**FIPI** 

Federation of Indian Petroleum Industry

Voice of Indian
Oil & Gas Industry



ANNUAL REPORT 2022-23

### **History of FIPI**

The amalgamation of two important societies namely Petrotech Society and Petroleum Federation of India (PetroFed) led to the formulation of FIPI in December 2016.

The Federation of Indian Petroleum Industry (FIPI) is an apex Society of entities in the hydrocarbon sector and acts as an industry interface with Government and regulatory authorities. It has been at the forefront in addressing their issues with the concerned Ministry, Regulator, and other stakeholders from time to time. It represents the industry on various Government bodies, committees and task forces and has been instrumental in voicing industry concerns with government.

As the most effective and influential voice of the oil & gas industry, FIPI enjoys the respect and trust of the society. All major companies operating in the oil & gas sector in India are members of FIPI. It has a Governing Council which is represented by the top-level executives drawn from the large oil and gas companies operating in India. FIPI under the leadership of Chairman, FIPI and Director General, strive towards resolution of the issues being faced by oil and gas industry. It also has a leadership team consisting of experts drawn from the respective functional domains.

FIPI conducts various Committee meetings on Natural Gas, Upstream & downstream operations, CBM, Marketing & Petrochemical besides taxation etc with our industry members to discuss the relevant issues pertaining to the oil and gas sector. It has 15 functional committees which cover every aspect of the oil and gas business and are represented by senior professional executives from the member companies.

FIPI organizes seminars, webinars, conferences, workshops, roundtable meetings for knowledge dissemination and brings out study reports to support the Govt. with evidence-based policy recommendation.

FIPI every year organises the annual award programme to honour and acknowledge the achievements in the Indian oil and gas sector. The performance of companies is judged by an esteemed Award committee and an eminent panel of Jury recognizing the achievements in various segments of the industry.

FIPI has tie-ups with international agencies like World Petroleum Council (WPC), World LPG Association (WLPGA), International Energy Forum (IEF), IPIECA and International Gas Union (IGU).

FIPI, under the aegis of the Ministry of Petroleum and Natural Gas, Government of India organised India Energy Week (IEW) 2023, the first major event under India's G20 Presidency, which was held between 6 – 8 February 2023 at the Bengaluru International Exhibition Centre (BIEC). The event witnessed participation from all the Indian oil & gas companies, as well as big significant number of nonoil and gas PSUs, Ministry of Power, Karnataka State Government, SIAM from automobile industry, various startups etc. The theme of the event, "Growth Collaboration Transition," embodied India's energy transition with a view of connecting global energy community for innovation, ideas, and investment on the road to net-zero. The event brought together 30,000+ global energy leaders, 8,000+ conference delegates, 1,000+ exhibitors, and 500+ renowned speakers from 150+ countries.

FIPI actively participated in international conferences and exhibitions and collaborates with international bodies and associations to promote the oil and gas industry and to serve the interests of its members. On directives from MoP&NG, a CGD Helpdesk portal has been developed at FIPI to provide a centralised platform to all CGD entities for raising their issues to the concerned Government Department / Ministry for required intervention at the level of MoP&NG.

### **FIPI Committees**

FIPI has the following committees having members drawn from its member organisations, with scope as indicated against them.

S. No.	Committee	Scope (in brief)
1	Budget and Investment	The Committee reviews yearly FIPI budget and its allocation to various FIPI activities and recommends it to Governing Council for approval.
2	Tariff, Duties & Taxes	The Committee discusses various fiscal issues faced by the sector such as, matters on corporate tax, Custom duty, excise duty, GST related concerns of the industry. It seeks support on behalf of the member companies from MoF, MoP&NG and other governmental agencies.
3	LPG Marketing	The LPG marketing Committee includes members from major oil and gas producing and marketing companies. The Committee discusses the latest developments, policies related to LPG, pricing, marketing, etc.
4	Safety, Health & Environment	The HSE Committee includes representatives from all the major oil & gas companies from upstream, midstream, and downstream. It also includes members from service providers companies. The Committee discusses about the various issues related to health, safety, and environment.
5	Natural Gas/CNG/LNG	The Natural Gas/CNG/LNG Committee represents members from major gas producing, transportation and marketing companies. The Committee discusses the latest developments, policies related to pricing, marketing, sustainable role of gas, CNG & LNG etc.
6	Alternative Sources of Energy	The Committee discusses the transition happening in energy sector towards cleaner energy sources such as renewable energy – solar & wind, Biofuels - methanol, ethanol, and biodiesel, Hydrogen, Coal gasification, Energy efficiency etc.
7	Refiner's Forum	The Committee includes members from major oil refining and marketing companies. The Committee discusses and highlights the issues faced by the refining companies.
8	Upstream Operations	The Committee represents members from major oil & gas producing companies and service providers. The Committee discusses about the latest technological developments and policies related to the exploration and production of the oil & gas and the various issues the companies are facing.

S. No.	Committee	Scope (in brief)
9	Downstream Marketing	The Committee acts as a focal point for all downstream related matters of the oil and gas industry. The Committee discusses about the latest technological developments and policies related to the downstream segment and the various issues the companies are facing.
10	Pipeline's Forum	The Committee discusses about the various issues related to efficient operations of oil and gas pipelines, including safety and performance standards etc.
11	IT & Cyber Security	The purpose of the Committee is to assess the preparedness of Indian oil and gas industry against cyber threats and ways to further strengthen the cyber-security system of Indian Oil & Gas companies.
12	CBM/Shale Oil/ Gas Hydrates	The CBM/Shale Oil/ Gas Hydrates Committee includes representatives from major oil & gas producing companies from unconventional sources like CBM. The Committee discusses about the latest technological developments and policies related to the E&P of the oil & gas from unconventional sources.
13	Audit Committee	The annual accounts of FIPI for the financial year are presented to the Audit Committee for approval
14	Petrochemicals Committee	The Committee includes representatives from petrochemical companies and discusses issues related to petrochemicals.
15	City Gas Distribution (CGD)	The CGD Committee includes representatives from city gas distribution (CGD) companies. The Committee discusses about the various issues ranging from permission related to infrastructure development, promotion, pricing and regulations of PNG, CNG & LNG.

### **Core Purpose Statement**

To be the credible voice of Indian hydrocarbon industry enabling its sustained growth and global competitiveness.

### **Shared Vision**

A progressive and credible energy advisory body stimulating growth of Indian hydrocarbon sector with global linkages.

A healthy and strong interface with Government, legislative agencies and regulatory bodies.

Create value for stakeholders in all our actions.

Enablers of collaborative research and technology adoption in the domain of energy and environment.

A vibrant, adaptive and trustworthy team of professionals with domain expertise.

A financially self-sustaining, not-for-profit organization.



#### Governing Council



Mr. S. M. Vaidya Chairman, IOCL Co- Chairman, FIPI





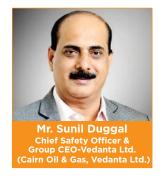




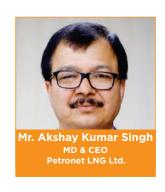




















### **Leadership Team**









### **Our Core Activities**



### Policy Recommendations

**Special Studies** 





Conference & Seminars

Industry Academia Interface





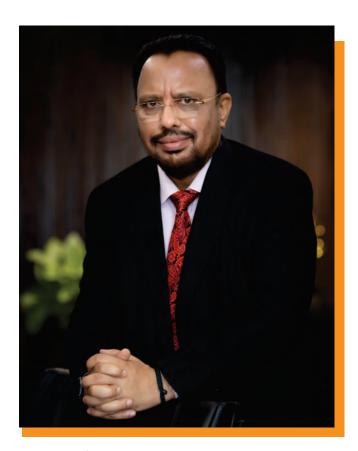
Consultancy

Resolution of issues





#### From the DG's Desk...



Dear Members,

Reflecting on the transformations in the global energy landscape over the past fiscal year, there is a renewed sense of optimism permeating the Indian oil and gas sector. This sense of renewal is prominent in the sector's enhanced commitment to investing in pioneering clean energy technologies, such as green hydrogen, biofuels, and decarbonization through Carbon Capture, Utilization, and Storage (CCUS).

The industry is diligently working towards finding a new balance among energy security, affordability, and sustainability, harbouring a unanimous long-term vision for a swift shift from hydrocarbons to more environmentally friendly and green energy sources. This year, there is a sense of earnest anticipation within the Indian oil and gas industry as globally the nations are realigning their energy dependencies, aiming for enhanced sustainability and energy security.

Having held the G20 presidency successfully, India spearheaded the initiatives to pave the way for

energy transition, aligning climate objectives seamlessly with the aim of attaining net-zero emissions. This prestigious role afforded India the opportunity to align its energy policies with broader environmental aspirations, creating a fertile ground full of opportunities to combine energy transition endeavours with ecological pledges.

The urgent need for the redefinition of energy strategies is highlighted by the evolving global scenarios. The global community is collectively venturing into a stage where the focus is diversifying, from not only ensuring energy security and affordability but also aligning passionately with sustainability and environmental conservation, with India poised to be a significant contributor to this transformative journey.

### A. Key Policy Developments in Oil & Gas Sector during FY 2022-23

- 1. Aligning with Prime Minister Narendra Modi's net-zero initiatives, Rs. 35,000 crore has been committed to green energy investments.
- 2. The Hon'ble Finance Minister, introduced a development focused Budget in February, 2023, highlighted by the 'Saptrishi'—seven guiding pillars including Inclusive Development, Infrastructure, and Green Growth, to lead through the Amrit Kaal. The Gol, aiming for secure and sustainable energy, outlined new policies and allocated Rs 10,000 crore for the development of biogas and cluster-based plants, aiming to enhance the gas sector by promoting the use of blended gas, especially in transportation.
- 3. To boost green mobility, customs duties on machinery for lithium-ion cells and subsidies on EV batteries have been revised, advancing EV adoption in India.
- 4. The National Green Hydrogen Mission was approved in January 2023 with a budget of Rs

- 19,744 crore, positioning India as a global leader in green hydrogen production, aiming for a capacity of 5 MMT per annum by 2030, focusing on decarbonization and reducing reliance on imported fossil fuels.
- 5. The Government, in its ongoing efforts to boost Exploration & Production (E&P), unveiled OALP Bid Round-VIII on 7<sup>th</sup> July, 2022, offering 10 blocks for International Competitive Bidding. This will expand Exploration Acreage by 36,316 sq. km, totalling 2,44,007 sq. km under the OALP regime.
- 6. The Directorate General of Hydrocarbons launched the OALP Bid Round-IX, offering 26 exploration and development blocks and 16 CBM Blocks through international bidding, covering approximately 2.23 lakh sq km.
- 7. A gas price review panel, led by Dr. Kirit Parikh, recommended complete liberalisation of natural gas prices by 1st January, 2027. The government has approved the revised domestic natural gas pricing guidelines for gas produced from nomination fields of ONGC/OIL, New Exploration Licensing Policy (NELP) blocks and pre-NELP blocks, where the Production Sharing Contract (PSC) provides for Government's approval of prices. The price of such natural gas is now indexed to the Indian Crude Basket, instead of pricing it based on gas prices in surplus nations such as the US, Canada, and Russia. These new guidelines are intended to ensure a stable pricing regime for domestic gas consumers while at the same time providing adequate protection to producers from adverse market fluctuations with incentives for enhancing production.
- 8. The revision of the National Biofuel Policy 2018 marks a substantial step forward for India's oil and gas industry. The early achievement of 10% ethanol blending target shows remarkable advancement. Accelerating the 20% blending goal for FY 2025-26 will drive the growth of local technologies, boosting the 'Make in India' initiative, generating employment, and pushing India towards 'energy independence' by 2047, in sync with the Hon'ble Prime Minister's vision.

- 9. The government also introduced the National Bioenergy Programme on 2<sup>nd</sup> November, 2022, to enhance the viability of Bioenergy projects, focusing on Waste to Energy, Biomass, and Biogas. Moreover, the Green Energy Open Access portal was launched to ensure the availability of affordable, sustainable green energy and to regulate green energy access for Renewable Purchase Obligation fulfilment.
- 10.In response to the global transitional shift towards cleaner energy solutions, the Government of India's initiatives, such as extending excise duty exemptions to biofuels to promote higher blending of ethanol and vegetable oil components with gasoline and diesel, are pivotal steps towards energy sustainability.
- 11. Under the guidance of the Hon'ble Prime Minister, the Union Cabinet has approved India's revised Nationally Determined Contribution (NDC). According to the updated NDC, India is committed to reducing the emissions intensity of its GDP by 45% by 2030, from the 2005 level, and aims to achieve approximately 50% of its cumulative electric power installed capacity from non-fossil fuel-based energy resources by 2030.

### B. Various Events/ Conferences/Webinars organized by FIPI during FY 2022-23

During the last financial year, FIPI, staying abreast with the dynamically evolving world, sustained its engagement in enriching the industry by organizing a variety of physical & virtual events, conferences, knowledge-sharing sessions, and webinars. Some of the events organised were:

- On 5<sup>th</sup> April 2022, FIPI hosted a webinar featuring experts from Axens on Sustainable Aviation Fuel (SAF), focusing on technology pathways for SAF production to meet various environmental and economic goals. It saw participation from 75+ professionals in the oil and gas sector.
- 2. On 8<sup>th</sup> April 2022, FIPI conducted a webinar on 'Gas-Hydrogen Blending', where insights were

- shared on various projects by experts from the UK, India, and the US.
- 3. On 11<sup>th</sup> April 2022, under the Ministry of Petroleum & Natural Gas's direction, the CGD Helpdesk arranged a first-of-its-kind virtual meeting with CGD manufacturers and suppliers to discuss the demand & supply in the CGD Industry. The helpdesk aids in swiftly resolving CGD entities' issues under MoP&NG's guidance.
- 4. On 23<sup>rd</sup> April 2022, FIPI PDEU Student Chapter organized TechnoAltar Researchers' Quest 6.0 at PDEU, Gandhinagar, with the theme "Reinventing oil and gas Industry for Energy Transition".
- 5. FIPI and ENCIS hosted the 6<sup>th</sup> Global Refining & Petrochemicals Congress (GRPC) from 5<sup>th</sup> 6<sup>th</sup> May 2022 in New Delhi, focusing on "Agility & Innovation for Downstream Resilience, Sustainability & Excellence". The event was a confluence of global policy makers, licensors, contractors, technology majors, and equipment suppliers.
- 6. On 8<sup>th</sup> June 2022, FIPI organized a webinar on 'Energy Transition & Decarbonization', which emphasized the role of CCUS and LNG in mitigating CO2 and in energy transition.
- 7. On 19th July 2022, FIPI and bp India held the bp Energy Outlook 2022 edition in New Delhi, attended by Shri Hardeep Singh Puri, Hon'ble Minister of Petroleum & Natural Gas and Housing & Urban Affairs; Shri Rameswar Teli, Hon'ble Minister of State in the Ministry of Petroleum & Natural Gas and Ministry of Labour & Employment; Shri Pankaj Jain, Secretary, MoP&NG; senior functionaries of MoP&NG and oil and gas company CMDs, with Mr. Spencer Dale of bp plc presenting the outlook. He highlighted the growth in India's primary energy market, driven by renewables and natural gas due to population growth and industrialization and discussed India's future energy scenario.

- 8. On 30<sup>th</sup> July 2022, FIPI conducted a webinar on "Basic Refining Economics and Relevance of Planning", exclusively for its Student Chapters. The webinar was attended by 56 participants from various FIPI chapters across India.
- On 23<sup>rd</sup> August 2022, FIPI in association with EY organized a webinar on 'Recent Developments in Direct and Indirect Taxes Impacting Oil and Gas Sector', attracting over 300 professionals from the oil and gas sector.
- 10. On 9<sup>th</sup> September 2022, FIPI hosted an open house with Shri Hardeep Puri, Hon'ble Minister of Petroleum & Natural Gas and Housing & Urban Affairs in New Delhi, where contracts for Discovered Small Fields (DSF) and CBM blocks were exchanged and the logo for India Energy Week (IEW) 2023 was unveiled.
- 11. From 28<sup>th</sup>-30<sup>th</sup> September 2022, FIPI and the Great Lakes Institute of Management conducted a three-day training program on "Project Finance and ESG" in Varanasi, attended by 39 executives from prominent oil & gas companies.
- 12. FIPI's 5<sup>th</sup> R&D Conclave, themed "India's journey towards Net Zero," was held from 16<sup>th</sup>-18<sup>th</sup> November 2022 in Mussoorie. Aimed at promoting innovation and addressing climate change, the conclave saw diverse participation from various sectors of the industry.
- 13. On 18<sup>th</sup> January 2023, FIPI and EY organized a webinar on 'Online Security Systems for the Oil and Gas Sector', focusing on the significance of robust technology systems to mitigate cyberattacks on Operational Technology ('OT').
- 14. On 2<sup>nd</sup> February 2023, FIPI conducted a postbudget analysis session in association with EY, exploring the Budget's impacts on the oil and gas sector, attended by CFOs, industry leaders, and nearly 200 delegates, receiving widespread acclaim for its content.

### FIPI has participated in the following International events and conferences:

- India Pavilion at Tanzania Energy Congress 2022: FIPI marked its debut at the Tanzania Energy Congress 2022 from 3<sup>rd</sup> - 4<sup>th</sup> August in Dar es Salaam, orchestrating the India Pavilion, with IOCL, BPCL, HPCL & GAIL as co-exhibitors. They showcased expertise in areas like LPG penetration, petrochemical exports, and CGD & CNG infrastructure development.
- Gastech at Italy- 2022: FIPI took part in the Gastech event held in Milan, Italy, where the Hon'ble Minister for Petroleum and Natural Gas and Housing & Urban Affairs, unveiled the logo for IEW 2023 on 6th September 2022.
- 3. India Pavilion at ADIPEC-2022: The Abu Dhabi International Petroleum Exhibition & Conference (ADIPEC) 2022 was held from 31<sup>st</sup> October to 3<sup>rd</sup> November 2022 in Abu Dhabi, UAE. FIPI facilitated the India Pavilion, enabling major Indian Oil & Gas companies to showcase their innovations to global organizations.

FIPI organized India Energy Week (IEW) 2023, a paramount event under India's G20 Presidency, from 6<sup>th</sup> - 8<sup>th</sup> February 2023 at Bengaluru which was inaugurated by the Hon'ble Prime Minister Shri Narendra Modi on 6<sup>th</sup> February 2023, under the theme of Growth, Collaboration, Transition.

Held under the patronage of the Ministry of Petroleum and Natural Gas (MoP&NG), Government of India and supported by the Federation of Indian Petroleum Industry (FIPI) and IOCL, IEW provided an unparalleled opportunity for buyers and sellers to meet, network and engage with the full energy value chain including leading National & International Energy companies operating within alternative & renewables, utilities & power generation, construction, technology & services and government & academia. IEW 2023 featured participation from diverse sectors and drew 30,000+ global energy leaders, 1,000+ exhibitors, and 500+ speakers from 150+ countries to discuss and share ideas on the latest innovations, developments, and policy matters.

The event included strategic and technical conferences, executive sessions, and hosted the 9<sup>th</sup> Asian Ministerial Energy Roundtable in collaboration with the International Energy Forum (IEF), focusing on stable and secure energy pathways for growth and innovation. The India-US Executive Roundtable was also conducted with the US-Indian Business Council and the US-India Strategic Partnership Forum. A Global Biofuel Alliance was initiated to intensify the use of sustainable biofuels globally, emphasizing market strengthening and technical support.

In July 2022, with the backing of oil and gas entities including IOCL, RBML, BPCL, HPCL, HMEL, GAIL, Shell, ONGC, PIL, Exxon Mobil, and Nayara Energy, FIPI initiated a study focused on the emerging hydrogen market and its potential opportunities in India. ICF was engaged as the research partner for the study in July 2022. ICF have since concluded and submitted their final report to all involved stakeholders. The study aimed to delve into and assess the hydrogen market's prospects in India, pinpointing consumption, production, storage, and distribution patterns, technological constraints, economic viability of hydrogen technologies, and innovative applications of low-cost hydrogen. The overarching goal was to explore ways to decrease India's carbon impact on the environment.

FIPI, in collaboration with its five partner organizations, namely - GAIL, ONGC, Pipeline Infrastructure Ltd. (PIL), Shell and Exxon Mobil launched a comprehensive study on the "Role and Potential of Natural Gas in Mitigating Industrial Air Pollution." The Energy and Resources Institute (TERI) was appointed as the research partner for this study, which focuses on three key industrial clusters: Gurgaon (Haryana), Varanasi (Uttar Pradesh), and Sangareddy (Telangana). TERI has submitted a draft report and is in the process of finalizing the report in consultation with the partner organization. The report's findings will play a vital role in advocating for the adoption of natural gas in industrial clusters, as it will provide compelling evidence to policymakers.

In 2019, FIPI, at the request of MoP&NG, had undertaken a study, in knowledge partnership with Deloitte, highlighting the impact faced by oil and gas

industry due to the non-inclusion of 5 petroleum products under the levy of GST with period of reference as July 2016 - June 2017 and July 2017 – June 2018. The detailed report with findings and recommendations was submitted to MoP&NG. MoP&NG had asked FIPI to update the study by carrying out the impact assessment for the years, FY 2018-19, FY 2019-20, and FY 2020-21. Deloitte was engaged as the research partner for the study. The final study report has been submitted to the study members as well as to the Ministry of Petroleum and Natural Gas.

#### C. Recommendations submitted to various Ministries, State Governments and Regulators

FIPI has been extremely proactive in voicing industry concerns with relevant stakeholders and has taken up the following issues with various Ministries, State Governments and Regulators.

- Amendment to Notification No. 11/2017-CE in respect of Ethanol blended Motor Spirit, submitted to Joint Secretary(R), MoP&NG in April 2022.
- 2. Set off Data purchased from NDR, submitted to Director General, DGH in May 2022.
- Revision of Consent Fee for Operation (CFO) for Oil & Gas in Andhra Pradesh, submitted to Special Chief Secretary, Department of EFS&T, Andhra Pradesh in May 2022.
- Expansion of scope of the DGH committee on Coal Bed Methane (CBM) to include Unconventional Hydrocarbons (Shale Oil and Shale Gas), submitted to Additional Director General (Development), DGH in May 2022.
- Airborne Gradiometry Gravity & Magnetic Survey (FTG) Technology, submitted to Director General, DGH in May 2022.
- 6. Increase of GST on capital goods used for Petroleum from 5% to 12%, submitted to Secretary, MoP&NG in September 2022.

- 7. Deregulating Sale of Domestically Produced Crude Oil, submitted to Secretary, MoP&NG in September 2022.
- 8. Draft Model Revenue Sharing Contract for OALP Bid Rounds, submitted to Joint Secretary, MoP&NG in February 2023.

FIPI remains at the forefront, representing its member companies by addressing various challenges pertinent to the oil and gas sector, and it will continue to advocate for the resolution of their concerns at appropriate forums. Throughout the last fiscal year, 2022-23, FIPI orchestrated numerous committee meetings with industry members to deliberate on matters relevant to the oil and gas domain. FIPI has been incessantly engaging with the Ministry to discuss and seek solutions to industry's issues as they arise.

The hydrocarbon sector has played a crucial role in driving the nation's economic progress over the last decade, and with the advent of innovative energy alternatives, we are on a trajectory towards a more sustainable and cleaner future. We maintain a robust confidence that, bolstered by supportive policies, our sector continues to innovate and integrate low-carbon solutions into the energy landscape, reinforcing its commitment to delivering sustainable energy solutions to diverse segments and businesses throughout the country.

On behalf of the Federation of Indian Petroleum Industry, I convey our sincere gratitude to our valued members for their persistent support, trust, and belief in our endeavours. The Indian oil and gas sector is persistently evolving and is committed to being a frontrunner in providing nationwide, efficient, and green energy solutions. I want to reaffirm that FIPI is unwavering in its support to the industry, spearheading dialogues on crucial issues and playing a pivotal role in the unfolding growth story of our sector.

#### Wishing you the very best!

# Partnering Inclusive Growth



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## Major Advocacy Areas



### **UPSTREAM**

#### 1. Airborne Gradiometry Gravity & Magnetic Survey (FTG) Technology

Submitted to: - Director General, Directorate General of Hydrocarbons (DGH)

FIPI on behalf of member companies brought out the significance of Airborne "Full Tensor Gravity Gradiometry" (FTG) as a technology that has been used in oil and gas exploration since early 2000's. Application of this technology has filled a data acquisition need in large and unexplored regions of many basins worldwide and has aided oil and gas exploration companies as well as mining companies. Globally FTG is now being used successfully in both pre and post seismic acquisition, filling gaps, verifying prospects, overcoming imaging difficulties and helping to plan and refine the locations of future seismic surveys. It has yielded successful results in areas such as Gulf of Mexico, Western Canada Fold and Thrust belt, NE Greenland, East African Rift System (Ethiopia to Mozambique).

Application of FTG technology has great potential in many basins across India. It provides a cost-effective & environmentally non-invasive technique to evaluate large geographic areas for both reconnaissance and exploration analysis. The industry has already acquired FTG data across various basins such as Barmer, Cambay, Assam, and GK-GS basins.

The addition of FTG to acceptable methodologies for data acquisition could be of significant benefit to the Exploration & Production sector in India. The FTG technology alternates with the conventional 2D seismic and often 3D seismic surveys particularly in those basinal acreages where the tectonics and structure have a significant role in prospect generation and definition. Application of FTG technology has various potential advantages such as reducing exploration cycle time, reducing capex cost and time in acquisition of 2D and 3D seismic data over larger than necessary areas, and minimizing surface disturbances and land use conflicts.

FIPI on behalf of its member companies submitted the following policy enablers which will facilitate application of the FTG technology by the industry:

- DGH to carry out pan India airborne FTG gravity magnetic survey and generate basin wide grids (for all category basins)
- Though few operators have started carrying out such surveys, DGH to encourage and allow all upstream operators to utilize such technologies and carry out high resolution Airborne FTG
- DGH to provide an option to Operators to offset 2D & 3D seismic acquisition quantum based on the FTG surveys conducted being an advanced and efficient technology.
- DGH to extend support for Ease of Doing Business related measures and facilitate fast tracking and streamlining the approval and clearance process from agencies such as Ministry of Petroleum and Natural Gas, Ministry of Defence, Directorate General of Civil Aviation etc.

#### 2. Set-off of data purchased from National Data Repository (NDR)

Submitted to: - Director General, Directorate General of Hydrocarbons (DGH)

FIPI on behalf of its member companies submitted a representation to DGH regarding setting off the data purchased from NDR.

Since the NDR was a newly launched initiative at the time of bidding for OALP I contracts, the data available with the NDR was minimal and rudimentary in nature. Additional data was incorporated after the gaps in data availability were highlighted by Operators to DGH. The NDR now has good volume of data in respect of conventional hydrocarbons. In this context following the two issues were raised to further improve the purpose and objective of NDR.

Setting-off the data purchased from NDR: The Operators have purchased data from NDR, processed/reprocessed it, merged the datasets, using latest processing modules and workflows to improve the image
quality and resultant interpretation. This repeating exercise of data acquisition and processing over these
areas under the Committed Work Programme (CWP) is not expected to add any substantial value for subsurface knowledge and understanding.

Article 5.3 of the RSC reads- "If the contractor has obtained, before or after the award of the block, seismic data generated under a Multi-client Speculative Survey model or through Reconnaissance Contract for that particular block, then the same can be set off against the similar CWP for that Block."

It would, therefore, be prudent to apply this rationale also to the seismic data purchased from NDR and processed/reprocessed which may be considered for setting-off against the CWP. This would not only save time but prevent undesirable capital expenditure.

Availability of data on Unconventional Hydrocarbons (UHCs) - CBM and Shale in the NDR: Significant
exploration efforts have been made by NOCs and Private players in the field of UHCs. However, the NDR does
not have any significant data pertaining to this resource. Exploration and exploitation of UHCs have attained
immense importance under Government's plan for a gas-based economy in the years to come. It is therefore,
suggested that the Operators should be encouraged to submit the UHC subsurface data and information of
their completed projects with NDR and make it accessible to the UHC operators in the current CBM and Shale
blocks.

The NDR is understood to have inputs from the Norwegian NDR model. The general rule is that all oil companies on the Norwegian Shelf are required to submit copies of all raw seismic and drilling data to the Norwegian Petroleum Directorate (NPD). All members have access to their own data in "Diskos"-the data platform, and to data in the licenses in which they have an ownership interest. The authorities also encourage different licenses that are drilling in the same geological formation to exchange the information they collect from the subsurface. This is a win-win situation for both parties. The idea behind Diskos is that the oil companies should cooperate on storing exploration data and compete in the interpretation of this data. The more raw data is collected and shared though under certain terms and conditions, the greater the possibilities for the bright minds in each company to come together.

FIPI therefore, requested that a similar approach towards data sharing can be adopted in our NDR which permits the ease of data accessibility and information sharing for the ultimate benefit of the industry.

3. Expansion of scope of the DGH committee on Coal Bed Methane (CBM) to include Unconventional Hydrocarbons (Shale Oil and Shale Gas)

Submitted to: - Additional Director General (Development), Directorate General of Hydrocarbons (DGH)

FIPI on behalf of member companies presented the issue on the substantial potential for Exploration of

Unconventional Hydrocarbon (Shale Oil & Gas) in India to DGH in May 2022.

In this context, FIPI highlighted that the industry consultation workshop held at DGH during October 2020 was a welcome initiative for bringing on board Operators together to understand various aspects and issues pertaining to Unconventional Hydrocarbons.

For continuation of initiatives on similar lines, it was requested that a broader framework can be constituted / facilitated by DGH for Operators interested in Shale/Tight Gas-Oil Exploration & Production.

In the backdrop of the fact that DGH has already constituted a specific committee on Coal Bed Methane (CBM) under DGH's convenorship, it was submitted that the scope of this existing institutional mechanism can be widened to also include issues pertaining to Unconventional Hydrocarbons (Shale Oil and Shale Gas).

#### 4. Deregulating sale of domestically produced Crude Oil

Submitted to: - Secretary - MoP&NG

FIPI on behalf of member companies presented the issue published on 11<sup>th</sup> July 2022 regarding "Deregulating sale of domestically produced Crude Oil w.e.f 1<sup>st</sup> October 2022".

FIPI mentioned in its representation that one clause of the notification pertaining to the methodology for computation of Statutory Levies & Contractual payments, runs contrary to the intent of granting oil marketing freedom.

As per the Notification, unless the contract provides otherwise; Royalty, Cess, other statutory levies, and contractual payments such as profit petroleum, revenue share, etc. shall be valued based on the actual sales price or the price of the Indian Basket of crude oil, as calculated by Government nominated agency on monthly basis, whichever is higher.

Considering the above, FIPI highlighted that having a minimum price level for computation of levies may adversely impact the companies due to the following reasons:

- Multiple types of crude oil are traded in the global market, and their value is arrived at as a
  Positive/Negative differential to the benchmark crude based upon a combination of market factors and
  crude quality. There is a wide variation in the quality and associated valuation of crude oil produced from
  different fields. Hence, the various grades of crude oil imported by Indian refiners is not an appropriate
  benchmark for arriving at the minimum value of domestically produced crude for the Indian basket.
- Due to the minimum price, upstream producers may have to pay royalty, cess, other statutory levies, and profit petroleum on a price level higher than the actual realised price and.

In the backdrop of the above and as the sale of crude oil would be executed on an arms-length basis to non-affiliated third parties, FIPI on behalf of upstream oil companies requested to consider the removal of the condition of the minimum price of Indian Basket of Crude Oil for the computation of Royalty, Cess, other Statutory Levies and Profit Petroleum and submitted that the valuation may be done based on actual sale realization.

#### 5. Suggestions on "Draft Model Revenue Sharing Contract" for OALP Bid Rounds

Submitted to: - Joint Secretary (Exploration), MoP&NG; Director General, DGH

Ministry of Petroleum and Natural Gas and Directorate General of Hydrocarbons [DGH] has adopted a focus approach on augmenting domestic E&P activities to achieve government's vision of reduced imports. Progressive reforms since introduction of HELP/OALP have seen enabling provisions which has enabled higher investments in the E&P sector.

The upstream industry believes that the key objective of exploration and development of oil and gas blocks under HELP/OALP should be to advance the assessment, understand the petroleum potential of India's sedimentary basins and unlock its true potential.

In view of the above, during the 3<sup>rd</sup> meeting of (FY 22-23) FIPI's Upstream Operations' committee held on 24<sup>th</sup> November 2022, the above issue was discussed in detail by the industry members.

Based on their inputs a note on the suggestions on "Draft Model Revenue Sharing Contract" for OALP Bid Rounds was prepared and submitted to MoP&NG and DGH for their kind consideration.

#### 6. Revision of fee for Consent for Operation (CFO) for Oil & Gas for Andhra Pradesh

Submitted to Special Chief Secretary, Department of Environment Forest Science & Technology, Andhra Pradesh

FIPI Committee on 'Upstream Operations' has submitted an issue w.r.t. revision of fee for Consent for Operation (CFO) and Consent for Establishment (CFE), coming under the purview of the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981 by the Andhra Pradesh Pollution Control Board for Fresh Consent as well as Renewal of Consent for various industries including the Oil & Gas Sector.

The revision vide GO.Ms.No.13 dated 26<sup>th</sup> February 2021 issued by the Environment, Forest, Science & Technology Department, Government of Andhra Pradesh; supersedes the orders issued in G.O. Ms. No. 157 dated 22<sup>nd</sup> November, 1997. The revised fees are applicable based on the consented quantities of production and processing of Oil & Gas, vis-à-vis the old fee structure which was based on the capital investment.

The revised fee structure has led to an increase of the CFE & CFO fees manifold by multiple hundreds of times vis-à-vis the fee applicable as per the old fee structure. Further, GO 14 issued on 26<sup>th</sup> February 2021 for other industries increased the CFE & CFO Fees only to a limited extent (by three times), hence the disproportionate rise in fees for Oil & Gas sector is very skewed and is affecting the sector adversely.

In addition, the fresh CFO validity period is reduced to one year from five years, contradicting the principles of ease of doing business. Given that the economic risk of the Oil & Gas Industry is very high compared to other industries; a one-year validity period is a very short term and will have an impact on the viability for the Operators.

It may also be noted that Oil and Gas Operators have to pay production-linked royalty to the Nation's / State's exchequer. Further, consideration also needs to be given to the standard practice across other states wherein

the project investment is considered while computing the CFO and CFE fee. The substantial rise in the consent fees is an outlier vis-à-vis the comparable fees level of other states in India. Incorporating a variable cost linked with the production levels will have cascading repercussions and may render the cost of operations of Oil and Gas projects in Andhra Pradesh prohibitive.

The manifold fee increase has an adverse impact on those Operators for whom the Consent for Operation expired with the renewal being due. Any deferral in granting renewal of CFO puts the Operator at risk without a valid CFO.

In the backdrop of the above, FIPI requested that the State Government of Andhra Pradesh may revert to the old CFO structure and grant immediate renewal of CFO for Oil & Gas blocks which are already operational. It was also requested that State Government of Andhra Pradesh may reduce CFE & CFO Fees of Oil & Gas industry at par with other Industries as per GO 14 issued on same date.

### **FINANCE**

#### 1. Increase of GST on capital goods used for Petroleum from 5% to 12%

Submitted to: - Secretary, MoP&NG

FIPI on behalf of its members highlighted the concerns of increase in the GST rate on capital goods used for Petroleum operations from 5% to 12%, as per the announcement made by the GST Council in June 2022.

It was brought out that the Upstream Oil & Gas industry is faced with a skewed scenario as procurement of key goods and services as inputs for the Upstream Exploration and Production sector is under the ambit of GST, while the output i.e., crude oil and natural gas is outside the purview of GST. As cross-utilization of tax credits is not possible, GST paid on input materials/services remains stranded leading to cost burden. The further spike in the GST rate from 5% to 12% will lead to an even higher tax burden on the E&P sector, with increased cost.

FIPI highlighted that customs duty exemption on imports and local purchases under deemed exports is provided under the production sharing contracts (PSCs) / revenue sharing contracts (RSCs).

FIPI therefore requested for re-consideration of this increase in GST rate on capital goods used for Petroleum from 5% to 12% since there is no input tax credit available currently. FIPI also requested for the inclusion of all five petroleum products Crude Oil, Natural Gas, Petrol, Diesel, and ATF under GST to avoid stranding of taxes.

#### 2. Amendment to Notification No. 11/2017-CE - in respect of Ethanol blended Motor Spirit

Submitted to: - Joint Secretary (R), MoP&NG

FIPI on behalf of its members highlighted the issue on amendment to Notification No. 11/2017-CE - in respect of Ethanol blended Motor Spirit.

To promote clean fuels, the Government of India, has set a target of 10% ethanol blending in Motor Spirit by 2022 and 20% by 2025. Presently, 5% ethanol (E5 fuel) and 10% ethanol (E10 fuel) are blended with petrol, as per Indian Standard 2796: 2017. Motor spirit is covered within the ambit of central excise duty and is subject to duty at the rate of Rs. 27.90 per litre. In order to bolster ethanol blended petrol and lower costs associated with the same, the Central Government introduced an exemption from the levy of central excise duty on ethanol blended petrol.

The availability of exemption is contingent upon fulfilling two distinct and independent requirements. Firstly, the composition of the blend must be in the specified proportions, each portion of which must have suffered applicable duties/taxes. Therefore, in the case of E5 fuel, the blend must consist of 95% motor spirit on which excise duty has been paid and 5% ethanol on which GST has been paid. Likewise, in the case of E10 fuel, the blend must consist of 90% motor spirit on which excise duty has been paid and 5% ethanol on which GST has been paid. Secondly, the ethanol blended petrol must conform to Indian Standard 2796.

The applicable Indian Standard 2796: 2017 prescribed that E5 fuel shall contain  $4.75 \pm 0.25\%$  ethanol whereas E10 fuel shall contain  $9.75 \pm 0.25\%$  ethanol. However, the said standard applicable to E10 fuel was revised vide Amendment No. 3 January 2022 to provide that E-10 fuel shall now contain  $10 \pm 1.0\%$  ethanol. Therefore, E10 fuel may now contain blends with ethanol from 9% to 11% and motor spirit from 91% to 89% respectively.

However, in order to be eligible for the exemption contained in Sl. No. 5 above, the ethanol blended petrol must consist of 90% motor spirit on which excise duty has been paid and 10% ethanol on which GST has been paid. Thus, there would be situations where motor spirit by volume would be 89% while ethanol by volume would be 11%. In such cases, excise duty would be paid on 89% motor spirit and not 90% motor spirit and it is uncertain whether the exemption would still be available to the blended fuel. In apprehension of the same, MoP&NG made a representation to the Tax Research Unit pursuant to which Office Memorandum F. No. 354/03/2022-TRU dated 02.02.2022 was issued clarifying that the exemption continues to be available to blended fuel adhering to tolerance under BIS specifications with ethanol content of  $10 \pm 1\%$  (v/v) (i.e., 9% to 11%).

Accordingly, FIPI had suggested that the present uncertainty is abated at the earliest. Since the target of the Government is to achieve 20% ethanol blending in Motor Spirit by 2025, the proposed amendment at SI. Nos. 4 and 5 of Notification No. 11/2017-CE dated 30.06.2017 is given in table below:

	Earlier exemption entry		Proposed exemption entry		
S. No.	Chapter or heading or sub-heading or tariff item	Description of goods	Chapter or heading or sub- heading or tariff item		Description of goods
(1)	(2)	(3)	(4)		(5)
4	2710	5% ethanol blended petrol that is a blend, - consisting, by volume, of 95% motor spirit, (commonly known as petrol), on which the appropriate duties of excise have been paid and of 5% ethanol on which the appropriate Central tax, State tax, Union territory tax or Integrated tax, as the case may be, have been paid; and conforming to the Bureau of Indian Standards	SI. No. to be deleted		
5	2710	10% ethanol blended petrol that is a blend, - (i) consisting, by volume, of 90% Motor spirit, (commonly known as petrol), on which the appropriate duties of excise have been paid and of 10% ethanol on Nil which the appropriate Central tax, State tax, Union territory tax or Integrated tax, as the case maybe, have been paid and; (ii) Conforming to the Bureau of Indian Standards specification 2796.			
5A	2710 12 42	20% ethanol blended petrol that is a blend, - consisting, by volume, of 80% motor spirit (commonly known as petrol), on which the appropriate duties of excise have been paid and, of 20% ethanol on which the appropriate Central tax, State tax, Union territory tax or Integrated tax, as the case may be, have been paid; and conforming to the Bureau of I n d i a n S t a n d a r d s specification 17021.	2710	consisting, to motor spin petrol), on vo of excise ha ethanol of Central tax,	nded petrol that is a blend, by volume, of 80% or more of rit (commonly known as which the appropriate duties we been paid and, up to 20% in which the appropriate State tax, Union territory tax ed tax, as the case may be, baid;

If amendment in notification No.11/2017 CE (Tariff) dated, 30.06.2017 is made as above, then any other amendment for any other combination of Ethanol Blended Petrol with combination of Petrol (80% or more) and Ethanol (up to 20%) is not required. Like for newly introduced tariff entries for Ethanol blended petrol viz. E12 and E15 exemption is yet to be provided. The above will also be in line with exemption entry for Bio-Diesel.

### 3. Imposition of Special Additional Excise Duty (SAED) to the Domestically Produced Oil by Indian Oil Companies

Submitted to Secretary, MoP&NG

FIPI on behalf of its members highlighted the issue on the imposition of Special Additional Excise duty @Rs 23250/mt i.e about \$40/bbl and the consequent adverse impact on the domestic upstream industry.

The upstream industry is already paying Royalty @20% of crude price, OID Cess @20% of crude price and different other levies & taxes etc. to Govt. of India irrespective of the oil price. The industry has seen significant volatility in crude oil prices being low as \$20/bbl in April 2020 to recent sharp increase due to global geo-political situation. Due to this kind of volatility an average price realization by upstream companies in India is only about \$60 bbl during last 5 years.

FIPI as an industry body has taken up the issue of OID Cess earlier also through different communications & requesting Govt to either abolish Cess or link it to the oil price as it is causing huge burden to the operators impacting deployment of Capital back into the operations. Moreover, upstream industry being a capex-oriented industry, huge funds are required for exploration & development, IOR/EOR schemes, sustaining production from existing fields, extensive drilling programme and to create medium to large infrastructure. In case of lower cess, the upstream operators can invest in technology & capex to increase production leading to reduced import bill coupled with more tax revenues to government over a sustained period.

Moreover, in an industry meeting held in February 2022, NITI Aayog in their presentation for reforms in upstream industry mentioned that rationalization of OID cess in a graded way could be a starting point to provide a level playing field, which was also supported by Upstream Industry representatives.

Further, FIPI highlighted that though there are indications that the levy will be reviewed on fortnightly basis, there is no clarity about process & extent of review resulting in uncertainty which has created a negative impact in the mind of investors & market for upstream oil companies. This may be an impediment to attract FDI and local players for future investments in E&P projects.

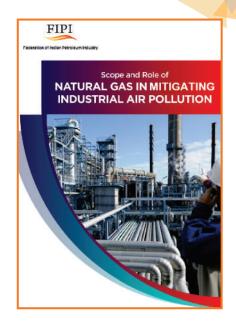
#### FIPI thus submitted the following proposal on behalf of upstream industry: -

- Imposition of SAED of Rs 23250/mt in the form of specific additional excise duty through the above-mentioned
  notification may be reviewed in its present form. Instead, royalty and OID cess ad-valorem rates may be linked
  to the oil prices such that rates are lower when the crude prices are low and increasing to higher levels when
  prices are higher.
- If SAED is to be continued for some time as an extraordinary measure, it is requested to consider an advalorem levy at 20% of incremental crude price, beyond a certain level (100 USD/bbl) or alternatively on a graded basis above a certain level. This would still result in a significant revenue share of incremental crude oil prices after considering the existing ad-valorem levies of Royalty & OID Cess.



#### 1. Scope and Role of Natural Gas in Mitigation of Industrial Air Pollution

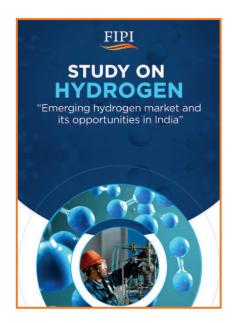
FIPI, in collaboration with its five partner organizations, namely – GAIL, ONGC, Pipeline Infrastructure Ltd. (PIL), Shell and Exxon launched a comprehensive study on the "Role and Potential of Natural Gas in Mitigating Industrial Air Pollution." The Energy and Resources Institute (TERI) was appointed as the research partner for this study, which focuses on three key industrial clusters: Gurgaon (Haryana), Varanasi (Uttar Pradesh), and Sangareddy (Telangana). The report's findings will play a vital role in advocating for the adoption of natural gas in industrial clusters, as it will provide compelling evidence to policymakers.



#### 2. Study on Hydrogen- "Emerging hydrogen market and its opportunities in India"

FIPI with the support of oil and gas organizations, IOCL, Jio BP, BPCL, HPCL, HMEL, GAIL, Shell, ONGC, PIL, Exxon Mobil and Nayara Energy launched a study on Emerging hydrogen market and its opportunities in India. ICF was engaged as the research partner for the study and was awarded the work in July 2022. ICF has submitted the final report to all the stakeholders on 17th July, 2023.

The objective of the study was to understand and gauge the hydrogen market potential in India by identifying the consumption, production, storage and distribution trends, technological barriers, cost competitiveness of hydrogen technologies and other novel uses of low-cost hydrogen to reduce India's carbon footprint in the environment.

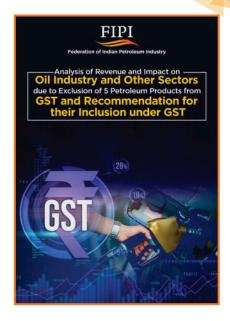


### 3. Analysis of revenue and impact on oil industry and other sectors due to exclusion of 5 petroleum products from GST and recommendation for their inclusion under GST

In 2019, FIPI, at the request of MoP&NG had undertaken a study, in knowledge partnership with Deloitte, highlighting the impact faced by Oil and Gas industry due to the non-inclusion of 5 excluded products under the levy of GST with period of reference as July 2016 - June 2017 and July 2017 – June 2018. The detailed report with findings and recommendations was submitted to MoP&NG.

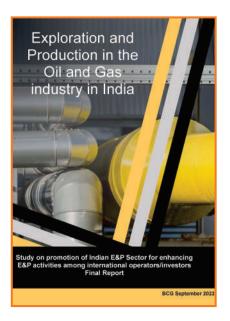
MoP&NG had asked FIPI to update the study by carrying out the impact assessment for the years, FY 2018-19, FY 2019-20, and FY 2020-21. Deloitte was engaged as the research partner for the study.

The Study partner organisations involved in the study were BPCL, bp, Cairn, CPCL, GAIL, HMEL, HPCL, IOCL, MRPL, OIL, ONGC, Shell. The final study report has been submitted to the study members as well as to Ministry of Petroleum & Natural Gas.



### 4. Promotion of Indian E&P Sector for enhancing E&P activities among International Operators/Investors

FIPI, under the guidance of the Ministry of Petroleum & Natural Gas, had awarded BCG an international study to promote the Indian E&P sector for enhancing E&P activities among the International Operators/Investors. To achieve this goal, BCG organized roadshows in London and Houston. BCG has submitted an "Investors Engagement" report to the Ministry and DGH, which highlights the key issues that need attention and outlines investors' expectations regarding investment opportunities in India's E&P sector. The partnering organisations for the study was ONGC and OIL.

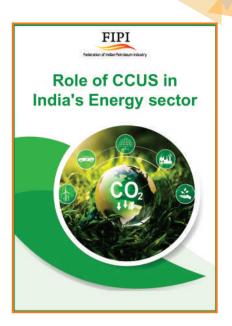


#### **UPCOMING RESEARCH REPORTS IN 2023-24**

#### 1. Role of CCUS in India's Energy sector

FIPI on behalf its industry members is carrying out a study on "Role of CCUS in India's energy sector." The objective of the study is to assess the role & importance of CCUS, technology trends, cost pathways, market potential, carbon pricing and interventions required for a robust CCUS environment applicable in India's energy sector.

Eight industry members - IOCL, BPCL, HPCL, GAIL, HMEL, ONGC, OIL, Nayara have agreed to partner this study. EY had been engaged as the research partner for the study.



#### 2. Global Biofuel Alliance under India's G20 Presidency

Under India's G20 Presidency, one of the priorities is to develop a Global Biofuel Alliance (GBA) across interested countries. This Alliance aims at facilitating cooperation and intensifying the use of sustainable biofuels. It will place emphasis on strengthening markets, facilitating global biofuels trade, development of concrete policy lesson-sharing and provision of technical support for national biofuels programs worldwide. FIPI is thus carrying out a study with BCG for developing the Global Biofuel Alliance (GBA) under India's G20 Presidency. The objective of the study is as follows: -

- Analyse and support alignment and broader adoption of the GBA
- Support in establishing design basis and aspirations for the GBA
- Define the operating model/ governance arrangements, organization structure and decision-making body across ministries, partner organizations, and industries
- Establish the roadmap, milestones, and targets for the GBA as well as the role the alliance will play in improving improve the economic viability and attractiveness of Biofuel industry
- Identify marquee biofuel opportunities / quick wins that can be showcased to advance interest and cooperation

The partnering organisations for the study are IOCL, BPCL, HPCL & GAIL.





#### Webinar on Sustainable Aviation- 5th April, 2022

FIPI in association with Axens organized the webinar on Sustainable Aviation Fuel on 5<sup>th</sup> April, 2022. The webinar focussed on various technology pathways for Sustainable Aviation Fuel production. The webinar witnessed participation of more than 70 professionals working across the oil and gas value chain.

Mr. DLN Sastri, Director (Oil Refining & Marketing), FIPI started the session with the opening remarks. He mentioned that Government has laid down various initiatives like One nation one grid, Ethanol blending programme, SATAT (bio gas) scheme, FAME (EVs) scheme etc to ensure efficient, sustainable, and clean energy system for India in future. He said that emissions in the aviation sector can be reduced through improved fuel efficiency in new aircraft, aircraft modifications, airport restructuring, and optimised navigational systems. However, a significant longer-term reduction of emissions would require airlines to use more fuels that are renewable and sustainable, such as Sustainable Aviation Fuel.

Mr. Yvon Bernard, Business Development Manager, Bio & renewables, Axens started with the presentation "Introduction to Axens biofuel technologies portfolio and Global context." He talked about the presence of Axens worldwide especially in refining and petrochemicals, gases and alternatives & renewables and said that Axens has over 3000 industrial units under license and over 500 modular units' references.

Mr. Harshit Agarwal, Deputy Country Sales Manager, Axens talked about Indian biofuels market scenario. He said that Axens have provided over 150 plus license units and 10000 tons of catalyst to all major oil and gas PSUs in India. He then mentioned about the biofuel market present in India and discussed the ethanol production and blending rates. He said that by 2018 there was focus on 2G

and 3 G pathways of producing SAF or renewable diesel and hence the target of blending ethanol with gasoline was revised to 20%. He mentioned that the consumption of biofuel is low in the Indian market and discussed the steps that need to be addressed in case of biofuel market.

Further he highlighted few challenges associated with SAF such as developing sustainable supply chains for 2G feedstock, transportation of feedstock, and pricing of feedstock.

Mr. Yvon Bernard, Business Development Manager, Bio & renewables, Axens then mentioned about the technological pathways associated with SAF, namely, Vegan, Biotfuel (biomass to liquid), Futurol (2G Enzymatic conversion), Gasel and ATJ (Alcohol to jet). However, for each technology he asserted that the major challenge continues to be huge investment required, tax incentive support and feedstock availability. He said that Axens is also conducting feasibility studies to identify feedstock, and understand capacity & logistics related to feedstock to mitigate this problem.

Mr. Maxime Vassieu, Technologist, Alcohol to jet team, Axens presented the pathway related to Alcohol to jet route. He highlighted the aviation fuel specifications containing synchronised hydrocarbons and discussed about the APJ-SPK (synthetic paraffinic kerosene) production steps. He also mentioned that Axens provides global technology solution for all types of supply chain and ensures flexibility in terms of feedstock product by providing wide range of ethanol qualities.

Mr. Yvon Bernard concluded the presentation and highlighted that SAF have huge market potential in India due to availability of low cost of manpower, availability of biomass and low equipment cost.



Mr. D.L.N. Sastri Director (Oil Refining & Marketing), FIPI delivering the opening remarks.



Mr. Yvon Bernard, Business Development Manager, Bio & Renewables, Axens delivering his presentation on "Introduction to Axens biofuel technologies portfolio and Global context



Mr. Harshit Agarwal, Deputy Country Sales Manager, Axens talked about Indian biofuels market scenario.



Mr. Maxime Vassieu, Technologist, Alcohol-to-Jet Team, Axens giving his presentation on SAF Technology Pathways



Session in progress

#### Webinar on Gas- Hydrogen Blending- 8th April, 2022

FIPI organized an exclusive webinar on 'Gas-Hydrogen Blending' on 8<sup>th</sup> April, 2022 over virtual platform. The webinar was aimed at sharing of knowledge from various gas-hydrogen blending initiatives and projects across the globe.

Three eminent speakers consisting of Mr. Ashu Shinghal, Executive Director, GAIL, India, Mr. Charles Perez-Storey, Progressive Energy, U.K and Mr. Evan Reznicek, National Renewable Energy Laboratory (NREL), U.S shared their experiences with the participants on the progresses made on Gas-H2 blending in countries like U.S, U.K and India.

Commencing the proceedings of the webinar, Mr. Gurmeet Singh, Director General, FIPI extended a warm welcome to the speakers and participants. In his welcome address, he highlighted that the blending hydrogen into the existing gas grid could be an important stepping stone during the transition to a sustainable, net zero future. He also highlighted that there are several developments including project announcements, initiation of pilot projects, funding for the research that is taking place around the world to carry out the blending of green hydrogen in natural gas pipelines.

He shared that some of the major projects are: HyBlend Project in the U.S., HyDeploy project in U.K, Ameland project of Netherlands, Hyp SA (Hydrogen Park South Australia) project of Australia and also in India, many pilot projects have been initiated, and the success of these various ongoing projects across the world for gas-hydrogen blending can prove an important step towards developing hydrogen economy.

Mr. Charles Perez-Storey, is associated with Progressive energy, U.K as Project Lead for the HyDeploy project. He highlighted the following major developments through his presentation:

 UK has secured its first permission for blending hydrogen into the grid in November 2018, based on 18 months of extensive rigorous research.

- Domestic appliances connected to gas network are most numerous use case.
- Keele Trial Overview: 100 homes and 30 university buildings received a blend between Oct 19<sup>th</sup> March, 2021, Safe and successful operation of the UK's first live hydrogen trial, provided over 42,000 scm of hydrogen, abating over 27 tonnes CO2
- Public Network Trial: Isolated network of 668 homes, a school, church and shop currently receiving a hydrogen blend. Commenced in August 2021

Mr. Ashu Shinghal, Executive Director, GAIL highlighted the following blending initiatives taken by GAIL:

- Indore CGD network selected for blending of hydrogen in natural gas up to 2% by vol considering the existing system components
- PNGRB & PESO have provided a go ahead for the pilot project at CGS Indore from 1.1%- 2.0% which was commissioned on Jan 2022
- Blended gas supplied to CGD Consumers

Mr. Evan Reznicek, National Renewable Energy Laboratory (NREL) U.S, briefly pointed out that NREL H2 Systems Analysis activities provide direction, insight, and support for the development, demonstration, and deployment of hydrogen technologies. Some of the highlights from his presentations are:

- United States has approximately three million miles of natural gas pipelines
- More than 1,600 miles of dedicated hydrogen pipelines
- U.S. currently produces ten million metric tonnes of H2 per day for refining and fertilizer production
- Majority produced via reforming of natural gas
- Significant push to develop low-carbon alternatives such as water electrolysis, SMR+CCS, and methane pyrolysis

An overwhelming number of questions were received from the audience, which also stood testimony to the audience interest on the subject. The one-and-a-half-hour-long session witnessed an overwhelming participation by over 125+ participants across the oil and gas value chain in the country.

At the end, Mr. D L N Sastri, Director (Oil, Refining & Marketing) FIPI extended sincere gratitude and thanked all the three speakers Mr. Charles, Mr. Evan and Mr. Shinghal for giving their valuable time and for sharing their experiences on the Gas - H2 blending perspective. He also thanked all the participants for taking out time and listening to the session.



Mr. Gurmeet Singh, DG FIPI delivering the welcome address



Mr. Charles Perez-Storey, Progressive energy, U.K delivering his presentation on "HyDeploy: Unlocking hydrogen blending in the UK gas grid"



Mr. Ashu Shinghal, Executive Director, GAIL giving his presentation on "Gas Hydrogen Blending Initiatives of India"



Mr. Evan Reznicek, National Renewable Energy Laboratory (NREL), U.S giving his presentation on "Pipeline Blending CRADA – A HyBlend Project".

### Energy Transition & Decarbonization - Role of LNG & Application of CCUS- 8<sup>th</sup> June 2022

Federation of Indian Petroleum Industry (FIPI) organized an exclusive webinar on 'Energy Transition & Decarbonization - Role of LNG & Application of CCUS' on 8<sup>th</sup> June 2022 over virtual platform. The webinar was aimed at understanding the role of Natural gas, LNG and CCUS in energy transition to pave a way forward for implementation of these concepts & technologies in the industry.

Two eminent speakers Dr. A K Balyan, former MD & CEO Petronet LNG and Dr. Raj Deo Tewari, Chief Scientist R&D, Group Research & Technology, Petronas, Malaysia shared their thoughts and experiences with the participants on the Role of LNG and objective of the CCUS as a viable CO2 mitigation option and its long-term outlook in decarbonizing the energy sector.

Mr. Gurmeet Singh, Director General, FIPI in his welcome address highlighted that with the following initiatives by the Government, India is already underway towards energy transition:

- · Accelerating the uses of renewable energy,
- Decarbonisation of transport and adoption of electric mobility,
- · One nation one grid,
- Ethanol blending programme, SATAT (bio gas) scheme,
- FAME (EVs) scheme etc to ensure efficient, Sustainable, and clean energy system for India in future.
- National Hydrogen Mission with the goal to make India a global hub for Green Hydrogen production and export

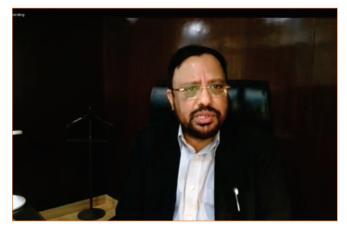
Dr Tewari, in his presentation on the "Important Role of CO2 Capture Utilization and Storage in the Energy Transition" emphasised that there is an urgency to significantly cut GHG emission to avoid the economic and human consequences of severe climate change.

Dr Tewari has also talked about various CCS Facilities across the globe which are at various stages of developments, current and future CCS capacity, typical CO2 storage development plan required for such storages and its well management, various requirement for Certification of Sites for geological CO2 storage.

Dr. Balyan, in his presentation on the "Energy Transition & Role of LNG/ Gas" emphasised that use of energy today cannot be seen in isolation and the true cost of energy is more than just few dollars/cents. It is important to take into consideration the consequences of choosing an energy source as it has economic, political, social and environmental factors attached to it.

Dr. Balyan emphasised on the various Energy Scenarios and informed that energy scenarios mapping not only impact the choice for the energymix, technology and investments, but also the intensity with which the societies and nations pursue its behaviour and policies.

Mr. T K Sengupta, Director (E&P), FIPI extended sincere gratitude and thanked all the two speakers Dr Raj Deo Tewari, and Dr. A K Balyan for giving their valuable time and for sharing their experiences on the Energy Transition & Decarbonization perspective focusing on CCUS & LNG. He also thanked all the participants for taking out their time and attending to the session.



Mr. Gurmeet Singh, DG FIPI delivering the welcome address.



Dr. A K Balyan, former MD & CEO Petronet LNG, in his presentation on the "Energy Transition & Role of LNG/  ${\sf Gas}$ 



Dr Raj Deo Tewari, Chief Scientist R&D in Group Research & Technology, Petronas in his presentation on the "Important Role of CO2 Capture Utilization and Storage in the Energy Transition".



Mr. T K Sengupta, Director (E&P) FIPI delivering the Vote of Thanks

#### bp Energy Outlook 2022 - 19th July 2022

Federation of Indian Petroleum Industry (FIPI) joined with BP India to organize bp Energy Outlook – 2022 edition on 19<sup>th</sup> July, 2022 at The Imperial, Janpath, New Delhi. This Outlook was unveiled in a physical gathering and was attended by Shri Hardeep Singh Puri, Hon'ble Minister of Petroleum & Natural Gas and Housing & Urban Affairs; Shri Rameswar Teli, Hon'ble Minister of State in the Ministry of Petroleum & Natural Gas and Ministry of Labour & Employment; Shri Pankaj Jain, Secretary, MoP&NG; Mr Spencer Dale, Group Chief Economist, bp Plc; Shri S. M. Vaidya, Chairman, FIPI & Chairman, IOCL; Shri Sashi Mukundan, President, bp India and Senior Vice President, bp Group and CEOs of major oil and gas companies in the country.

Mr Spencer Dale, Group Chief Economist, bp Plc., made a detailed presentation on the bp Energy Outlook 2022. At the outset, he informed the participants that bp's Energy Outlook 2022 is focused on three main scenarios to explore the energy transition: Accelerated, Net Zero and New Momentum to explore the range of possible pathways for the global energy system to 2050. The scenarios included in Energy Outlook 2022 were largely prepared before the outbreak of the military action (Ukraine War) and do not include any analysis of its possible implications for economic growth and global energy markets.

While talking about the Insights from the three scenarios: Accelerated, Net Zero and New Momentum scenarios from the Indian perspective, he emphasized that we cannot understand global energy without understanding what is happening in India. He further informed that under all scenarios, there is a strong growth in primary energy in India led by renewables and, to a lesser extent, natural gas.

Mr Dale's presentation triggered a very fruitful Q&A session and brought some deep insights into the global and Indian energy sectors.

Hon'ble Minister of Petroleum and Natural Gas & Housing and Urban Affairs, in his address,

complimented Mr. Dale for delivering a very insightful presentation and bringing out the analysis of humanity's challenges in the context of energy. He added that we cannot look at energy without considering its sustainability and climate change dimensions. He further stated that we were already addressing a very challenging international economic environment determined by the Pandemic's challenges, followed by what happened on 24<sup>th</sup> February, 2022 (Ukraine War). This has created a new sense of urgency for us to do things slightly faster than what would have happened if events like the Pandemic and 24<sup>th</sup> February, 2022 (Ukraine War) had not happened.

On the sidelines of Outlook 2022, the Hon'ble Minister also discussed about the future of the energy sector & India's energy scenario. He also discussed the global energy scenario & the future of green & renewable energy with Chief Economist of bp Spencer Dale.

Hon'ble Minister of State in the Ministry of Petroleum & Natural Gas and Ministry of Labour & Employment, Shri Rameswar Teli in his speech stated that the Govt. has taken several initiatives to ease business and to create a conducive ecosystem for the sector's growth and to bring foreign investment into the industry. He added that under the able leadership of the Hon'ble Prime Minister, India has made remarkable achievements and has now emerged as a global player.

Mr Sashi Mukundan, President, BP India and Senior Vice President, BP group, delivering his vote of thanks, highlighted the importance of this year's BP energy outlook in the backdrop of the energy transition the world is undergoing. He also added that bp is encouraged by the progressive policies announced by the government to maximize production from all forms of energy, enhance India's energy security and provide affordable and reliable energy to millions of Indians in a sustainable manner.



Mr. S. M. Vaidya, Chairman FIPI and IOCL welcomed the Hon'ble Minister Shri Hardeep Singh Puri, Minister for Petroleum and Natural Gas and Minister for Housing & Urban Affairs



Mr Spencer Dale, Group Chief Economist, BP Plc., made a detailed presentation on the BP Energy Outlook 2022



Hon'ble Minister of Petroleum and Natural Gas & Housing and Urban Affairs addressed the august gathering.



Shri Rameswar Teli, Hon'ble Minister of State in the Ministry of Petroleum & Natural Gas and Ministry of Labour & Employment addressed the audience.



Session is in Progress



Mr Sashi Mukundan, President, BP India and Senior Vice President, BP group, delivering his vote of thanks.

### Webinar on Basic Refining Economics and Relevance of Planning- 30<sup>th</sup> July 2022

A webinar on "Basic Refining Economics and Relevance of Planning" was organized exclusively for FIPI Student Chapters on 30<sup>th</sup> July, 2022. It was attended by 56 participants from FIPI Chapters at various institutes/Universities in India. The Session was taken by Mr Sachin Singh, Senior Principal Consultant with Aspen Technology.

The program commenced with the Address by Shri Gurmeet Singh, Director General FIPI. He apprised the participants about the various new initiatives approved by FIPI's Governing Council which are being implemented for the benefit of the student fraternity.

Shri D L N Sastri, Director (Oil Refining & Marketing) addressed the participants as well and informed about planned webinar series for FIPI Student Chapters, which will be addressed by industry

experts on the relevant topics to Indian oil & Gas industry. He thanked AspenTech for agreeing to take the 1st webinar in the series.

The Speaker, Mr Sachin Singh, Senior Principal Consultant at Aspen Technology, made the presentation on the topic and touched upon various areas viz. planning & optimization: Challenges and Opportunities; Selection of Crude Oils; Distillation; Process Unit; forecasting Supply & Demand and also shared the Aspen Tech Journey to Self-Optimizing Plant, Aspen Hybrid Models, Sustainability-Carbon Capture Models in Aspen Plus & Aspen HYSYS, Biomass & Hydrogen Processing Models, Carbon Emissions Optimization Model for Planning etc.



Mr. Gurmeet Singh, Director General, FIPI delivering the welcome address.



Mr. D.L.N. Sastri, Director(Oil Refining and Marketing) addressing the participants.



Mr Sachin Singh, Senior Principal Consultant at Aspen Technology making his presentation.

#### Indian delegation at Tanzania Energy Congress 2022- 3rd- 4th August, 2022

Federation of Indian Petroleum Industry (FIPI) participated for the first time at the Tanzania Energy Congress 2022 in Dar es Salaam during 3<sup>rd</sup> - 4<sup>th</sup> August, 2022. FIPI was responsible for setting up the India pavilion which was used by four National Oil & Gas companies, namely IOCL, BPCL, HPCL & GAIL. FIPI also coordinated the Indian business delegation comprising of 09 officers to the Tanzania Energy Congress 2022.

Being organized since 2018, the Tanzania Energy Congress brings together energy ministers from around the world, policymakers, oil & gas companies, service providers, industry experts and leaders to take stock of the latest developments in the energy sector to understand the implications of new trends to share knowledge and learn from each other, and to explore synergies and partnership opportunities.

The Indian delegation represented India at the exhibition and portrayed the following capabilities on which Indian Oil & Gas companies could collaborate with Tanzania and the rest of Africa.

- India's expertise in increasing LPG penetration throughout the country.
- India's capacity for increasing exports of petrochemicals, including lubes, to Africa.
- India's expertise in developing CGD & CNG infrastructure across the country.

Shri Binaya S Pradhan, Indian High Commissioner to Tanzania, formally inaugurated the India Booth on 3<sup>rd</sup> August, 2022. The inaugural ceremony was witnessed by Shri Raj K Ganger, Second Secretary (Com.), The High Commission of India and the Indian business delegation.

On the side-lines of the Tanzania Energy Congress 2022, the Indian delegation led by the Indian High Commissioner held a meeting with Hon'ble Minister January Makamba, Minister for Energy of the United Republic of Tanzania. Minister January Makamba

welcomed the Indian delegation and was keen to hear the success stories of India regarding the increased use of cleaner fuels like LPG and CNG across the country. He informed that it has been difficult for many low-income earners in Tanzania to transform from biomass energy such as firewood and charcoal to low-carbon energy, mainly LPG.

The Indian High Commissioner to Tanzania informed that India succeeded in expanding the use of clean cooking energy among its low-income population through successfully implemented schemes, namely Pradhan Mantri Ujjwala Yojana (PMUY) and City Gas Distribution (CGD). He further informed that the Indian delegation is in Tanzania to share more information about these schemes and to discuss how the two countries can work together to expand low-carbon cooking energy among low-income earners.

The Indian delegation shared the success stories of PMUY- LPG and CGD. In addition, the Indian High Commissioner had a detailed discussion with the Minister for Energy of the United Republic of Tanzania on opportunities for investment and collaboration between India and Tanzania. Also, the Energy Minister Tanzania agreed to send a high-level Tanzanian delegation to India to see these infrastructures and how the Indian oil & gas companies operate and to learn from them.



Shri Binaya S Pradhan, Indian High Commissioner to Tanzania inaugurating India booth



Indian High Commissioner, Second Secretary (Com.), and the Indian delegation at India Booth.



Meeting between the Indian delegation led by Indian High Commissioner with the Energy Minister, Tanzania.



Meeting between the Indian delegation led by Indian High Commissioner with the Energy Minister, Tanzania.



Group photograph.

## Webinar on Recent Developments in Direct and Indirect Taxes Impacting Oil and Gas Sector- 23<sup>rd</sup> August, 2022

Federation of Indian Petroleum Industry (FIPI) in association with EY organized the webinar on 'Recent Developments in Direct and Indirect Taxes Impacting Oil and Gas Sector' on 23<sup>rd</sup> August, 2022. The webinar focussed on recent developments in direct and indirect taxes on the oil and gas sector. The webinar witnessed an overwhelming response with participation of more than 300 professionals working across the oil and gas value chain.

Mr. Gurmeet Singh Director General, FIPI made the opening remarks. In his address, he covered global and domestic macro scenario in oil and gas sector. He further said that FIPI, on behalf of member companies, has been taking up industry points on taxes with appropriate authorities in the Government such as bringing exempted hydrocarbon fuels into the GST ambit, issue of cess levied recently on oil. While welcoming EY team, he observed that participants will be immensely benefited from hearing the subject-matter experts.

Ms Uma Iyer, Partner EY- Indirect tax, made presentation on 'Recent Developments in Indirect Taxes Impacting Oil and Gas Sector'. She covered the recent changes in customs and GST notification for O&G operations with key changes being: - amendment in List 33 of Customs and linkage of items with HSN code, self-certification by operator instead of EC from DGH, issues in disposal of surplus items, requirement of maintaining documents to address any possible queries from tax authorities, increase in GST from 5% to 12% for import/local supplies of O&G items.

Ms. Neetu Vinayek, Partner EY- Direct tax gave the presentation on 'Recent Developments in Direct Taxes Impacting Oil and Gas Sector. She provided an overview of BEPS 2.0 and mentioned its importance in the space of international taxation both for domestic companies having overseas subsidiaries/offices and international companies having establishments in India.

Mr. Vivekanand, Director (Finance, Taxation & Legal)

gave the closing remarks and vote of thanks. He thanked DG, FIPI for sparing his valuable time and setting the tone of webinar by his opening remarks. He thanked the EY team for giving a comprehensive view on the recent changes that have taken place in the field of taxation in oil and gas sector. He stated that FIPI is already seized with issues of change in List -33 of customs and IGST increase from 5% to 12% which were very comprehensively covered by EY in their presentation creating further awareness on possible issues.



Mr. Vivekanand, Director(Finance, Taxatation and Legal), FIPI delivering the vote of thanks.



Mr. Gurmeet Singh, Director General, FIPI welcoming the participants.



Presentation on 'Important developments in direct and Indirect tax'.

## Open House with Hon'ble Minister of Petroleum & Natural Gas and Housing & Urban Affairs - 9th September, 2022

Federation of Indian Petroleum Industry (FIPI) organized an open house with Shri Hardeep S Puri, Hon'ble Minister of Petroleum & Natural Gas and Housing & Urban Affairs on 9th September 2022 at Hyatt Regency, New Delhi. At the event, the Hon'ble Minister witnessed the contract exchange for 30 Discovered Small Fields (DSF) blocks under DSF bid round-III and 4 CBM blocks under special CBM bid round 2021 awarded to 14 Exploration & Production (E&P) companies. During the event, Minister also unveiled the logo for India Energy Week (IEW) 2023, the Ministry's flagship event taking place from 6th - 8th February 2023 in Bengaluru, India.

The event commenced with Shri S.C.L. Das, DG DGH highlighting the key features of DSF and CBM rounds through a short presentation and their importance in helping India to reduce its dependence on imports while meeting the energy demand.

Further Contract(s) were exchanged between Mr. Sunil Kumar, Joint Secretary (Refineries) MoPNG on behalf of Ministry of Petroleum & Natural Gas and the Business Leaders from the winning companies of the DSF bid round-III and special CBM bid round 2021.

Shri Pankaj Jain, Secretary MoPNG, made a presentation during the event and highlighted the growth opportunities in India's Oil & Gas sector, growth of the Indian economy and from being the 5<sup>th</sup> Largest Economy in the world presently to become 3<sup>rd</sup> Largest by 2030. In the coming years, India is expected to remain a growing energy demand center and will hold a significant share in the global energy consumption as it is one of the top five energy consuming nations with 3rd largest CNG vehicle fleet and 4<sup>th</sup> largest auto market globally.

During the event, the Hon'ble Minister unveiled the logo for India Energy Week (IEW) 2023, the Ministry's flagship event taking place from 6th-8th February 2023 in Bengaluru, India. In the Open House following the Contract Exchange and logo launch ceremony, the Hon'ble Minister highlighted

that Government of India has taken several measures to minimize and mitigate the volatility of global crude oil and gas prices. On India Energy Week 2023, the Hon'ble Minister stated that it would be a flagship event of the Ministry, and also the first major Energy event once India takes over G20 Presidency. The event will provide an unprecedented opportunity for regional and international leaders and CEOs to come together for strategic policy and technical knowledge sharing for energy justice and energy transition.

1,000 exhibitors from over 50 countries will participate in the exhibition at India Energy Week that will host national pavilion representations from 15 countries. India Energy Week will feature exhibitors including NOCs, NECs, IOCs and IECs, international service providers, EPC contractors, technology, service companies, utility companies, and financial organisations, from across the oil, gas, alternative and renewable energy value chain. The strategic conference will host ministers and global business leaders to actively discuss the successful development and growth of the industry, promote strategic partnerships, investment opportunities and enhance industry collaboration. 20 ministerial and global business leader sessions will examine the key pillars driving India's energy transition and influence the future of the industry, both regionally and globally.

The event concluded with a question-and-answer round between the Hon'ble Minister and the media personnel.



Shri S.C.L. Das, DG DGH delivering his presentation and highlights the key features of DSF and CBM rounds.



Contract(s) were exchanged between Mr. Sunil Kumar, Joint Secretary (Refineries) MoPNG on behalf of Ministry of Petroleum & Natural Gas and the Business Leaders from the winning companies of the DSF bid round-III and special CBM bid round 2021.



Hon'ble Minister unveiled the logo for India Energy Week (IEW) 2023.



On India Energy Week 2023, the Hon'ble Minister stated that it would be a flagship event of the Ministry, and also the first major Energy event once India takes over G20 Presidency.



Shri Pankaj Jain, Secretary, MoPNG presentating his presentation and highlights the growth opportunities in India's Oil & Gas sector, growth of the Indian economy.



Hon'ble Minister Hardeep S. Puri delivering his speech.



 $Open \ house \ session \ with \ Shri \ Hardeep \ Singh \ Puri \ in \ progress.$ 



Session in Progress.

## Training program on Project Finance and Environment, Social and Governance (ESG)- 28<sup>th</sup>-30<sup>th</sup> September, 2022

Federation of Indian Petroleum Industry (FIPI) in association with Great Lakes Institute of Management organized a three-day training program on "Project Finance and Environment, Social and Governance (ESG)" on 28th - 30th September, 2022 at Radisson Hotel, Varanasi. The program was attended by 39 mid to senior level executives from Indian Oil Corporation Ltd, Bharat Petroleum Corporation Ltd, Hindustan Petroleum Corporation Ltd, GAIL India Ltd, Oil & Natural Gas Corporation, ONGC Videsh Ltd, Oil India Ltd, and Reliance Industries Ltd.

The training program commenced on the 28<sup>th</sup> September with the opening remarks of Mr. Vivekanand, Director (Finance, Taxation and Legal), FIPI. Mr. Vivekanand welcomed the participants and the distinguished faculty members comprising of Dr. Ahindra Chakrabarti, Professor of Finance, Great Lakes Institute of Management, Dr. Chanchal Chatterjee, Professor of Finance, IMI Kolkata, Mr. Arjay Kumar Mishra, Consultant – ICRIER and Mr. Ruchir Agarwal, CGM (CF & T), IOCL. He highlighted the growing importance of project finance for companies as against balance sheet finance. He also explained the difference between project finance and balance sheet financing. He shared his personal experience in handling project finance matter for a major multi-billion-dollar international project. He also highlighted the increasing importance of ESG consideration for financing by oil and gas companies.

During the training program Dr. Ahindra Chakrabarti, covered a range of topics related to project finance. During his sessions he highlighted that distinguishing feature of project financing is that the project is a distinct legal entity & project assets, project-related contracts, and project cash flow are segregated to a substantial degree from the sponsoring entity. For practical learning, he discussed important case studies from the Indian context that gave insights into analyzing cash flows from infrastructure projects, sources, and cost of

funding, role of mezzanine finance, weighted average cost and capital (WACC) and steps in evaluation of WACC.

Mr. Arjay Kumar Mishra covered the topics related to ESG. His sessions included discussions on sustainability and environment related issues in the energy sector and the efforts being made by oil and gas companies to promote sustainable operations.

Dr. Chanchal Chatterjee's sessions on corporate governance, covered the corporate governance parameters such as environmental awareness, ethical behavior, corporate strategy, compensation, risk management etc., its Indian context and addressing investors' concerns about governance.

Mr. Ruchir Agarwal, CGM (CF & T), IOCL took a session on Credit Rating for Oil & Gas companies and ESG considerations as an industry expert. During the session he spoke on the major rating agencies present both globally and in India and importance of credit rating from a lender's perspective. His session covered in detail the rating considerations and parameters for downstream and integrated companies.

The training program ended in the evening on 30th September with the valedictory session. During the session, Mr. Vivekanand, Director (Finance, Taxation and Legal), FIPI awarded the participants with a certificate for successfully completing the three-day training program on Project Finance and Environment, Social and Governance. During his closing remarks, Mr. Vivekanand reemphasized importance of Project Finance in Mega projects like LNG in Oil & Gas sector.



Mr. Vivekanand, Director (Finance, Taxation and Legal), FIPI welcomed the participants and the distinguished faculty members.



Mr Vivekanand emphasised the significance of Project Finance in Mega projects such as LNG projects. He also spoke about increasing importance of ESG considerations in On or Off-Balance Sheet financing.



Dr. Ahindra Chakrabarti, Professor of Finance Great Lakes Institute of Management in his session highlighted distinguishing features of project financing and project cash flow.



Mr Ruchir Agarwal, CGM (CF&T), IOCL took a session on Credit Rating for Oil & Gas companies and ESG considerations as an industry expert.



FIPI awarded the participants with a certificate for successfully completing the three-day training program.



Group Photograph.

### India pavilion at ADIPEC 2022- 31<sup>st</sup> October - 3<sup>rd</sup> November 2022

The Abu Dhabi International Petroleum Exhibition & Conference 2022 was held from 31<sup>st</sup> October -3<sup>rd</sup> November 2022 at Abu Dhabi, UAE. FIPI had once again coordinated to set-up the India Pavilion for the participation of the Indian Oil & Gas industry in the above Exhibition. India's major oil & gas companies viz. ONGC, IOCL, BPCL, HPCL, OIL, GAIL, EIL and PLL had participated and exhibited their technologies & facilities to the world wide organizations during the above Exhibition & Conference.

Hon'ble Minister of Petroleum & Natural Gas & Housing and Urban Affairs Shri Hardeep Singh Puri was invited by H.E. Suhail Mohamed Faraj AL Mazrouei, Minister of Energy and Infrastructure, UAE and H.E. Dr Sultan Bin Ahmad Sultan Al Jaber, Minister of Industry and Advanced Technology UAE and MD & Group CEO ADNOC to attend the Opening Ceremony on 31st October 2022. Hon'ble Minister participated in the Ministerial Panel discussions along with his counterparts from UAE, Arab Republic of Egypt and USA.

Chairman FIPI & Chairman IOCL along with MDs/CMDs from ONGC, HPCL, GAIL, EIL and PLL welcomed Shri Hardeep Singh Puri, Hon'ble Minister of Petroleum & Natural Gas and Housing & Urban Affairs at India Pavilion. Hon'ble Minister inaugurated the India Pavilion at ADIPEC 2022 in the presence of H.E. Shri Sanjay Sudhir Ambassador of India to UAE, Senior officials' from Indian oil & Gas companies, Ministry of Petroleum & Natural Gas Corporation and Indian Embassy.

During ADIPEC 2022, Hon'ble Minister had meetings with his counterparts from various countries, heads of international energy organizations and CEOs of global oil & gas companies. He also had a meeting with senior Officials of DMG Event to review the preparations made for the India Energy Week being organized from 6<sup>th</sup>-8<sup>th</sup> February 2023 at Bengaluru, India.

On 31st October 2022, GAIL signed an agreement with ADNOC to Explore LNG Supply and Decarbonization Opportunities. The agreement was exchanged between Shri Sandeep Kumar Gupta, C&MD, GAIL (India) Ltd and Ms Fatema Al Nuaimi, CEO ADNOC LNG in the presence of H.E. Dr. Sultan Bin Ahmad Sultan Al Jaber, UAE Minister of Industry and Advanced Technology and H.E. Shri Hardeep Singh Puri, Minister of Petroleum and Natural Gas and Housing & Urban Affairs, India.

On 1<sup>st</sup> November 2022, Shri Pankaj Jain, Secretary, Ministry of Petroleum and Natural Gas visited ADIPEC-2022 and interacted with each company at India Pavilion.



Shri Hardeep Singh Puri, Hon'ble Minister of Petroleum & Natural Gas and Housing & Urban Affairs attended the Ministerial Panel during Opening Ceremony of ADIPEC 2022



Shri S.M. Vaidya, Chairman FIPI & Chairman IOCL welcomed the Hon'ble Minister of Petroleum & Natural Gas and Urban affairs at India Pavilion



Inauguration of India Pavilion by Hon'ble Minister of Petroleum & Natural Gas and Housing & Urban Affairs.



Shri Hardeep Singh Puri, Hon'ble Minister of Petroleum & Natural Gas and Housing & Urban Affairs had meetings with his counterparts from UAE, heads of international energy organizations and CEOs of global oil & gas companies



Group Photograph of Officials from MoP&NG, Heads & Senior officials from Indian Oil & Gas companies, Director General FIPI with Shri Hardeep Singh Puri, Hon'ble Minister of P&NG and Housing Urban Affairs



Welcoming Shri Pankaj Jain, Secretary MoP&NG to India Pavilion at ADIPEC 2022.



Welcoming Shri Pankaj Jain, Secretary MoP&NG to India Pavilion at ADIPEC 2022



Shri Gurmeet Singh, Director General FIPI met with DMG officials to discuss about the India Energy Week 2023 scheduled from 6-8 February 2023 at Bengaluru, India



GAIL & ADNOC signed an Agreement to Explore LNG Supply and Decarbonization Opportunities



Group Photograph of officials from MoP&NG and FIPI Team with Hon'ble Minister of Petroleum & Natural Gas and Housing & Urban Affairs.

#### R&D Conclave 2022- 16th November to 18th November 2022

Federation of Indian Petroleum Industry (FIPI) organised a three-day workshop on R&D Conclave from 16th November to 18<sup>th</sup> November, 2022 at Jaypee Residency Manor, Mussoorie. The theme of the Conclave was "India's journey towards Net Zero." The event was organized with the focus to drive the industry forward through innovation and collaboration while managing the need for climate change. The broad topics that were discussed included-electric mobility, role of Hydrogen in energy transition, role of CCUS, refineries of the future, biomass value chain, energy storage, carbon financing solutions etc.

The conclave witnessed a wide participation of companies across the upstream, midstream, downstream, and technologies domain. The workshop was attended by more than 150 delegates (physically and virtually) and was appreciated in terms of content by everyone.

The Welcome Address at the inaugural session was delivered by Mr. TK Sengupta, Director (Exploration & Production), FIPI. Mr. Sengupta welcomed the delegates and mentioned that R&D in oil and gas industry plays a pivotal role in the company's scale of operations for providing techno-economical solutions for the problems faced in the areas of exploration, drilling, production and transportation of crude oil and natural gas.

Dr. Anil Kakodkar, Chancellor, Homi Bhabha National Institute; Chairman, Rajiv Gandhi Science & Technology Commission and former Chairman, Atomic Energy Commission delivered the special address virtually. He said R&D would have to play a crucial role in India's journey towards net zero.

Dr. R.K. Malhotra, Professor of Practice (Adjunct) in Depts. of Energy at IIT, Delhi delivered the Special address on R&D needs in the era of Energy Transition. He said that with rising population & urbanisation, the energy demand is bound to rise and thus there is greater need of clean energy sources that can take care of the rising energy demand as well as emit less/zero CO2 emissions in the atmosphere.

Mr. Sanjay Khanna, Director (Refineries), BPCL delivered the Special address on Net Zero initiatives. He mentioned that India currently stands at 4th position in renewable energy (mainly solar and wind) and the ranking is expected to improve further in the coming decades.

Dr. SSV Ramakumar, Director (R&D), IOCL delivered the Special address on Net Zero initiatives. He mentioned that IOCL has the ambition to be "operational net zero" by year 2046. The energy & innovation trends in year 2022 mainly depends on 3 factors - decarbonisation, decentralisation, & digitalization.

After the inaugural session on 16th November, 2022 over the next two days, R&D Conclave 2022 witnessed sessions on various topics related to electric mobility, role of Hydrogen in energy transition, role of CCUS, refineries of the future, biomass value chain, energy storage, carbon financing solutions etc. The Conclave was concluded by Mr. DLN Sastri, Director (Oil, Refining & Marketing) FIPI, who delivered the vote of thanks to the delegates.



Lighting the Lamp.



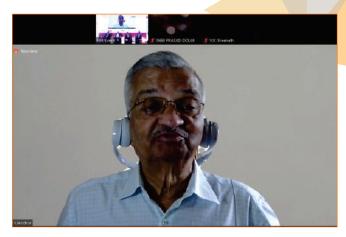
Director (E&P), FIPI Shri T K Sengupta welcomed the guests and delivered the opening address.



"India mission for energy self-reliance cannot come without coal being there in the picture. We need to also adopt suitable mix of fuels and technology." - Dr. R. K Malhotra, Professor of Practice (Adjunct) in Depts. of Energy at IIT, Delhi.



Indian Oil signed a Statement of Intent (SoI) with Solutum Technologies Ltd., Israel for collaboration and commercialization of biodegradable plastics in India.



"In India of 2070, we would see transportation shifting from internal combustion engines to electrical engines or Hydrogen fuel cells. A combination of hydrogen & electrical mobility will be the order of the day." - Dr. Anil Kakodkar, Chancellor, Homi Bhabha National Institute; Chairman, Rajiv Gandhi Science & Technology Commission and former Chairman, Atomic Energy Commission.



Shri S S V Ramakumar, Director R&D, Indian Oil, delivered the Key Note address at the FIPI R&D Conclave and outlined Indian Oil's roadmap to achieve Net-Zero goals including Hydrogen fuel cell, HCNG, and battery swapping technology, and more.



Mr. Sanjay Khanna, Director (Refineries), BPCL delivered the Special address on Net Zero initiatives.



Dr. Anjan Ray, Director, CSIR, IIP Dehradun, Dr. Ajit Sapre, Group President R&D Reliance Group and Dr. Ajay Mehta, VP Engineering Technology Shell discussed R&D strategies for achieving net-zero goals with Dr. SSV Ramakumar, Director R&D, Indian Oil.



Session on Electric Mobility - Potential & Challenges moderated by Dr. R K Malhotra, Prof. of Practice IIT Delhi.



Panel Discussion on Renewable powered future and Energy Storage moderated by Ms. Sushmita Ajwani, ICF



Session on Chemicals on the Rise – Managing Molecules & Circularity moderated Dr. Bharathan S, Director Refinery, HPCL.



Dr. R K Malhotra chaired the discussions on Hydrogen's role in energy transition with Mr. Amar Singh, Head New Energy Business unit, Siemens, India; Mr. Anish Paunwala, Director, Lindeplc; Dr. Charu Datta Patil, Manager hell and Prof. S. Dasappa, Indian Institute of Science (IISc), Bangalore.



Session on Role of Hydrogen in Energy Transition -Storage & Applications moderated Dr SSV Ramakumar, Director (R&D), Indian Oil Corporation.



Mr. Michael McBride, Honeywell, Dr. M.O. Garg, President R&D Reliance group, Mr. Sangeet Jain, Director, LanzaTech, Dr. Ashwani Malhotra, CGM, EIL talked about refineries of future and biomass value chain with Ms. Sukla Mistry, IOCL.



Panel Presentation: Carbon Trading Mechanism / Financing Energy Solutions moderated by Ms. Suzanne Minter, Director Client Strategy, Energy Solutions, Platts.



Session on Accelerating Decarbonisation with CCUS technologies moderated by Mr. Pankaj Kumar Goswami, Director(Operations), Oil India Limited.



Mr. D L N Sastri, Director (Oil Refining & Marketing), FIPI delivered the Vote of Thanks

# Webinar on 'Online security systems for the Oil & Gas Sector'- 18<sup>th</sup> January, 2023

Federation of Indian Petroleum Industry (FIPI) in association with EY organized a webinar on 'Online security systems for the Oil and Gas Sector' on 18<sup>th</sup> January 2023. The webinar was conducted in order to shed a light on the importance of having sound and secure technology systems to shield companies from the recent increase in cyber-attacks on the Operational Technology (OT) of companies. The webinar witnessed an overwhelming response with participation of more than 100 professionals working across the oil and gas value chain.

Mr. Vivekanand, Director (Finance, Taxation & Legal), FIPI began the session with the opening remarks. He spoke about the recent trends indicating that the Oil and Gas companies have shown a drastic increase in implementing the latest technology in the existing systems to monitor real time developments and to keep a track on production cycle.

Mr. Sambit Sinha, Partner EY (Technology Consulting) made a presentation on 'Online security systems for the Oil and Gas sector'. He spoke about the requirement of having robust cyber security defence in the critical infrastructure sector of our country which include the Oil & Gas sector along with Power & Utilities. Further, Mr Sinha spoke on recent security challenges faced by the companies. He mentioned that there has been a steady rise in attacks on the Industrial Control System (ICS) and the Operational Technology (OT) systems primarily focused in the Oil & Gas sector as compared to the other sectors. Mr Sinha then concluded the presentation by speaking about a holistic approach in order to build a cyber secure culture within an organisation followed by conducting a Q&A session and wherein he answered on various queries posted by our participants.

Lastly, Mr. Vivekanand, Director (Finance, Taxation & Legal), FIPI thanked the attendees for their active and interactive participation during the event.



"Oil & Gas industry is seeing a boom in use of the online and internet based equipments. We must build a robust cyber security system & upgrade our existing security system as cyber hackers are evolving." - Vivekanand, Director (Finance, Taxation & Legal), FIPI



Cybersecurity is the need of the hour. As we move towards industry 4.0 we are deploying more automation, digitalization and more robotics in our plants.



Presentation is in progress.

#### FIPI Post Budget Analysis 2023- 2nd February, 2023

The Union Budget for the Year 2023-24 was announced by the Hon'ble Finance Minister of India Smt. Nirmala Sitharaman on 1st February, 2023. Keeping up with FIPI's long tradition, FIPI organized its flagship FIPI Post Budget Analysis 2023 session on 2nd February with EY as the knowledge partner. The Budget session was attended by nearly 200 delegates (virtually) and was appreciated in terms of content by everyone. The objective of the session was to analyze the recently presented Union Budget 2023-24 and weigh the impact of the Budget on the Economy and India's oil and gas industry. The session was attended by many senior dignitaries from across the industry.

In his opening remarks, Mr. Vivekanand, Director (Finance, taxation and Legal), FIPI, welcomed all the panelists during the budget analysis session organized by FIPI. He said that the Budget presented by the honorable Finance Minister is a growth-oriented budget with a long-term view of social and infrastructure development. He spoke about some of the key announcements highlighted in the Economic Survey and Union Budget 2023-24.

He further added that FIPI through its Pre-Budget Memorandum has been continuously submitting its recommendations to Ministry on critical issues like, inclusion of five petroleum products under the ambit of GST, exemption of customs duty on import of LNG, etc. among many others issues. He assured the industry members that FIPI will continue to highlight these issues at relevant forums in the future as well.

Ms. Neetu Vinayek, Partner, EY, presented the Prebudget survey analysis and discussed about the industry expectations from the Budget. She then presented the key takeaways of the Economic Survey as well as mentioned the developments related to Direct tax amendments.

The main highlight of the session was the 'Panel Discussion on Union Budget 2023-24, focusing on the outcome for oil and gas companies in the new budget. The panel comprised of Mr. Vivek Tongaonkar, Executive Director- ONGC, Mr. Sanjay

Kaushal, Chief Financial Officer- IOCL, Mr. Hitesh Vaid, Chief Financial Officer- Cairn Oil & Gas, Vedanta Ltd and Mr. Kartikeya Dube, Chief Financial Officer- Reliance BP Mobility Ltd. The panel discussion was moderated by Ms. Neetu Vinayek, Partner, EY.

The panel had a consensus on government providing more fiscal incentives/capital subsidy towards oil and gas sector in order to attract private sector participation and thus help to meet the target of green energy initiatives as laid down by our honourable Prime Minister. Further the panel had a consensus on inclusion of all petroleum products under GST in order to avoid losing significantly in terms of input tax credits due to its non-inclusion under GST. The panellists believed that for meeting Govt's vision of India becoming a gas-based economy, a call has to be made by GST council to bring gas under the purview of GST soon.

Delivering the closing remarks at the session, Mr. Praveen Rai, Deputy Director, FIPI, said that with Govt spending on infrastructural development of Rs. 10 lakh crores, and focus towards green energy, Indian economy can achieve its targeted growth of 7% by 2023. In his concluding remarks, he thanked all the panellists and the subject matter experts for providing their insights on the Union Budget 2023-24 and its implications on the oil & gas industry and the economy.



Shri. Vivekanand, Director (Finance, Taxation & Legal) FIPI, welcomed all the esteemed panelists from Oil & Gas industry and distinguished participants at the webinar on Post Budget Analysis 2023.



Mr. Sanjay Kaushal, CFO, IOCL; Mr. Vivek Tongaonkar, ED, ONGC; Mr. Hitesh Vaid, CFO, Cairn India Oil and Gas Vedanta Ltd. & Mr. Kartikeya Dube, CFO, Reliance BP Mobility Ltd. shared their views at a panel discussion on FIPI Post Budget Analysis 2023 moderated by Ms. Neetu Vinayak, Partner, EY.



Neetu Vinayak and Uma Iyer, Partners, EY deliberated upon the insights and impact of budget 2023.



Mr. Praveen Rai, Deputy Director(Economic Policy & Planning), FIPI delivered the vote of thanks.

### FIPI Supported India Energy Week (IEW) 2023 and Exhibited at the Grand Event

Federation of Indian Petroleum Industry (FIPI) organized India Energy Week (IEW) 2023, showcasing India's rapidly growing energy sector and emphasizing the nation's commitment to a sustainable energy future. IEW 2023 helped in bringing together experts, professionals, and policymakers to discuss and share ideas on the latest innovations, developments and policy matters.

Hon'ble Prime Minister Shri Narendra Modi inaugurated India Energy Week (IEW) 2023 in Bengaluru, Karnataka, on 6<sup>th</sup> February 2023, under the theme of Growth, Collaboration, Transition under India's G20 Presidency. Held under the patronage of Ministry of Petroleum and Natural Gas (MoP&NG), Government of India and supported by the Federation of Indian Petroleum Industry (FIPI) from 6th - 8th February 2023, IEW provided an unparalleled opportunity for buyers and sellers to meet, network and engage with the full energy value chain including leading National & International Energy companies operating within alternative & renewables, utilities & power generation, construction, technology & services and government & academia.

IEW aimed to showcase India's rising prowess as an energy transition powerhouse and is a testament to Hon'ble Prime Minister Shri Modi's Panchamrit - five nectar element – pathway that offers a step-by-step guide to securing a reliable, affordable and sustainable energy system for India and the world. Governor of Karnataka, Shri Thawar Chand Gehlot, Chief Minister of Karnataka, Shri Basavaraj Bommai, Union Minister of Petroleum & Natural Gas and Housing & Urban Affairs, Shri Hardeep S. Puri, and Hon'ble Minister of State for Petroleum & Natural Gas and Labour & Employment, Shri Rameshwar Teli also graced the occasion.

During the Opening Ceremony, Hon'ble Prime Minister said: "The energy sector plays a major role in deciding the world's future in the 21st century. India

is one of the strongest voices in the world for energy transition and developing new energy resources. As a result, unprecedented possibilities are emerging for the energy sector in India, which is determined to become a developed nation."

To further enhance the event, FIPI exhibited a stall at IEW 2023. The stall displayed infographics related to its

- Core competencies and major advocacy areas
- Publications such as Annual Report and Quarterly & Monthly publications
- Member and Partner Organizations
- International event participation
- · Various studies carried out

FIPI stall witnessed a heavy footfall from large number of visitors, and exhibitors. As a part of FIPI student chapter initiative, FIPI supported participation of 20 students from 11 colleges in the event.

As such, FIPI played a significant role in promoting industry collaboration, knowledge exchange and partnerships, further strengthening India's position in the global energy market while organising the IEW 2023.



FIPI at India Energy Week 2023











#### **FIPI Journal**

The quarterly FIPI Journal is regularly published and has been widely appreciated for its content and contribution by member companies and recipients. The Journal is also available on the website of FIPI.



### **Policy & Economic Report**



FIPI publishes a monthly policy report focusing on Economic and Policy issues pertaining to global as well as national oil & gas sector. This report contains a detailed analysis of the various policy issues and the oil & gas market trends. The report is published in the first week of every month and is also uploaded on our website.

#### **Weekend Reading**

With an objective of keeping our members updated on the latest developments in the field of oil & gas, FIPI brings you Weekend Reading every Friday covering the latest news and energy stories from across the globe and provide various reports & analysis on a wide range of subjects.

#### Website

The FIPI website www.fipi.org.in. carries information about the Federation and its activities which is regularly updated. The "Oil & Gas in Media" is uploaded daily to provide the latest news and happenings in the global as well as domestic markets. It is proposed to enrich it further with assistance from members and other organisations in the hydrocarbon sector.



#### **FIPI AWARDS**

The FIPI Oil and Gas Awards have been created to recognise the leaders, innovators and pioneers in the oil and gas industry. The objective of the FIPI Oil & Gas Awards is to celebrate the industry's most outstanding achievements.

FIPI selects among applicants and reward those companies and individuals who have demonstrated an unparalleled ability to succeed, continually set standards of excellence, and who will be or are the stars of the industry.

All companies operating in India, including those who are not members of FIPI, are eligible to apply. In our constant endeavour, every year FIPI revamp the Awards scheme making it more objective by adopting quantitative parameters to the extent possible. In FY 2022-23, the parameters of a few awards were modified and five new awards viz. 'Initiatives in Solar Energy - Company of the year', 'Initiatives in promoting Wind Energy - Company of the year', 'Initiatives in promoting Hydrogen -Company of the year', 'Initiatives in CCUS -Company of the year' and 'Initiatives in promoting Compressed Bio Gas - Company of the year' have been introduced. There were nineteen categories of awards in which the performance of the prospective awardees was judged.

#### **Evaluation**

Entries are reviewed and evaluated by an 'Awards Committee' consisting of eminent personalities with vast experience in Oil & Gas Industry and specific domains. The committee presents the evaluation to an eminent Jury and winners are announced as per the verdict of the Jury.

The award function was organised on 7<sup>th</sup> June 2023 at Hyatt Regency, New Delhi. Union Minister of Petroleum & Natural Gas and Housing & Urban Affairs Shri Hardeep Singh Puri, addressed the august gathering of leaders, innovators, media personnels' and pioneers in the Oil and Gas Industry, at FIPI's Oil & Gas Awards-2022 ceremony. Shri Rameswar Teli, Minister of State for Petroleum and Natural Gas & Labour and Employment; Shri Pankaj Jain, Secretary, MoP&NG and Shri Arun Kumar Singh, Chairman, FIPI were also present on the occasion.

Complimenting FIPI for felicitating the new clean energy initiatives taken up by Indian oil and gas companies, Shri Puri said that this year comprises of more than 20 award categories including recognition to Phd. thesis from FIPI student chapters in new energy areas. He mentioned that the sanctity of the awards is clear from the grandness of the evaluation committee comprising of a former Secretary along with ex CMDs of Oil PSUs and eminent Scientists. He further highlighted that as India is undertaking an ambitious journey of energy transition, several landmark reforms have been implemented by Indian Government in the upstream, midstream, and downstream sectors of Hydrocarbon industry in India. With cabinet approving a series of critical gas pricing reforms which would not only lay foundation of a sustainable, affordable, and secure energy future for Indian citizens, but will also incentivize investment in India's E&P sector by ensuring that gas production from new wells of nomination fields will receive 20% higher prices. Further, he laid emphasis on Government's plans on clean and green energy, and mentioned about 4 planks: - (i) Diversification of supplies (ii) Increase of alternate energy sources like Biofuels, Ethanol, CBG and Surya Nutan (iii) Increasing E&P footprint (iv) Energy targets through EVs & Hydrogen. He also spoke about the 'Global Alliance on Biofuels' with USA and Brazil during India's Presidency of G20.

Addressing the gathering, Shri Rameshwar Teli said, to achieve clean and green energy vision, the Green Hydrogen Policy has been launched by Government of India with a target of production of 5 million Tonne by 2030. He also mentioned about the importance of biofuels in boosting economic prosperity, energy security, access, and affordability while being sustainable and supporting decarbonization.

Mr. Arun Kumar Singh, Chairman, FIPI in his welcome address said that FIPI is all set to play a role, more crucial than ever, to handhold its members to negotiate through the challenges of energy transition. He complimented the efforts undertaken by FIPI in recognizing the talent and achievements performed by many entities/persons in the oil and gas field and conveyed commendation to all the award winners who had been honoured.

### Winner of FIPI Awards 2022

Award Category	Winner
Young Achiever of the Year in the Oil & Gas Industry (Female)	Pinki Indian Oil Corporation Ltd.
Young Achiever of the Year in the Oil & Gas Industry (Female) (Special Commendation)	Divya Dutta Engineers India Ltd.
Young Achiever of the Year in the Oil & Gas Industry (Male)	Sharad Goenka Cairn Oil & Gas, Vedanta Ltd.
Young Achiever of the Year in the Oil & Gas Industry (Male) (Special Commendation)	Susobhan Panda Larsen & Toubro Ltd.
Woman Executive of the Year in Oil & Gas Industry (Service experience > 20 yrs)	Gummalla Rama Hindustan Petroleum Corporation Ltd.
Woman Executive of the Year in Oil & Gas Industry (Service experience > 20 yrs) (Special Commendation)	Sonali Parekh Larsen & Toubro Ltd.
Innovator of the Year – Team	Hindustan Petroleum Corporation Ltd. R&D Team Led by Sheshachala S.N., CGM (R&D)
Innovator of the Year – Team	Bharat Petroleum Corporation Ltd. R&D Team Led by Nitin Somkuwar, Manager (R&D)
Digitally Advanced Company of the Year	Indian Oil Corporation Ltd.
Digitally Advanced Company of the Year (Special Commendation)	Bharat Petroleum Corporation Ltd.
Digital Technology Provider of the Year	AspenTech Technology, Inc
City Gas Distribution Established Company of the Year	Central U.P. Gas Ltd.
City Gas Distribution Growing Company of the Year	AG&P Pratham
Engineering Procurement Construction (EPC) Company of the Year	L&T Energy - Hydrocarbon (for New Water Injection Facility- Bombay High South Field)
Service Provider of the Year	SLB
Oil/Petroleum Products Pipeline Transportation Company of the Year	Cairn Oil & Gas, Vedanta Ltd.

Award Category	Winner
Natural Gas Pipeline Transportation Company of the Year	GAIL (India) Ltd.
Exploration Company of the Year	Oil India Ltd.
Oil Marketing Company of the Year	Bharat Petroleum Corporation Ltd.
Sustainably Growing Corporate of the Year	Hindustan Petroleum Corporation Ltd.
Excellence in Human Resource  Management  Company of the Year	Cairn Oil & Gas, Vedanta Ltd.
Excellence in Human Resource Management Company of the Year (Special Commendation)	Hindustan Petroleum Corporation Ltd.
Oil & Gas Production Company of the Year (Production more than 1 MMTOE)	Cairn Oil & Gas, Vedanta Ltd.
Oil & Gas Production Company of the Year (Production less than 1 MMTOE)	Sun Petrochemicals Private Ltd.
Best Managed Project of the Year	GAIL (India) Ltd. (for 36 IN X 352 Kms Vijaipur Auraiya Pipeline Project- VAPL)
Best Managed Project of the Year (Special Commendation)	Sun Petrochemicals Private Ltd.
Refinery of the Year Small & Medium (Capacity up to 9 MMTPA)	BPCL- Bina Refinery
Refinery of the Year Small & Medium (Capacity up to 9 MMTPA) (Special Commendation)	IOCL - Mathura Refinery
Refinery of the Year Large Refineries (Capacity higher than 9 MMTPA)	BPCL - Kochi Refinery
Oil & Gas Retailer of the Year (Special Commendation)	Think Gas Distribution Private Ltd.
Initiatives in Compressed Bio-Gas company of the year	Indian Oil Corporation Ltd.
Initiatives in Promoting Hydrogen company of the year (Special Commendation)	Oil India Ltd.
Best PhD thesis in New Energy Studies	Dr. Krishna Raghav Chaturvedi Rajiv Gandhi Institute of Petroleum Technology

































































### MEMBER ORGANISATIONS (AS ON APRIL 24<sup>TH</sup> 2023)

### Corporate - Group A Members: 13

Bharat Petroleum Corp. Limited

BP Exploration (Alpha) Limited

Cairn Oil & Gas, Vedanta Limited

Chennai Petroleum Corp. Limited

GAIL (India) Limited

Hindustan Petroleum Corporation Limited

Indian Oil Corporation Limited

Mangalore Refinery & Petrochemicals Limited

Nayara Energy Limited

Oil & Natural Gas Corporation Limited

Oil India Limited

Petronet LNG Limited

Reliance Industries Limited

#### **Corporate - Group C Members: 8**

Bliss Anand Private Limited

Engineers India Limited

FMC Technologies India Private Limited

**HPCL-Mittal Energy Limited** 

Numaligarh Refinery Limited

Pipeline Infrastructure Limited

Shell Companies in India

Sun Petrochemicals Private Limited

#### **Ordinary Members: 25**

Adani Welspun Exploration Limited

Axens India (P) Limited

**Baker Hughes** 

Central U.P. Gas Limited

Dynamic Drilling & Services Pvt. Limited

Ernst & Young LLP

ExxonMobil Gas (India) Pvt. Limited

**GSPC LNG Limited** 

**S&P Global Commodity Insights** 

**IMC** Limited

Indian Strategic Petroleum Reserves Limited

Indraprastha Gas Limited

Indian Oil Adani Ventures Limited

Jindal Drilling & Industries Limited

LanzaTech Private Limited

Larsen & Toubro Ltd.

Reliance BP Mobility Limited

SAS Institute (India) Pvt Limited

SLB

Scottish Development International

Siemens Limited

South Asia Gas Enterprise Pvt. Limited

Topso A/S

Total Energies Marketing India Private Limited

VCS Quality Services Private Limited

# Ordinary Members against Cross-membership: 4 (without payment of any fee by either party)

Decom North Sea

**IPIECA** 

World LPG Association

International Gas Union

#### **Institutional Members: 6**

Chandigarh University

CSIR-Indian Institute of Petroleum, Dehradun

IIT (ISM) Dhanbad

MIT World Peace University Pune

Rajiv Gandhi Institute of Petroleum Technology

University of Petroleum & Energy Studies

#### **Introductory Member: 8**

Chi Energie Private Limited

h2e Power Systems Private Limited

Indian Gas Exchange Limited

Indradhanush Gas Grid Limited

IRM Energy Private Limited

Secure Meters Limited

SNF Flopam India Private Limited

THINK Gas Distribution Pvt. Ltd.





PHD House, 3rd Floor, 4/2, Siri Institutional Area, August Kranti Marg, New Delhi-110016 Website: www.fipi.org.in