	NIL	NIL

### GRI-417-2 Incidents of noncompliance concerning product and service information and labelling

Incidents of non-compliance in product information & labelling	2020-21	2021-22	2022-23
Number of incidents of noncompliance in product information and labelling	NIL	NIL	NIL

### GRI-417-3 Incidents of noncompliance concerning marketing communications

Incidents of non-compliance in marketing communication	2020-21	2021-22	2022-23
Number of incidents of noncompliance in marketing communications	NIL	NIL	NIL

### GRI-418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data

Customer data breaches	2020-21	2021-22	2022-23
Complaints concerning breaches of customer privacy and losses of customer data (number)	NIL	NIL	NIL

<sup>&</sup>lt;sup>2</sup>Estimated by taking 8 hour / training day.

<sup>&</sup>lt;sup>3</sup>Each training conservatively taken to be attended by 30 employees

# **Material Topics and Its Impact Boundaries**

S. NO.	MATERIAL TOPICS	WHY IS IT MATERIAL?	RELEVANT GRI STANDARDS INDICATOR	IMPACT BOUNDARY	STAKEHOLDER IMPACTED	S. NO.	MATERIAL TOPICS	WHY IS IT MATERIAL?	RELEVANT GRI STANDARDS INDICATOR	IMPACT BOUNDARY	STAKEHOLDER IMPACTED
1	Economic Performance	The foundation of growth for any organization lies in its ability to deliver a robust economic performance. Meeting financial objectives is essential for IndianOil, as it can lead to higher revenues, improved profit margins, and facilitate the company's expansion efforts. Additionally, our financial results can be influenced by various factors, including competitive pressures and regulatory changes that may affect our profitability.	GRI 201: Economic performance	Within IndianOil	Investors and shareholders, business partners/contractors, employees	5	Climate Change Mitigation	climate change is causing a transformation in the business landscape, with anthropogenic activities leading to a rise in greenhouse gas emissions. Simultaneously, the shift toward a low-carbon approach offers prospects for enhanced efficiency, innovation, and expansion. Moreover, achieving positive performance in critical sustainability aspects, particularly in addressing climate change, is a significant expectation of both investors and various stakeholders.	GRI 302: Energy GRI 305: Emissions	Within and outside IndianOil	Investors and shareholders, employees, government/ regulatory bodies, industry and trade associations, media, academic and scientific community
2	Market Volatility	Our financial performance has strengthened in the current reporting year.	Non GRI	Within and outside IndianOil	Customers, business partners/ contractors, employees, investors and shareholders	6	Managing Environmental Impacts	the reduction of our operational environmental footprint, including the	GRI 303: Water and effluents GRI 304: Biodiversity GRI 306: Waste	Within and outside IndianOil	Investors and shareholders, employees, government/ regulatory bodies, industry
3	Sustainable Supply Chain	Our operations depend on a well-established supply chain, comprising suppliers, vendors, contractors, and more. Collaborating with our	GRI 204: Procurement practices GRI 308: Supplier environmental	Outside IndianOil	Business partners, industry and trade associations			sustainable stewardship of resources.			and trade associations, media, academic and scientific community
		supply chain partners is vital to promote sustainable business practices and tackle significant risks effectively. Ensuring the promotion of health and safety standards throughout the supply chain is also of paramount importance.	assessment GRI 414: Supplier social assessment			7	Product Stewardship	IndianOil is dedicated to mitigating the negative environmental consequences stemming from its operations, products, and services. This commitment involves overhauling operational methods, employing materials that prevent, diminish, and manage pollution, and engaging in efforts to restore and preserve natural habitats.	GRI 302: Energy GRI 305: Emissions GRI 303: Water and effluents GRI 304: Biodiversity GRI 306: Waste	Within and outside IndianOil	Employees. customers
4	Digitisation	Embracing digitization has become a critical factor in staying abreast of evolving times.	Non GRI	Within and outside IndianOil	Employees, business partners/ contractors						

S. NO.	MATERIAL TOPICS	WHY IS IT MATERIAL?	RELEVANT GRI STANDARDS INDICATOR	IMPACT BOUNDARY	STAKEHOLDER IMPACTED	S. NO.	MATERIAL TOPICS	WHY IS IT MATERIAL?	RELEVANT GRI STANDARDS INDICATOR	IMPACT BOUNDARY	STAKEHOLDER IMPACTED
8	Circularity/ Materials	advancing the concept of a circular economy through the creation of a system for gathering, reprocessing, and incorporating recycled waste into products, with	GRI 306: Waste	Within and outside IndianOil	Employees, Business partners/ contractors, customers	12	Community Development	Fostering societal value for all our stakeholders stands as a top priority, as it also secures the company's social permission to operate.	GRI 203: Indirect Economic Impacts GRI 413: Local communities	Outside IndianOil	Community and NGOs
		a particular focus on used plastics and used lubricants/oils.				13	Security Practices	effectively handling	GRI 410: Security practices	Within and outside IndianOil	Employees and business partners/ contractors
9	Employment Practices	Investing in our workforce through a strong recruitment strategy, training initiatives, incentives, and benefits is crucial for retaining	GRI 401: Employment GRI 404: Training and education GRI 405:	Within IndianOil	Employees			encompassing a spectrum of threats that extend to asset vulnerability and cybersecurity concerns.			
		skilled employees and is indispensable for the company's growth and productivity.	Diversity and equal opportunity GRI 406: Non- discrimination			14	Customer Satisfaction & Brand Loyalty	For IndianOil, customer satisfaction serves as a measure of customer loyalty and retention, consequently leading to	GRI 416: Customer health and safety GRI 417:	Within and outside IndianOil	Customers
10	Labour Rights & Relations	Given the nature of our operations, our dependence on third-party and temporary workforce is substantial. Ensuring the safeguarding of labor rights and preventing any	relations regulatory GRI 407: bodies Freedom of		the growth of revenues.	Marketing and labelling GRI 418: Customer privacy					
		human rights violations in workplaces and throughout the value chain is of utmost importance.	and collective bargaining GRI 408: Child labour GRI 409: Forced or compulsory labour GRI 412:			15	Compliance & Governance	Non-Compliance of the laws and regulations can have the potential to disrupt business operations.	GRI 307: Environmental compliance GRI 419: Socio- economic compliance	Within IndianOil	Employees, business partners/ contractors, government/ regulatory bodies
			Human rights assessment			16	Business Ethics & Accountability	Implementing strong corporate governance	GRI 205: Anti- corruption	Within IndianOil	Employees, business partners/ contractors, government/ regulatory bodies
11	Health & Safety	As a company with a significant reliance on manual labor, prioritizing the health and safety of our employees is of paramount importance.	GRI 403: Occupational health and safety	Within and outside IndianOil	Employees, business partners/ contactors		Accountability	principles establishes a bedrock for ethical and socially responsible business conduct, fostering trust between the company and its stakeholders.	GRI 206: Anti- competitive behaviours		

# **Abbreviations**

AAQ	Ambient Air Quality	CSP	Concentrated Solar Power	FCCE	Fluidised Catalytic Cracking Unit	ITPS	Integrated Transaction Processing Server
AE&SD	Alternate Energy & Sustainable	CSR	Corporate social responsibility	FCI	Food Corporation of India	ISO	
AFC	Development	CSR&SD	Corporate social responsibility &	FICCI	Federation of Indian Chambers of	150	International Organization for Standardization
AFS	Aviation Fuel Station		sustainable development		Commerce and Industry	kl	Kilo litre
ALIMCO	Artificial Limbs Manufacturing Corporation	CVC	Central Vigilance Commission	FO	Fuel Oil	km	Kilo Meter
ASI	Archaeological Survey of India	DEF	Diesel Exhaust Fluid	FTL	Free Trade LPG	KNP	Kuno National Park
ATF	Aviation Turbine Fuel	DGR	Directorate General of Resettlement	GCC	General Conditions of Contract	KPI	Key Performance Indicator
B2B	Business to Business	DPE	Department of Public Enterprises	GHG	Greenhouse Gases	KRA	Key Result Area
B2C	Business to Consumer	E20	Ethanol 20	GPS	Global Positioning System	KSK	Kisan Seva Kendra
BIS	Bureau of Indian Standards	E&P	Exploration and Production	GRIHA	Green Rating for Integrated Habitat Assessment	KW	Kilowatt
BMW	Biomedical Waste	e-ARS	e - Accident Reporting System	GSO	Government Supported Oil	KWh	Kilowatt Hour
BRSR	Business Responsibility and	Eco-parks	Ecological Parks	GWh	Gigawatt hour	kWp	KiloWattpeak
BCD /// //	Sustainability Reporting	EDPL	Effluent Discharge Pipeline	H-CNG	Hydrogen spiked CNG	L&D	Learning and Development
BSIV/VI	Bharat Stage IV / VI		-	HAZOP	Hazard and Operability Study	LCD	Liquid Crystal Display
BTU	British Thermal Units	EFRT	External Floating Roof Tank	HCU	Hydrocracker Unit	LDO	Light Diesel Oil
CAP	Compliance Audit Program	EIA	Environment Impact Assessment	HR	Human Resources	LEDs	Light Emitting Diodes
CBG	Compressed Biogas	EMP	Environment Management Plan	HSD	High Speed Diesel	LEED	Leadership in Energy and
CCE	Cold Chain Equipment	ENCON	Energy Conservation	HSE	Health, Safety and Environment		Environmental Design
CCUS	Carbon Capture, Utilization, and Storage	EPR	Extended Producer Responsibility	нмм	Harvard Manage Mentor	LMO	Liquid Medical Oxygen
CDA rules	Conduct, Discipline and Appeal Rules	e-PIC	Electronic Portal for IndianOil	IBBI	India Business & Biodiversity Initiative	LNG	Liquefied Natural Gas
CDP	Carbon Disclosure Project		Customers	ICT	Institute of Chemical Technology	LOIs	Letter of Intent
CERT-IN	Computer Emergency Response	e-PMS	e - Performance Management System	IFRT	Internal Floating Roof Tank	LPG	Liquefied Petroleum Gas
	Team-India	ERDMP	Emergency Response & Disaster Management Plan	IIT	Indian Institutes of Technology	LTIFR	Lost Time Injury Frequency Rate
CGD	City Gas Distribution	EDM	_	INCCA	Indian Network for Climate Change	L&T	Larsen & Toubro
CII	Confederation of Indian Industries	ERM	Enterprise Risk Management		Assessment	MBN	Million British Thermal Unit per Thousand barrels per Energy Factor
CISF	Central Industrial Security Force	ERP	Enterprise Resource Planning	IOF	IndianOil Foundation	MMBTU	Metric Million British Thermal Unit
CLDP	Common LPG Data Platform	ESA	External Safety Audit	IP	Integrity Pact	MMT	Million metric tons
CNG	Compressed Natural Gas	ESG	Environmental, Social, and Governance	IPCC	Intergovernmental Panel on Climate	MMTCO2e	Million Metric Tonne of Carbon Dioxide
CoE - H	Centre of Excellence on Hydrogen	ECI			Change		Equivalent
CPCB	Central Pollution Control Board	ESI	Employees' State Insurance	IPIECA	International Petroleum Industry Environmental Conservation	MMTPA	Million metric tons Per Annum
CPSE	Central Public Sector Enterprises	ETP	Effluent Treatment Plants		Association	MoU	Memorandum of Understanding
CRM	Customer Relationship Management	ETAC	Energy Transition Advisory Committee	IPS	Intrusion Prevention System	MoP&NG	Ministry of Petroleum and Natural Gas
CRO	Customer Relationship Officers	EV	Electric Vehicle	IR	Integrated Reporting	MSE	Micro and Small Enterprises

MSME	Micro, Small and Medium Enterprises	PCMM	People Capability Maturity Mode	SAKSHAM	Sanrakshan Kshamta Mahotsav	<b>Impor</b>
MSO	Maintenance Services Organization	PCRA	Petroleum Conservation Research	SATAT	Sustainable Alternative Towards	
MSQ	Motor Spirit Quality Upgradation unit	556	Association		Affordable Transportation	Corporate Web
MT	Metric Tonne	PDC	Post-delivery checks	SCADA	Supervisory Control & Data Acquisition	https://iocl.com
MW	Mega Wat	PESO	Petroleum & Explosives Safety Organisation	S.C. /ST	•	Financial Perfor
MWP	Mega Watt Peak	PET	Polyethylene terephthalate	SC/ST	Scheduled Caste/Scheduled Tribe	https://iocl.com
NAAQS	National Ambient Air Quality	PF	Provident Fund	SDGs	Sustainable Development Goals	<u>overview</u>
	Standards	PGCIL	Power Grid Corporation of India	SD-WAN	Software-defined Wide Area Network	Integrated Anni
NCF	National Culture Fund		Limited	SEBI	Securities and Exchange Board of	Indian Oil Corpo
NCIIPC	National Critical Information Infrastructure Protection Centre	PH	Physically Handicapped		India	Report 2022-23
NCR	National Capital Region	PM	Particulate Matter	SIEM	Security Incident & Event Monitoring	B
NCT	National Capital Territory	PMUY	Pradhan Mantri Ujjwala Yojana	SJVN	Satluj Jal Vidyut Nigam	Business Respo Sustainability R
NDRF	National Disaster Response Force	PNG	Piped Natural Gas	SOAR	Security Orchestration, Automation,	IndianOilBRSR2
NDC	Nationally Determined Contributions	PNGRB	Petroleum & Natural Gas Regulatory		and Response	
			Board	SOC	Security Operation Center	Sustainability a https://iocl.com
NGOs	Non-Governmental Organisation	POL	Petroleum, Oil, and Lubricants	SOPs	Standard Operating Procedures	
NIT	National Institutes of Technology	POSH	Prevention of Sexual Harassment	SOx	Sulphur Oxides	Corporate Socia
NMIMS	Narsee Monjee Institute of Management Studies	PPE	Personal Protective Equipment	SPCB	State Pollution Control Board	https://iocl.com
NOx	Nitrogen oxides	PPM	Parts per Million	SRFT	Standard Refinery Fuel in Tonnes	Corporate Polic
NPCI	National Payment Corporation Limited	PRECIS	Providing Regional Climate for Impact Studies	STFCT	Sundarban Tiger Conservation	https://iocl.com
NTCA	National Tiger Conservation Authority	PRMBF	Post-Retirement Medical Benefit	51. 61	Foundation Trust	
NTPC	National Thermal Power Corporation	PRIVIDE	facility	STP	Sewage Treatment Plant	Citizens' Charte
NVG	National Voluntary Guidelines	PSU	Public Sector Undertaking	TCFD	Task Force on Climate-related	https://iocl.com
ОВС	Other Backward Class	PUC	Pollution Unit Control		Financial Disclosures	Vigilance
OGSS	Oil and Gas Sector Supplement	PV	Photovoltaic	tCO2e	Tonne of Carbon Dioxide Equivalent	https://iocl.com
OHC	Occupational Health Centres	QRA	Quantitative Risk Analysis	TERI	The Energy and Resource Institute	
OHS	Occupational Health and safety	R&D	Research and Development	TMTCO2e	Thousand Metric Tonne of Carbon	Right to Inform
OHSAS	Occupational Health and Safety	RMC	Risk Management Committee		Dioxide Equivalent	
OHSAS	Assessment System	RMCB	Risk Management and Compliance	TREM	Truck Rescue Emergency Management	IndianOil e-tend
OISD	Oil Indian Safety Directorate		Board	TSFD	Treatment, Storage & Disposal Facility	https://iocletend
ОМС	Oil Marketing Company	RO	Retail Outlets	UNGC	United Nations Global Compact	Grievance Redr
ows	Oil Water Separator	RTI	Right To Information	VIBA	Virtual Indane Bot Assistant	https://iocl.com
PAT	Profit After Tax	RWH	Rainwater Harvesting			
PAT	Perform, Achieve & Trade Scheme	SABF	Super Annuation Benefit fund	VLCC	Very Large Crude Careers	Contact Us
Scheme		SAF	Sustainable Aviation Fuel	voc	Volatile Organic Compounds	https://iocl.com

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# **External Assurance Certificate**

### Price Waterhouse Chartered Accountants LLP

Independent practitioner's limited assurance report on Identified Sustainability Indicators in Indian Oil Corporation Limited's Sustainability Report

### To the Board of Directors of Indian Oil Corporation Limited

We have undertaken to perform a limited assurance engagement for Indian Oil Corporation Limited (the 'Company') vide IOCL's letter of award in respect of the agreed parameters listed below (the 'identified Sustainability Indicators'). These parameters are as included in the "GRI content index" in the Sustainability Report of the Company for the year ended March 31, 2023.

### Identified Sustainability Indicators

The Identified Sostainability Indicators for the year ended March 31, 2023 are summarised in Appendix 1 to this report.

Our limited assurance engagement was with respect to the year ended March 31, 2023 information only and we have not performed any procedures with respect to earlier periods or any other elements included in the Sustainability Report and, therefore, do not express any conclusion thereon.

### Criteria

The criteria used by the Company is Global Reporting Initiatives Standards ("GRI Standards") 2021 as set out under Appendix 1 to this report, to prepare Identified Sustainability Indicators for inclusion in the Sustainability Report.

### Management's Responsibility

The Company's Management is responsible for identification of key aspects of Sustainability Report, engagement with stakeholders, content and presentation of the Sustainability Report in accordance with the Criteria mentioned above. This responsibility includes the design, implementation, and maintenance of internal control relevant to the preparation of the Sustainability Report, and measurement of Identified Sustainability Indicators, which are free from material misstatement, whether due to fraud or error.

### Inherent limitations

The absence of a significant body of established practice on which to draw to evaluate and measure nonfinancial indicators allows for different, but acceptable, measures and measurement techniques and can affect comparability between entities. In addition, Greenhouse gas ("GHU") quantification is subject to inherent uncertainty because of incomplete scientific knowledge used to determine emissions factors and the values needed to combine emissions of different gases.

### Our Independence and Quality Management

We have complied with the independence and other ethical requirements of the International Code of Ethics for Professional Accountants (including International Independence Standards) issued by the International Ethics Standards Board for Accountants (IESBA Code), which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.



Price Waterhouse Charteted Accountants LLP, Building No. 8, 8th Floor, Tower - B, DLF Cyher Gry, Gurugram - 122 002 T: +91 (124) 4620000, F: +91 (124) 4620000, F: +91 (124) 4620000.

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Our firm applies International Standard on Quality Management (ISQM) 1 "Quality Management for Firms that Perform Audits or Reviews of Financial Statements, or Other Assurance or Related Services Engagements" and ISQM 2 "Engagement Quality reviews", and accordingly maintains a comprehensive system of quality management including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

### Our Responsibility

Our responsibility is to express a limited assurance conclusion on the Identified Sustainability Indicators based on the procedures we have performed and evidence we have obtained. We conducted our limited assurance engagement in accordance with International Standard on Assurance Engagements 3000 (Revised) 'Assurance Engagements other than Audits or Reviews of Historical Financial Information' and International Standard on Assurance Engagements 3410 'Assurance Engagements on Greenhouse Gas Statements', issued by the International Auditing and Assurance Standards Board. These standards require that we plan and perform this engagement to obtain limited assurance about whether the Identified Sustainability Indicators are free from material misstatement.

A limited assurance engagement involves assessing the suitability in the circumstances of the Company's use of the Criteria as the basis for the preparation of the Identified Sustainability Indicators, assessing the risks of material misstatement of the Identified Sustainability Indicators whether due to fraud or error, responding to the assessed risks as necessary in the circumstances, and evaluating the overall presentation of the Identified Sustainability Indicators.

A limited assurance engagement is substantially less in scope than a reasonable assurance engagement in celation to both the risk assessment procedures, including an understanding of internal control, and the procedures performed in response to the assessed risks,

The procedures we performed were based on our professional judgement and included inquiries, observation of processes performed, inspection of documents, evaluating the appropriateness of quantification methods and reporting policies and agreeing or reconciling with underlying records.

Given the circumstances of the engagement, in performing the procedures listed below, we:

- · Obtained an understanding of the Identified Sustainability Indicators and related disclosures.
- Obtained an understanding of the assessment criteria and their suitability for the evaluation and /or measurements of the Identified Sustainability Indicators.
- Made enquiries of Company's Management, including those responsible for Sustainability, Environment Social Governance (ESG), Human Resource (HR) etc. and those with responsibility for managing the Company's Sustainability Report.
- Obtained an understanding and performed an evaluation of the design of the key systems, processes
  and controls for managing, recording and reporting on the Identified Sustainability Indicators
  including at the sites and corporate office visited.
- Based on above understanding and the risks that the Identified Sustainability Indicators may be materially misstated, determined the nature, timing and extent of further procedures.
- Checked the consolidation for various sites and offices including corporate office under the reporting boundary (as mentioned in the Sustainability Report) for ensuring the completeness of data being reported.
- Performed limited substantive testing on a sample hasis of the Identified Sustainability Indicators at Panipat Refinery (including pipeline), Mathura Refinery (including pipeline) and corporate office (for consolidation) to verify that data had been appropriately measured with underlying documents recorded, collated and reported. This included assessing records and performing testing including recalculation of sample data.
- Assessed the level of adherence to GRI Standards, 2021, by the Company in preparing the Identified Sustainability Indicators in the Sustainability Report.



- Assessed the Sustainability Report for detecting, on a test basis, any major anomalies between the
  information reported in the Sustainability Report on performance with respect to Identified
  Sustainability Indicators and relevant source data/information.
- · Obtained representations from Company's Management.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had we performed a reasonable assurance engagement. Accordingly, we do not express a reasonable assurance opinion about whether the Identified Sustainability Indicators have been prepared, in all material respects, in accordance with the Criteria.

### Exclusions

Our limited assurance scope excludes the following and therefore we do not express a conclusion on the

- Testing the operating effectiveness of management systems and controls;
- Performing any procedures over other information/operations of the company/aspects of the report
  and data (qualitative or quantitative) included in the Sustainability Report not agreed under our
  engagement letter/ Scope of Assurance
- The statements that describe expression of opinion, belief, aspiration, expectation, aim or future intentions provided by the Company and testing or assessing any forward-looking assertions and/or data.

### Limited Assurance Conclusion

Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that Indian Oil Corporation Limited's Identified Sustainability Indicators included in the Sustainability Report for the year ended March 31, 2023 are not prepared, in all material respects, in accordance with the respective criteria.

### Restriction on Use

Our limited assurance report including the conclusion has been prepared and addressed to the Board of Directors of the Indian Oil Corporation Limited at the request of the company sold to assist the Company in reporting on the Company's Sustainability performance and activities. Accordingly, we accept no liability to anyone, other than the Company. Our deliverables should not be used for any other purpose or by any person other than the addressees of our deliverables. The Firm neither accepts nor assumes any duty of care or liability for any other purpose or to any other party to whom our Deliverables are shown or into whose hands it may come without our prior consent in writing.

Price Waterhouse Chartered Accountants LLP Firm Registration No: 012754N/N500016

# abhaeval

Place: Gurugram Date: 22.09.2023 Partner Membership Number: 093263 UDIN: 23093263BCWPNQ5681

### Appendix 1

### Identified Sustainability Indicators

S. No.	GRI Indicator Reference	Indicator description
1	302-1	Energy consumption within the organization
2	302-3	Energy intensity
3	303-3	Water withdrawal
4	303-4	Water discharge
5	303-5	Water consumption
6	305-1	Direct (Scope 1) GHG emissions
7	305-2	Energy indirect (Scope 2) GHG emissions
8	305-4	GHG emissions intensity (Based Scope 1 & Scope 2 emissions)
9	403-8	Workers covered by an occupational health and safety management system
10	404-2	Programs for upgrading employee skills and transition assistance programs



Linkages to

Standards

Click here to access the linkages to

GRI

**GRI Oil & Gas standards** 

IPICEA / IOGP / API

SASB

UNGC

**TCFD** 

# Awards and Recognition

### **PSU CMD Leadership Award 2022:**

 Recipient: Mr. S.M. Vaidya, Chairman of IndianOil

### **Octamax Technology Award:**

 Recognition: Country's top technology award for IndianOil's Octamax technology

### MoP&NG Swachhta Pakhwada Awards:

• Achievement: IndianOil bags the top prize for outstanding cleanliness initiatives

### **CSR Journal Excellence Awards 2022:**

 Recognition: IndianOil honored for Excellence in Corporate Social Responsibility

### FICCI CSR Awards 2022:

- Category: Skill Development and Livelihood
- Project: Recognition for the project 'Establishment of Fodder bank and Skill training facility, Gannavaram, Andhra Pradesh'

# National Energy Efficiency Innovation Award:

 Recognition: IndianOil's innovative Green Combo Solution receives the National Energy Efficiency Innovation Award

### **SCALE Award:**

 Category: Supply Chain and Logistics Excellence (Oil and Gas Category) by CII

### ATD BEST Award 2022:

 Presented by: Association for Talent Development (ATD), USA

### **Best Enterprise Award:**

- Category: Maharatna
- Platform: 33rd National Meet of Forum of Women in Public Sector (WIPS)

### **EEF Global Sustainability Award 2022:**

- Issuer: The Energy and Environment Foundation
- Occasion: International conference on the 13th World Renewable Energy Technology Congress

### **FICCI Award 2022-23:**

- Category: Excellence in Sustainability & Safety for Petrochemicals
- Recipient: Petrochemicals department of BD (Business Division)

### **Arogya World Healthy Workplace Award:**

- Category: Platinum
- Organizer: Arogya World India Trust, Bangalore

# **Green Champion Award (GreenCo Awards):**

 Occasion: 11th Edition of GreenCo Summit 2022

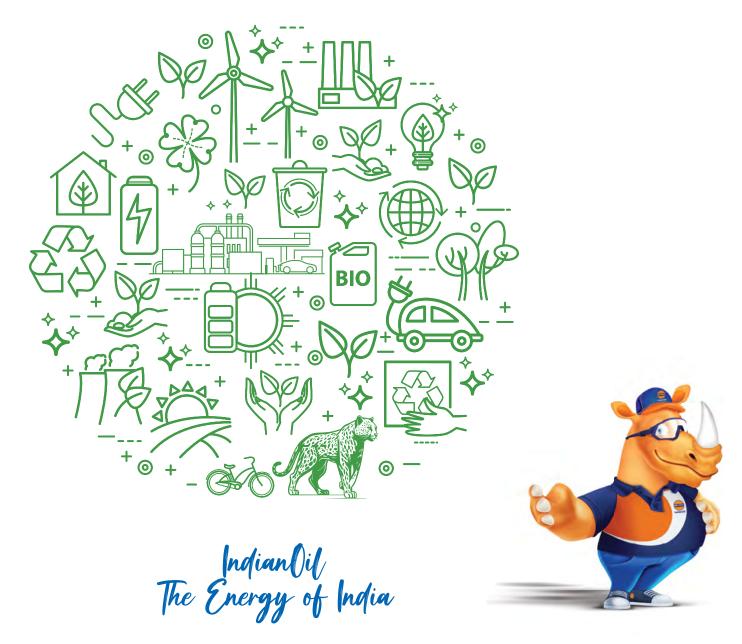
### Suraksha Puraskar:

- Category: Safety Awards-2022
- · Recipient: IndianOil R&D

### **Company of the Year Award:**

- Category: Initiatives in Compressed Biogas
- Issuer: FIPI (Federation of Indian Petroleum Industry)







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