# ANNUAL REPORT



The year that went by...



# **Federation of Indian Petroleum Industry**

Voice of Indian Oil & Gas Industry

# **C**ONTENTS

Core Purpose Statement & Shared Vision	i
Governing Council	ii
Our Core Activities	iii
From the DG's Desk	1
Partnering Inclusive Growth	3
FIPI at a Glance	4
Policy Advocacy	5
Research Reports	15
Ongoing Research Reports	16
Events	19
Upcoming Events	47
Membership Services	48
FIPI Awards	51
List of Members	57





## 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**

#### Chairman



Mr. Sanjiv Singh Chairman, IOCL

#### Co-Chairman



Mr. Shashi Shanker CMD ONGC

#### **Vice Chairman**



Mr. P.M.S. Prasad ED & Member of the Board, Reliance Industries Ltd.



Mr. Prabh Das MD & CEO, HMEL



Mr. Sashi Mukundan Regional President & Head of Country, BP Group



Mr. M. K. Surana CMD, HPCL



Mr. D. Rajkumar CMD, BPCL



Mr. Prabhat Singh MD & CEO, Petronet LNG Ltd.



Mr. J.C. Nakra CMD, EIL



Mr. B. Anand CEO, Nayara Energy



Mr. Ajay Dixit CEO, Cairn Oil & Gas, Vedanta Ltd.



Mr. Utpal Bora CMD, Oil India Ltd



Dr. Ashutosh Karnatak CMD & Director (Projects), GAIL



Mr. Nitin Prasad Chairman, SHELL India



Dr. Anjan Ray Director, CSIR - IIP



Prof. Rajiv Shekhar Director, IIT (ISM), Dhanbad



Dr. R. K. Malhotra
Director General & Member,
Governing Council

# **OUR CORE ACTIVITIES**



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

#### Dear Members,

Prime Minister Shri Narendra Modi's thumping victory in the recently concluded general elections has reinforced positive outlook for continued growth. Though the ongoing trade war between US & China has dampened the spirits of global business community, India has still managed to emerge as the fastest growing large economy in 2018-19. As India continues to ascend in the rankings of the world's largest economies, its contribution to global GDP growth momentum is also expected to increase.

The petroleum industry can look forward to further liberalized and forward looking policies with Shri Dharmendra Pradhan continuing as the Minister for Petroleum & Natural Gas. The initiatives taken by Shri Pradhan, to usher in policies like Hydrocarbon Exploration and Licensing Policy (HELP), Open Acreage Licensing Policy (OALP), Small Discovered Fields and Exploration & Exploitation of Unconventional Hydrocarbons under Existing Production Sharing Contracts (PSCs), Coal Bed Methane (CBM) Contracts etc., in his first term were welcomed by the industry. More such policies will further show positive results in terms of increased production of oil & gas.

FIPI has been at the forefront in advocating for a favourable policy ecosystem for the oil and gas industry. In the upstream sector, since the introduction of HELP and OLAP regimes, FIPI has played an instrumental role in highlighting the industry pain points and further fine-tuning the policies. In 2018-19, as result of FIPI's relentless efforts, the Government has now approved a policy framework for incentivising Enhanced Oil Recovery (EOR)/Improved Oil Recovery (IOR).

To further incentivize the production from domestic gas resources, marketing and pricing freedom has been granted to those new gas discoveries whose Field Development Plans (FDP's) are yet to be approved. Fiscal incentive is also provided on additional gas production from domestic fields over and above normal production. Addressing the long standing issue of natural gas pricing in the country, the Government has proposed to develop a gas trading hub, where gas coming from different sources will compete to establish a single price for all domestic gas, agnostic to the source of supply. The Petroleum and Natural Gas Regulatory Board (PNGRB) is already in the process of finalizing the framework for the gas hub.

The Pradhan Mantri Ujjawala Yojana resulted in the LPG coverage increase from 56 percent in 2015 to 90 percent in 2019. The World Health Organization (WHO) has appreciated the efforts of the Government and has termed it as a decisive intervention to check the indoor health pollution being faced by the women of the country.

Indian refineries have made huge investments while moving to BS VI stage of fuels specifications from April 2020 in case of petrol and diesel to reduce the vehicular emissions. The PSU refineries alone are presently executing projects worth more than Rs. 30,000 crores to move from BS IV to BS VI fuel quality levels. The emissions from BS VI Vehicles would be extremely low and hence the contribution to overall air pollution from such vehicles would be negligible. This will enable the auto industry to comply with the most stringent vehicle exhaust emission norms prevalent anywhere in the world.

The Government has been pushing for increasing gas share in the total energy mix. At present there are nearly 1400 CNG stations in the country with more than 31 lakh vehicles and lakhs of domestic and commercial consumers connected through the CGD network. PNGRB's successful completion of 10th bidding round will provide 70 percent of country's population access to CGD network. In addition, the SATAT initiative to promote compressed bio-gas as an alternative green transport fuel will increase the supply of Bio-CNG in the country.

The new Bio-fuels Policy provides for a viability gap funding scheme for 2G ethanol Bio refineries of Rs.5000 crore in 6 years, in addition to tax incentives and higher purchase price as compared to 1G biofuels. Several OMCs are also participating in such projects to increase the supply of ethanol for ensuring energy security of the country and helping the farming sector.

Hydrocarbon industry has been investing in a responsible manner in BS VI, CNG and Bio-fuels which is a testimony of the growing realization about the need of the clean fuels. While NITI Aayog's emphasis on EVs is aimed at ensuring energy security and environment protection, the current flurry of activity towards EVs is creating confusion and an atmosphere of uncertainty in the minds of those investing in the oil & gas industry.

There are issues with EVs like dependence on imports of Lithium and Cobalt, charging infrastructure and fear of job losses in the oil sector and particularly in the automotive component manufacturing sector. A FIPI study has shown, that even with 25% share of renewable energy in the total energy mix, EVs do not seem to provide a significant advantage over IC engine vehicles in terms of reducing carbon emissions for which India is committed, as we will have to continue to produce electricity from coal inspite of growth in renewables to meet our growing energy demands. Such issues need attention while formulating policies.

At FIPI, we firmly believe that any policy decision must be based on well informed and rigorously established objective evidence. FIPI has commissioned various studies and produced research reports to substantiate its stand on various policy issues. In 2018-19, FIPI commissioned four such studies including 'Climate Change Risks and Preparedness for Oil and Gas Sector'; 'Impact of Oil and Gas sector on Indian Economy'; 'Viability Assessment of LNG as a fuel for long distance transportation in India'; and Roadmap for Natural Gas Industry in India.

As the Goods and Service Tax (GST) completes its second year, the five major petroleum products are yet to be included under GST. The non-inclusion of the sector has resulted in huge stranded input tax credits for the companies. In this regard, FIPI has been voicing the industry's concerns at various levels. As a result of FIPI's continued efforts, some of our recommendations have been accepted by the GST Council. FIPI is presently carrying out a detailed analysis related to the impact of non-inclusion of the petroleum products under GST. The Analysis will also include the methodology for arriving at the Revenue Neutral Rate (RNR) for each product and how each state and centre would be impacted if these were to be brought under GST at these rates.

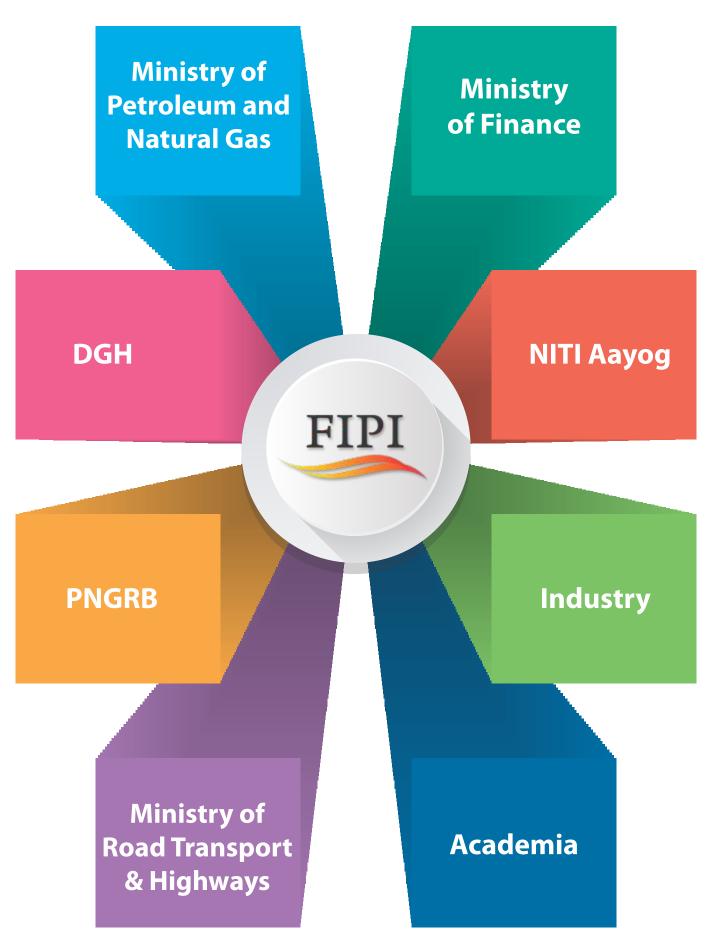
As the Indian oil & gas Industry marches forward, there are some areas that will require targeted policy interventions and fine tuning by the Government to place India as the preferred investment destination for the global petroleum industry.

To conclude, I assure that FIPI will continue to engage with both the Government and industry for the larger good of the country and will establish itself as the most trusted partner in scripting the growth story of the Indian oil and gas industry.

#### Dr. RK Malhotra

Director General
Federation of Indian Petroleum Industry (FIPI)

## **PARTNERING INCLUSIVE GROWTH**



#### FIPI at a Glance



6 International Events

Workshops and Seminars 11

3 Interactive Sessions

Training and Industry
Academia Interaction

4

Industry
Representations







10 Sectorial Sub-Committee Meetings





# POLICY ADVOCACY

# **MAJOR ADVOCACY AREAS**

GST

Gas Pricing

Marketing Freedom

Se or of or

OID Cess

EOR / IOR

Infrastructure

Rationalization Rationalization

### **Policy Advocacy**

#### 1. Representation for inclusion of petroleum products under GST

The Goods and Services Tax (GST) is one of the biggest and most forward looking tax reform undertaken by the Government in the history of independent India. However, the non-inclusion of major petroleum products such as crude oil, natural gas, MS, HSD and ATF has adversely affected the oil and gas sector. As per the GST Act, input credit can be claimed only if the output is also under GST. The main concern of the petroleum industry is non-availability of input tax credit and the consequent stranding of taxes in their hands. Further, as result of exclusion from GST, the oil and gas industry is presently complying with both the previous tax regime and the present GST regime, leading to double compliance cost. Additionally, a tax rate increase from 15 to 18 per cent on upstream services, which constitute a significant part of the oil companies CAPEX and OPEX, will affect the profitability of these companies adversely.

Over the last two years FIPI has been at the forefront in advocating for inclusion of the sector under the newly introduced GST regime. The issue was advocated at various levels with Ministry of Finance, Ministry of Petroleum and Natural Gas and the GST Council and the relevant officials were made aware of the pain points and the concerns of the industry.

As result of FIPI's continued and relentless efforts for inclusion of the sector under GST, below are some of the recommendations that were accepted and implemented by the GST council:

- GST rate on transportation of natural gas (without credit) reduced from 18% to 5%
- GST rate on transportation of natural gas (with credit) reduced from 18% to 12%
- GST rate on bunker fuel reduced from 18% to 5%
- GST rate on oil & gas offshore works contracts dropped from 18% to 12%
- GST rate on Transportation of petroleum crude and petroleum products reduced from 18% to 12%
- E-way bill on transports implemented on April 1, 2018
- No IGST on the import of ancillary and rigs under lease
- No GST on advance payment received for a supply
- For public transport buses running on biofuels, rate reduced from 18% to 12% with ITC Credit
- Rate reduced on biodiesel from erstwhile 18% to 12%
- GST rate on LPG supplied to household domestic consumers reduced from 18% to 5%
- GST rate on Mining or exploration services of petroleum crude and natural gas and for drilling services reduced from 18% to 12%

## 2. Clarification on rate of GST applicable to supply of LPG in bulk by refiners/fractioners for supply to household domestic customers

A uniform GST rate of 5 per cent was made applicable to all supplies of LPG for supply to household domestic consumers from 25 January 2018 by inserting Entry No. 165 A in schedule I to notification 01/2017-Central Tax (Rate) and 01/2017 Integrated Tax (Rate). Further, the Board vide circular 80/54/2018 dt 31-12-2018 clarified that the LPG supplied in bulk by a refiner/fractionator to an OMC or by one OMC to another for bottling and further supply for domestic usage is covered under the above mentioned entry no. 165 A.

The oil industry believes that even though the clarification issued by the Board is with specific reference to Entry No 165 A, the same principle should also apply to LPG supplied in bulk by a refiner/fractionator to an OMC for bottling for further supply to household domestic consumers by an OMC, from 01-7-2017 to 24-1-2018.

In this regard, FIPI has advocated with Joint Secretary (TRU-I), Department of Revenue, Ministry of Finance, that a suitable clarification be issued that the concessional GST rate of 5 per cent is also applicable to LPG supplied in bulk/fractionators to OMCs for bottling for further supply to household domestic consumers during the period 01-7-2017 to 24-1-2018.

#### 3. Resolution of pending tax issues from oil and gas sector

The Federation of Indian Petroleum Industry made a representation to Member (Tax Policy), Central Board of Indirect Taxes and Customs. The issues highlighted in the representation are as follows:

#### a. Inclusion of petroleum products under GST

Since products and natural gas are outside the levy of GST, the input tax credit has turned into a cost for the oil and gas companies operating in India. In this regard, FIPI has advocated for the inclusion of the sector under GST at all levels in the MoP&NG, MoF, GST Council and the State Governments

#### b. Service tax on PSC payments

**Cost Petroleum:** The GST council has already clarified that recovery of cost is not in lieu of services provided by the contractor and therefore not subject to service tax. However, the industry continues to face service tax demands for the period prior to 1-07-2017, when service tax regime was applicable. In this regard, FIPI has requested for a clarification for similar principles under the Service Tax law

**Cash Calls:** Cash calls are funding arrangements/ capital contributions by partners where the cash is pooled together by operator to spend on petroleum operations. Tax is already paid on underlying transactions by the operator. In spite of the CBEC clarification, the matter is being pursued by the field formations. FIPI has requested for a clarification in respect of upstream oil and gas industry for earliest resolution of the issue

#### c. Mining Services

A concessional GST rate of 12 per cent is applicable on exploration mining or drilling services used in petroleum operations. However, the scope of exploration, mining and drilling services is not defined. In this regard, FIPI has requested that the scope of mining services should be akin to 'petroleum operations' as defined under PSC

#### d. Terminal excise duty refund from DGFT

Oil and gas companies pay excise duty on procurement of diesel used for petroleum operations. The excise duty so paid can be claimed back from DGFT, provided an Essentiality Certificate (EC) is issued by the DGH. However, the DGH has not been issuing the EC. As result of conflicting positions taken by DGH and DGFT, oil and gas companies are incurring higher cost of petroleum operations. FIPI has requested for a clarification that EC is required for the purpose of claiming DGFT benefits and for DGH to issue ECs

#### e. Sale of Scrap

The oil and gas companies have imported capital goods for use in petroleum operations at Nil/concessional rate of customs duty on the basis of the certificate issued by the DGH. Many times these capital goods become obsolete due to operational reasons or are declared scraps after continuous use. In terms of condition No. 48 of SI No. 404 of notification 50/207-Cus on disposal of such scrap/obsolete material customs duty is payable based on the original import value (with depreciation allowance). However, as some of these equipments are old, it is difficult to identify them with their purchase documents and therefore it is difficult to dispose such scrap. In this context, FIPI has recommended that customs duty should not be applicable on obsolete/scrap material

#### f. Clarification that the upstream consortium does not constitute and AOP

The notification issued under section 293A of the Income Tax Act provides that the persons with whom the Central Government has entered into an agreement for the association or participation in the business of prospecting for or extraction or production of mineral oils does not constitute an AOP and needs to be assessed to tax individually. FIPI has requested for a clarification that the consortium of upstream companies does not constitute an Association of Persons (AOP) and similar to the notification issued under section 293A of the Income Tax Act 1961

#### g. Purchase and sale of participating interest in oil and gas blocks

It is a common international practice for the oil and gas companies to buy (farm in) and sell (farm out) their Participating Interest (PI) in the Production Sharing Contract (PSC) or similar contracts with the Government. Such Farm-in and farm-outs are effectuated by assignment of participating interest in upstream oil and gas blocks by Government of India. As farm-in and farm-outs are purchase and sale of interests in a business, FIPI has requested CBIC to issue appropriate clarification that such transactions are business sale and purchase and therefore not subject to GST

#### 4. Coastal conversion of vessels taken at lease

The prevalent operating model in oil and gas industry in respect to vessels hired from foreign owners under time/voyage charter arrangements for transportation of petroleum products are as under:

- a. The oil companies enter into time voyage charter arrangement with foreign vessel owners for the purpose of transportation of petroleum products. These time/voyage charter arrangements are not for supply of goods
- b. The consideration payable towards services provided under the above arrangements is directly paid by the oil companies to the foreign vessel owners located abroad and on such payments, the applicable IGST is being paid by the oil companies under the reverse charge mechanism
- c. While these vessels call on Indian ports for carrying import/export goods, the need for filing of any bill of entry for import of vessels does not arise and therefore payment of BCD and claiming of any IGST exemption does not arise

With respect to IGST exemption on conversion of vessels at certain custom ports, the IGST is being denied on the ground that the applicable IGST on the supply of services is being paid by oil companies and not the vessel agent of the foreign vessel owner, who as importer of goods is filing for the bill of entry. Also, time/voyage charter agreements are not covered under the expression "lease".

In view of the above, FIPI has requested the Government to grant relief by following:

- a. Insertion of an explanation to entry 557B of notification No. 50/2017 Customs as amendment effective
   1 July 2017
- b. Amend Clause (i) of condition 102
- c. Issue a circular explaining the rationale of such amendments, so that the legislative intent is clearly expressed and the benefit is available for the trade

## 5. FDI in oil and gas production – request for clarification on tax treatment of 'farm-in' purchase price for entering oil and gas producing blocks

It is of utmost importance to accelerate E&P activity from existing and new sources as well as deploy advanced technologies to recover maximum oil and gas. It will, therefore, be important to tap foreign investment and technical expertise along with domestic capabilities.

It is a common practice for upstream companies to buy (farm-in) and sell (farm-out) their Participating Interest (PI) in Production Sharing Contracts (PSCs) or similar agreement with the Government and thereby to share risk, bring new and niche expertise and technologies. This is internationally a common mode of investment in upstream assets. As per the Guidance note issued by the Institute of Chartered Accountants of India, there are intangible assets to be capitalized and depreciated.

In spite of judicial precedents and accounting principle, the tax department has been charging an established treatment causing uncertainties and inconsistencies to oil and gas companies and foreign investors. As India looks to attract FDI worth USD 300 billion in the oil and gas sector, FIPI has requested for an urgent clarification that Farm-ins are depreciable assets covered under Income Tax Act.

#### 6. Guidelines for transaction of a field from one operator to another

A significant number of PSCs are reaching their expiry in the coming years. While many of these get extended under the PSC extension policy or the fields may be abandoned, it is also possible that PSCs for some producing fields are not extended and transition arrangement will need to be put in place to ensure continuous production from such fields.

In such scenario, the producing field would need to be handed over to GoI appointed successor at the end of PSC term. Since the new operator will be taking over a producing field at the end of the PSC term, there are some specific challenges that need to be addressed:

- a. In a producing field, transitioning operatorship while simultaneously continuing operations is a key challenge. The successor needs to be operationally ready with contracts, manpower and licenses immediately on commencement of their term. This requires close collaboration and a clear understanding of the roles between the incumbent and the successor operator as well as the DGH'
- b. Secondly, a producing asset that has run the course of the PSC term is likely to have generated a significant amount of sub-surface, wells, facilities and production data through its petroleum operation that would need to be transferred

Given the above listed challenges, it would be beneficial for all stakeholders, if there are clear guidelines laid down by MoP&NG/DGH defining the modalities of asset handover for a producing field at the end of its PSC term. In this regard, FIPI has shared a representation with Joint Secretary (E), MoP&NG and DG, DGH and have requested them to form a working group consisting of industry representatives and Members from DGH and MoP&NG to propose guidelines for transition of field from one operator to another.

## 7. Review of guidelines for granting marketing authorization to market transportation fuels to oil companies

FIPI has suggested the following changes to the current policy for authorization of transportation fuels policy:

- a. The policy must include new breed of transportation fuels such as bio-fuels, hydrogen cells, CNG, LNG and LPG to harness their expertise and provide better service
- b. Policy guidelines must address both bulk and retail segments specifically in separate frameworks
- c. The present regulatory framework needs to be effectively implemented to achieve a level playing field in terms of infrastructure sharing and pricing
- d. The criteria for initial investment may be reviewed and reframed to attract genuine investors in large numbers
- e. System and procedures to set up retail outlets must be made simpler

#### 8. Representation for issuance of essentiality certificate under deemed export transaction

Although, DGH is issuing Essentiality Certificate (EC) for import of specified goods for Petroleum operations, EC is not being issued for domestic purchase of specific goods under procedure of ICB. Consequently, domestic manufacturer is burdened with a merit rate of 18 per cent GST and merit rate of BCD on import of raw materials, leading to an acute shortage of raw materials especially casing pipes for continuing petroleum operations. FIPI made a representation to DG, DGH requesting to issue EC under Notification No. 3/2017-IGST (rate) to domestic manufacturers so that they could avail the concessional rate of 5 per cent GST for the supply of specified goods.

#### 9. Representation for lowering the GST rate on LNG motor vehicles to 12 percent

In line with India's CoP-21 commitment and the Prime Minister's vision of increasing the penetration of natural gas to 15 percent by 2030, it is imperative that natural gas plays an integral role in the country's energy mix. Presently, the transportation sector consumes more than 21 per cent of the country's total energy demand. The introduction of Liquefied Natural Gas (LNG), a cleaner fuel, as an automotive fuel presents an opportunity to significantly cut down the pollution in the country. LNG stored onboard the commercial vehicle, unlike CNG run vehicles, also allows it to travel longer distances without the need for frequent re-fuelling. In this regard, to promote LNG run vehicles, FIPI made a representation to MoP&NG seeking support to advocate for a 12 per cent GST slab for LNG vehicles with the Ministry of Finance.

## 10. Representation for Rationalization of Tariff Structure for Promoting Investments in Indian Refining Sector

The domestic refining companies in India have slated large CAPEX spend for the next few years to meet the country's growing energy demand and to meet the stringent fuel quality specifications mandated for the nationwide implementation of BS VI fuels. Due to the present uncertain global oil price scenario the refining margins of Indian refiners are under severe pressure. The non-inclusion of core petroleum products such as crude oil, natural gas, MS, HSD and ATF under GST is resulting into stranded input costs, leading to significant under-recoveries for the Indian Refining Companies. Further, over the last few years, the refining tariff protection has consistently fallen, reaching as low as 1.5 per cent for MS and HSD. The lack of tariff protection favours imports over domestic production, putting domestic refiners at a competitive disadvantageous position. This, in turn, adversely impacts the 'Make in India' objective of the Government. On this issue, FIPI made a representation to Secretary, MoP&NG requesting to keep the customs duty on crude be retained at 'zero' while customs duty on petroleum products be increased suitably to compensate for the stranding of taxes on account of GST.

#### 11. List of contractual and operational issues faced by E&P industries

Various contractual issues have cropped up over the years while administering the PSCs of Pre-NELP and NELP regime, some of which have been resolved by the Management Committees as well as through Policies/Guidelines issued by the Government. However, there are still certain important issues which need to be addressed to help the E&P industry. In this regard, FIPI has made a representation on the below mentioned issues to Joint Secretary (E), MoP&NG:

#### a. Cost of unfinished minimum work programme (CoUMWP)

Under the Pre-NELP and NELP PSCs, in case the contractor is unable to complete the Minimum Work Programme (MWP), they are required to make payments to the Government for UMWP. In this regard, the Government of India, in December 2007, formulated policy guidelines to compute CoUMWP on dry well principle. However, the policy guidelines lack certain clarity. DGH has raised demand based on their own computation and assumptions, which has been contested by the operators.

In view of the above, a policy guideline from Government will go a long way in settling this long outstanding issue. A Joint Working Group of MoP&NG/DGH and industry can be constituted to discuss and remove ambiguity and bring a uniform and consistent approach in computation of well costs.

#### b. Exploration in NE and Frontier Areas

It is appreciated that Government, vide CCEA approval dated 18.07.2018, has extended timeline for exploration and appraisal period in operational blocks in North Eastern region of India considering geographical, environmental and logistical challenges. Further, to stimulate gas production in NER, Government has also allowed marketing including pricing freedom of natural gas to be produced from discoveries in NE region which are yet to commence production as on 01.07.2018. It is requested that similar dispensations may also be accorded for other frontier areas having poor infrastructure, logistical constraints, lack of sufficient G&G data, technological challenges or less explored areas like Kerala-Konkan, Deccan Syncline, Himalayan Foot hills and ultra-deepwater area etc. This step will help in accelerating E&P efforts in such poorly explored/unexplored areas for energy security of the country.

#### c. Longer period for development of discoveries in challenging areas

Some of the discoveries have been made in geologically and logistically challenging areas with no or inadequate infrastructure and market, especially for gas. This has resulted in these discoveries being stranded. In order to monetize and encourage investment for development, time for development should be longer depending upon the circumstances and constraints of the project. HELP has provided additional time for such difficult areas and the same should be extended to the existing PSCs as well.

#### d. Permitting exploration in Petroleum Mining Lease (PML) area

Government has permitted exploration in PML areas for blocks under the PSC regime vide OM dated 01.02.2013 and further addendum in October 2016 with certain conditions. There are certain ambiguous clauses in February 2013 OM regarding cost recovery and ring-fencing etc. E&P Companies make different interpretations of these ambiguous clauses which are leading to differences in opinions at OC level and hindering approval of development plans. The matter has been already highlighted to DGH/MoP&NG, requesting to issue clarifications on OM of February 2013.

#### e. Pricing and marketing freedom for natural gas

Based on the pricing formula approved by the Government, existing domestic natural gas produced are getting natural gas prices of around \$ 3/mmbtu (on GCV basis) for almost last 2 years. This price is lower than the production cost of many companies. This is acting as deterrent and leading to financially unsustainable operation. The industry has been requesting for marketing freedom to make gas production viable and at least the Government should allow a floor price of US \$ 4.2/mmbtu, which prevailed prior to October 2014 domestic gas pricing policy. It is pertinent to mention that NELP PSCs provide for marketing and pricing freedom of sale of gas at arm's length.

In this connection, Government may also consider giving special dispensation for sale of gas from difficult blocks (blocks requiring cost-intensive and challenging developments and induction of new technology etc.) even they are located in onland and shallow water areas.

#### f. Exploration and production of CBM, shale gas and oil under existing PSCs

Under HELP/OALP, Government has permitted exploration and production of both conventional and unconventional hydrocarbons under a single license/lease. This dispensation should be extended to cover existing blocks under PSCs as well to explore and where economically feasible produce CBM and Shale oil/gas. This would be the fastest way to exploit these unconventional resources from existing active acreages and help towards energy security of the country.

#### g. Decommissioning and Site Restoration Issues

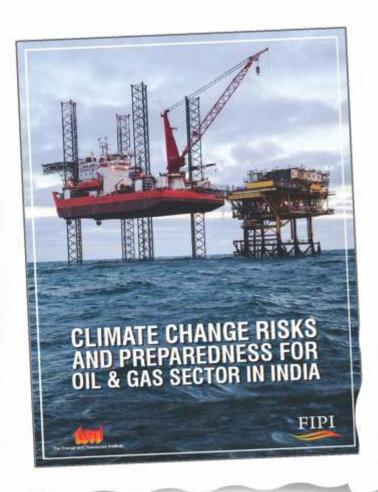
The liabilities for decommissioning and site restoration are governed by PSC provisions, SRF Scheme 1999 and Guidelines Notified by MoP&NG. The E&P Companies are encountering certain issues like liability of decommissioning and site restoration in case asset is transferred to another party/Gol nominee at the expiry of current PSC period, withdrawal of money from SRF for carrying out abandonment activities and uncertainty about the identification of the third party/and or Government Nominee, if any, to whom the facilities to be handed over when the PSC expires and the current Operator/Contractor does not seek PSC extension etc.

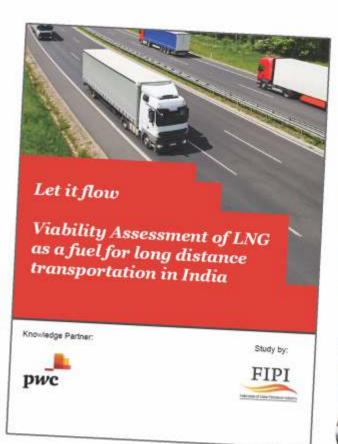
#### 12. OID Cess on indigenous crude oil

Ministry of Finance has levied cess on Crude Oil from a specific rate to an ad-valorem rate. Directionally, it was a right step though the rate set at 20 percent at that time turned out to be very high. Prior to the aforesaid revision, the cess was specified at a fixed rate of Rs. 4500 per tonne. This rate was in force from March 2012 till the revision in February 2016. As the average monthly oil price during this period was approximately US\$ 100/barrel, in percentage terms the cess of Rs. 4500/tonne worked out to about 9% of crude oil price.

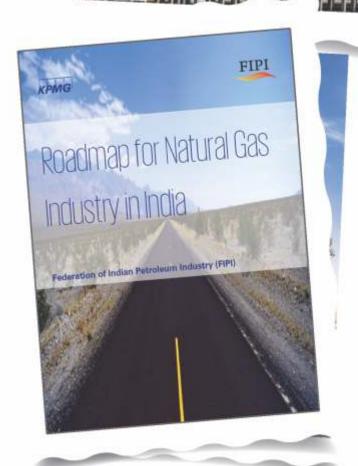
The 20 percent Cess rate provided benefit for a temporary period only upto moderate crude oil prices. In the wake of recent OPEC decision to again resort to production cuts, the crude oil prices have started moving up, though it is difficult to predict whether it is a sustained or temporary trend. As a result, the domestic producers of crude oil are again feeling the pinch with 20 percent ad-valorem cess and are in fact in a much worse off than before. There is therefore an urgent need to reconsider this issue and provide the much needed relief to the domestic oil producers.

In this regard, FIPI has advocated with Revenue Secretary, Department of Revenue, Ministry of Finance for an expeditious correction in the levy of cess on domestic crude oil production from 20 percent to 8 percent of the realized price of crude oil. Reducing the cess rate would help to expeditiously increase oil production and meet Hon'ble Prime Minister's vision of "Make in India" and enhanced energy security.









# RESEARCH REPORTS

#### 1. Climate Change Risks and Preparedness for Oil and Gas Sector

The energy sector faces multiple challenges due to climate change. While the need to reduce greenhouse gas (GHG) emissions requires reducing reliance on fossil fuels for meeting energy demands, the energy infrastructure itself is vulnerable to the physical impacts of climate change. India's NDCs set a target of reducing GHG emissions intensity of the gross domestic product (GDP) by 33% to 35% from 2005 levels by 2030. Increasingly reduced reliance on fossil fuels, including oil & gas, is the essence of India's NDC.

Climate change poses three types of challenges to the oil & gas sector in the country. First is the threat to the future of industry itself due to regulations for mitigating GHG emissions. Second is the risk to infrastructure and operations, particularly due to extreme weather events. Third, relates to the nature of the Paris Agreement requiring improved transparency in the accounting of GHG emissions.

This FIPI study is a first step towards understanding the nature and spread of the three types of risks that the oil & gas sector in India is likely to face in the near future due to climate change. It identifies hotspots where the oil & gas infrastructure is likely to be affected the most by climate change along with the likely impact on demand for oil & gas based products nationally as well as internationally, if current climate policies are fully implemented. It also analyses the preparedness of India's oil & gas sector to meet the reporting requirements under the Paris Agreement. On the basis of this analysis, the study proposes a set of short-term and long-term action points for better preparing India's oil & gas sector to meet the challenges of climate change.

#### 2. Impact of Oil and Gas on Indian Economy

The Indian economy has made rapid progress in the last decade. Its GDP has virtually doubled in this period, making it the world's sixth largest economy. In terms of purchasing power parity, it stands as the third largest economy in the world. As the economy grows, the demand for energy is likely to grow at a significant pace.

Realizing the role of the oil and gas sector in achieving the targeted double digit economic growth of the country, over the last few years the government has introduced a slew of proactive policy reforms, thereby, transforming the landscape for the upstream sector and providing the necessary push to roll out the slowed investments into the E&P sector. Alongside production, the government has also introduced a series of policy reforms to improve the access to energy.

Given the significant reliance of economic growth of the country on the Oil and Gas industry, this study was undertaken to assess the contributions of Oil and Gas sector on the economy in the last two decades. The study also aimed to analyze the economic linkages/interdependencies of the Oil and Gas sector with other sectors. Oil and Gas sector has played a pivotal role in the socioeconomic development of the nation, and thus, the study also assessed the impact of the output of Oil and Gas sector to household incomes.

#### 3. Viability Assessment of LNG as a fuel for long distance transportation in India

The future of mobility and transportation in India is the subject of many policy discussions. Major Indian cities have grappled with dangerous levels of PM 2.5 and other pollutants and now feature prominently among the most polluted cities in the world. Transportation as a sector has emerged as a major contributor to emissions in the country. Transportation sector has traditionally been dominated by petrol and diesel. Through Compress Natural Gas (CNG) and auto LPG have been introduced in the market, they have failed to make a serious dent to the share of liquid fuels due to the absence of policy support.

LNG as a fuel for trucks, also known as Auto LNG, has been gaining traction in major international markets. China is the market leader and USA along with Europe are following suit given the advantages of LNG over diesel. Although LNG is a fossil fuel, it is the cleanest burning fossil fuel available today and could be a bridge to a future dominated by renewable energy sources. This study looks at the prospects of LNG as a fuel for heavy duty trucks. To understand how Auto LNG could evolve in India this FIPI study focuses on the following:

- a. Market potential for Auto LNG
- b. Technology used on trucks fueled with LNG
- c. Infrastructure requirement and sustainable business model
- d. Economic and environmental benefits
- e. Financial case for truck owners
- f. Policies and guidelines suggested to accelerate penetration of Auto LNG
- g. Key recommendations for various stakeholders to accelerate the use of LNG in this sector

#### 4. Roadmap for Natural Gas industry in India

India currently is the fastest growing economy in the world and as a consequence has emerged as the third largest energy consumer after US and China. However, the energy consumption is largely dependent on fuels, such as coal and oil, contributing to ~86 percent of country's energy consumption. With India's commitment to reduction in carbon emissions as per COP 21 targets and a vision of building India's energy future on four pillars - energy access, energy efficiency, energy sustainability and energy security, the country envisions to move towards cleaner fuels. Given its clean attribute, natural gas is the next generation fossil fuel which presents a viable alternative to play a critical role in India's transition towards a low carbon clean fuel based economy. In this direction, Government has introduced a series of reforms to give an impetus to domestic production of natural gas.

With this background, FIPI commissioned this study with KPMG to identify the major impediments to the growth of gas industry in India. The objective of the study was to develop a vision for the natural gas sector from the view point of the key stakeholders of the industry and to draft a comprehensive roadmap to achieve this vision of 15 per cent PEM contribution.

### **Ongoing Research Reports**

#### 1. GST Impact Study on Excluded Petroleum Products

On request from Ministry of Petroleum and Natural Gas (MoP&NG), FIPI has commissioned a report on the impact of non-inclusion of five key petroleum products namely crude oil, natural gas, ATF, MS and HSD under the GST regime. The findings of the report will substantiate the impact of huge stranded input tax credits on the oil industry and recommend revenue neutral rates at which these products could be included under GST without affecting the revenues of State and the Central Governments. The findings of the report will be advocated with various ministries and State Governments for inclusion of the presently excluded products

#### 2. Impact of Electric Mobility on India's Oil and Gas Sector

The oil and gas sector has played a dominant role in shaping the world as we know it today. With the emergence of electric mobility, the sector is poised to undergo a tectonic shift with demand potentially moving away from conventional fuels to electricity and renewables. Under such circumstances, the FIPI report will try to explore the impact of EVs in terms of:

- a. Benefit to the national economy
- b. Scale of the disruption caused
- c. Impact on oil and gas industry
- d. Preparatory measures required by oil companies to withstand the challenge posed by Evs

#### 3. Making Natural Gas Viable for Power Generation in India

The Hon'ble Prime Minister of India has set a vision of increasing the share of natural gas in the countries Primary Energy Mix (PEM) from a present 6 per cent to 15 per cent by 2030. In this regard, the Government has taken various policy measures in the recent past to increase the demand for natural gas in the country. However, the power sector, one of the anchor consumers of natural gas in the country, is still receiving less than 12 Bcm against a potential demand of 42 Bcm. As a result, 14 out of 27 GWs of gas based power generation capacity is presently stranded and will eventually turn into stressed assets. In this regard, FIPI is commissioning a study report to explore various ways in which natural gas could be made viable for power generation in the country.

# **EVENTS**



TECHNOLOGY ADOPTION & DIGITALISATION INDIA'S GLOBAL OUTREACH HYDROCARBON

2nd WPC LEADERSHIP CONFERENCE OF STREET OF STREET

HYDROCARRON VISION 2030

YOUTH FORUM 2019 I NG FOR ROAD

SYNERGY IN TRANSPORTATION

R & D CONCLAVE

WINNERS: WOMEN IN INDIA'S ENERGY SECTOR

Dr. R. K. Malhotra, Director General, FIPI welcoming the participants at Delhi

# Mr. T. K. Sengupta, Director (E&P) welcoming the participants at Mumbai





Mr. Spencer Dale, Group Chief Economist, BP delivering the presentation on 'BP Energy Outlook 2019' before the August audience at an impressive function at Delhi.

### **BP Energy Outlook 2019**

Carrying on with its tradition, the Federation of Petroleum Industry (FIPI) presented the BP Energy Outlook – 2019 in association with BP India. This year two events were organised jointly by FIPI with BP India one in Delhi and the other at Mumbai. The Delhi event was held on March 5, 2019 at the Royal Ballroom, The Imperial, Janpath, New Delhi and the Mumbai event was held on March 7, 2019 at the Four Seasons, Mumbai.

Considering the importance and relevance of the BP Energy Outlook and the pristine position it holds as a beacon of guidance for the energy sector, both the events saw attendance of top executives from the oil and gas companies in India.

Mr. Spencer Dale, Group Chief Economist, BP in his presentation of BP Energy Outlook – 2019 spoke on the energy transition under different scenarios. He explained as to how the outlook presents and analyses future energy trends and the growing demand will be met over the coming decades through a diverse range of supplies including oil, gas, coal and renewables.

#### **Key Takeaways from the Presentation:**

Global energy demand is set to rise by around a third in 2040, driven by increasing population and improving living standards in Asia, particularly in India and China. Renewables will be the largest source of global power generation. Industry and buildings accounts for 3/4th of the increase in energy demand. Carbon emissions continue to rise, signaling the need of policy to achieve less carbon. On India's perspective, India will continue to be one among the large importers of energy. With different alternative scenarios of gas demand for India, it is vivid that Natural gas is set to play a vital role in meeting the rising energy demand. Though the gas consumption will increase, it will still be short of 15 percent in the Primary Energy Mix (PEM).



Mr. Spencer Dale, Group Chief Economist, BP delivering the presentation on 'BP Energy Outlook 2019' at Mumbai



Sh. Sashi Mukundan, Regional President and Head of Country, India, BP Group giving the vote of thanks.

### 2<sup>nd</sup> WPC Leadership Conference

Federation of Indian Petroleum Industry (FIPI) joined hands with the World Petroleum Council (WPC) to organize the second edition of WPC leadership conference from 18 – 20 February, 2019 in Mumbai, India. The WPC Leadership Conference is a global conference on industry leadership in responsible operations, international cooperation and sustainable solutions for the petroleum sector. Recent edition of the conference was even more important in the Indian context because India, one of the major demand centers for energy, has a large growing population with increasing appetite for energy and is faced with serious concerns regarding air quality and climate change. The key themes of the conference were Engaging Energy Poverty, Energy Transitions and Industry Responses to Climate Change. The conference was attended by major stakeholders from the Indian and International Oil and Gas industry, including industry leaders, experts and academia.

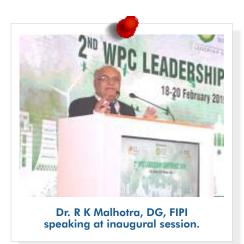
The two-day conference commenced with the welcome remark and setting of context by Mr. Tor Fjæran, President, World Petroleum Council and Dr. R. K. Malhotra, Director General, Federation of Indian Petroleum Industry (FIPI). Mr Fjæran underlined the rising concerns due to air quality and climate change and emphasized that the efforts of the industry will be fruitful only through collaboration, dialogue and sharing of best practices. Dr Malhotra pointed out that as the world approaches energy transition, access to energy sources at an affordable price will be of paramount importance. The first session of the conference 'Energy Transitions – The Changing Role of the Oil & Gas Industry' was chaired by Dr Sun Xianshena, Secretary General, International Energy Forum (IEF). During the discussion, it was well established that the energy transition has already been put in motion by ground breaking developments in the industry like Electric Vehicles (EVs), emergence of renewables and digitalization. In the future, the energy transition will be driven by three major factors – efficiency, innovation and digitalization. Going forward, bringing clean energy access to even the most under privileged will be the main focus for the entire energy industry. In this direction, the success of Government of India's Pradhan Mantri Ujiwala Yojana (PMUY) scheme, that made clean cooking fuel in the form of LPG cylinders available to more than 60 million under privileged households, drew wide spread appreciation. The panelists agreed that faced with the energy transition, the Oil & Gas industry will have to shoulder a responsibility more important than ever before to ensure a smooth transition to a sustainable future.



Ms. Ulrike von Lonski, Director of Communication, WPC in conversation with Mr. Sven Mollekleiv, Senior Vice President, DNV GL



Ms. Lucy Alexander, an AIChe Technological Community, USA giving her views on "Taking the next step – what way forward for sustainability in oil and gas?"





Dr Sun Xiansheng, Secretary General, International Energy Forum (IEF) at inaugural session



Dr. S S V Ramakumar, Director (R&D), IOCL speaking at the plenary session 'Energy Transitions'



Mr. Tor Fjæran, President, World Petroleum Council delivering the address





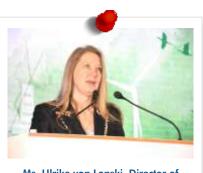
FIPI speaking during the session



with energy poverty & local communities

The session 'Energy Transition Challenges in the Wake of Growing Energy Demand in India' was moderated by Dr. Sun Xiansheng, Secretary General, International Energy Forum (IEF). The session discussed that India is one of the largest consumers of energy in the world and the country's dependence on fossil fuels is only going to increase in the foreseeable future. At this stage of energy transition, developing countries like India are faced with the challenge of striking a delicate balance between economic development and environmental sensitivity. It was underlined that to ensure a smooth transition, India should reduce its dependency on import of fossil fuels and make better use of renewables and technologies such as carbon capture and storage (CCS). To promote domestic production of Oil & Gas, the Government has introduced a flurry of new policies in the upstream sector. To further support exploration in the country, the Government should encourage E&P activities in the unexplored basins.

The Second edition of the WPC leadership Conference brought industry leaders from the international Oil & Gas industry, experts and the youth under one roof to deliberate about the upcoming energy transition and the industry's preparedness towards it. This transition, unlike all previous energy transitions, is driven more by the very fundamental concerns over air quality and climate change and not by the emergence of a new fuel. During the course of the discussions, it was realized that for a sustainable future, affordable energy access for all will remain the central focus while the key levers in this transition will be energy efficiency, digitalization and acceptance towards disruptive technologies. It was realized that for a smooth transition towards a cleaner future, natural gas and renewables will have play a key role in the India's energy mix. In this direction, various initiatives and policy measures taken by the Indian Government like adoption of BS-VI standards, Ujjwala scheme and interventions in the upstream space attracted wide spread appreciation. During the discourse it was underlined that in a sustainable future, the Oil & Gas company will have to shoulder a responsibility much beyond generating returns and will have to engage with the local communities for an over-all socio-economic development. The petroleum companies, to ensure their place on the right side of the history, will not just have to be a stakeholder in the upcoming energy transition but will also have to be a vanguard in this major paradigm shift.



Ms. Ulrike von Lonski, Director of Communication, WPC introducing the speakers of Expert Panel



Dr Pierce Riemer moderating the Expert Panel on "Best Practices in engaging energy poverty and local communities"



Dr. R. K. Malhotra, DG, FIPI giving closing remarks and proposing vote of thanks

# FIPI Innovation Centre at Petrotech 2019

Petrotech 2019 was organized by ONGC and FIPI under the aegis of Ministry of Petroleum and Natural Gas (MoP&NG), Government of India from 10 – 12 February, 2019 at Greater Noida. Petrotech 2019, the grand show of Indian oil and gas industry was inaugurated by the Hon'ble Prime Minister of India Shri Narendra Modi in the presence of Shri Dharmendra Pradhan, Minister, Petroleum and Natural Gas and Skill Development and Entrepreneurship, Government of India.

Petrotech 2019, the 13th edition of the biennial conference and exhibition, provided experts from national and international oil and gas industry with a platform to share knowledge and expertise and display the technological developments across the oil and gas value chain. The theme of Petrotech 2019 was aptly set as 'Shaping the New Energy World through Innovation and Collaboration'. While the conference at this occasion witnessed sectorial experts sharing their views on issues touching upon various aspects of the petroleum industry, the exhibition presented an opportunity for both national and international companies, working in the oil and gas space, to exhibit the latest technologies in the industry and explore business opportunities globally.

At Petrotech 2019, FIPI had set up a pavilion at Hall 14 in the exhibition area. The FIPI pavilion at the event was rightly called the 'FIPI Innovation Center', as it extended an opportunity to the young entrepreneurs to be a part of the most prestigious event of the Indian oil and gas industry. The FIPI Innovation Centre was inaugurated by Minister of Petroleum & Natural Gas, Mr Dharmendra Pradhan. He also launched the FIPI, KPMG study on 'Impact of Oil & Gas on Indian Economy' at this occasion. The inauguration of the FIPI Innovation Centre was also attended by Dr. M M Kutty, Secretary, MoP&NG and Mr. Shashi Shanker, Chairman, FIPI & Chairman and Managing Director (CMD), ONGC among other dignitaries. The Innovation Centre set up by FIPI at Petrotech 2019, presented a unique opportunity for the young start-ups to display their products and explore possible business opportunities with stakeholders from global oil and gas industry.

Several members of FIPI's leadership team represented the organization at various knowledge sharing sessions at Petrotech 2019. Dr R K Malhotra, Director General, FIPI shared his insights on the role of R&D in the continued growth of the country's petroleum sector at the plenary session 'Building Energy Ecosystem Through R&D and Innovation'. Dr. Malhotra also chaired a technical session on 'Emerging Alternative Energy Options'. Mr. T K Sengupta, Director (E&P), FIPI and Mr. N K Bansal, Director (Oil Refining and Marketing), FIPI chaired technical sessions 'HP – HT and Tight Field Development & Technology' and 'Health, Safety and Environment', respectively where useful insights were given by experts in these areas.



Hon'ble Minister Dharmendra Pradhan, MoP&NG inaugurating FIPI Innovation Center



Hon'ble Minister Dharmendra Pradhan releasing FIPI's study on 'Impact of Oil and Gas on Indian Economy' at Petrotech 2019 Exhibition during his visit to FIPI Innovation Center



Dr. R. K. Malhotra, DG, FIPI speaking in the plenary session on 'Building Energy Ecosystem through R&D and Innovation'



"We need to produce more energy with lesser emissions... R&D will play a critical role in achieving it", DG FIPI speaking in the plenary session.

#### **Youth Forum 2019**

The Federation of Indian Petroleum Industry (FIPI) organized the Youth Forum 2019 during 9 – 10 January, 2019 in New Delhi. The Youth Forum 2019 organized under the umbrella of Petrotech 2019, India's flagship energy conference, was uniquely designed to bring under one roof, students from across the country and industry leaders to interact and explore the prospects of a rewarding career in the oil and gas industry. The event witnessed participation of over 200 students from various colleges and universities across the country. Many eminent personalities such as Mr. Sanjiv Singh, Chairman, IndianOil; Dr. Mahesh Gupta, Chairman & Managing Director, Kent RO Systems Ltd; Brig (Dr) Sunil Kumar Moudgil and Mr. Anish De, Partner & Head, Energy and Natural Resources, KPMG India interacted with the students over the course of this event.

To shortlist the students for attending the event, FIPI had organized an online quiz, open to all students across the country, which received an overwhelming response with participation of students from more than 30 colleges. Top 200 students from the online quiz were shortlisted based on their marks, and were invited to participate in the Youth Forum 2019. Along with the quiz, to encourage innovation and creativity among students, FIPI had also called for entries for a photography and short film competition this year, based on the theme 'Innovation in Energy'. The programme, at this two-day event was carefully designed with a perfect blend of informative and entertaining sessions to keep the students engaged throughout the event and ensure rich takeaways.

The event opened with a warm welcome address by Mr. Rajiv Bahl, Director (Finance and Taxation), FIPI. Mr. Bahl underlined that the objective of Youth Forum 2019 is to provide students with an opportunity to interact with the leaders of Indian oil and gas industry and to provide an ideal platform to explore the opportunities available in the sector. He mentioned that as the country continues to grow at a brisk pace, the demand for energy is poised to grow significantly in the years to come. He also emphasized that the growing energy sector will present a vast range of opportunities to the youth in the country.

The next session of the day was an experience sharing session with some of the most successful start-ups in the space of energy to encourage the students and to make them aware of the support being made available by the oil sector PSUs to young entrepreneurs. In this session, senior representatives from H2E Power, Detect Technologies and Chakr Innovation shared with the students their experiences, challenges faced by them and how these successful start-ups managed to overcome them.



Youth Forum Live Quiz where our 4 finalist teams fought to answer Quiz Master Ajay Poonia's questions.



Mr. Mahesh Gupta, Founder-Chairman, Kent RO Systems Ltd shared some really inspiring stories with the students.



Mr. Rajiv Bahl, Director (Finance), FIPI welcoming the participants.



Mr. Siddharth Mayur the founder of H2E power systems, Mr. Daniel Raj, CEO Detect Technologies and Mr. Anmol Khandelwal from Chakr innovations shared the motivational story of their start-up journey with the students.



Students participating in the Live Quiz.



Brig. Sunil Kumar Moudgil energized atmosphere at Youth Forum with his inspiring address.



Mr. Vishal Thapa, MIT-WPU receiving the best Photography award.

which were invited on stage by the quiz master to compete in the second round of the contest. The live quiz contest heightened the student excitement and kept the participants and the audience at the edge of their seats, as the session approached a nail-biting finish.

The next session was a motivational talk by Brig. Sunil Kumar Moudgil. The high-octane interactive session by Brig. Moudgil fully engaged the students and proved a big ice breaker for students coming from different

The high-octane interactive session by Brig. Sunil Kumar Moudgil. The high-octane interactive session by Brig. Moudgil fully engaged the students and proved a big ice breaker for students coming from different parts of the country and uplifted the general mood. He encouraged students to accept new challenges in life and approach each obstacle with self-belief. The first day of Youth Forum 2019 ended with a cultural evening and dinner.

In the live quiz contest that followed, eight students were shortlisted through an open online quiz, where all the students present at the event participated. The eight students were divided in four teams of two each,

The day two of the event started with research paper presentations. For this session, FIPI had invited three of the most innovative research papers focused on tackling energy issues. The findings presented by researchers at this occasion on varied issues such as 'Future of Oil for Transportation'; 'Strategies for Using Refinery Hydrogen as a Fuel for Fuel Cells'; and 'Biodiesel Production along with High Value Omega-3 Fatty Acids' attracted much attention from students.

At the interactive session with the role model, Mr. Mahesh Gupta, Founder-Chairman, Kent RO Systems shared from his rich experiences as a successful entrepreneur and underlined the importance of hard work and perseverance. He further emphasized on importance of taking calculated risks and readiness to embrace the newest technologies for aspiring entrepreneurs. At this occasion, to apprise the students with the importance of technological developments in the sector, Mr. Anish De from KPMG made a presentation on the 'Role Played by Technology and Innovation in Oil and Gas Sector' and mentioned the vast opportunities this space presents for the students.

The highlight of the event remained the interactive session with Mr. Sanjiv Singh, Chairman, IndianOil alongwith Dr. R.K. Malhotra Director General FIPI. Mr. Singh in a very eloquent manner introduced the students to the Indian oil and gas industry and informed them about the potential growth areas and the exciting career opportunities in the oil and gas space. He suggested that the newest technological advancements in the sector will have a long lasting impact on the dynamics of the global energy industry. With new technologies like Electric Vehicles (EVs) and LNG driven vehicles on the horizon, he urged the students to view these fuel technologies in combination as they will coexist in the near future. At the occasion, Dr R K Malhotra, Director General, FIPI encouraged students to stay abreast with the latest developments in the sector and explore newer possibilities to contribute to the growth of the sector. With a number of students eager to interact with the Chairman, Mr. Singh patiently answered to a number of student queries.

The two-day event ended on a high note with winners of various competitions at the event winning exciting prizes and setting the right tone for the larger event, Petrotech 2019, scheduled between 10-12 February, 2019.



Mr. Sanjiv Singh, Chairman, IOCL and Co-chairman, FIPI along with Dr. R. K. Malhotra, Director General, FIPI discussed about the rewarding career opportunities for students in the Oil and Gas Sector of India.



Paper presenter during the case study session



Mr. Prashant Kamble, University of Mumbai - First Runner-ups of best Short Film award.



Mr. Sanjiv Singh with a group of students.



Winners of Live Quiz.

# Delate Figital Transformation is 04.5 to Justin Community of the Communi

Director(ORM), FIPI, Mr. N K Bansal delivered a very inspiring welcome address at the conference.

# Insformation Digital Transformation in Dil & Gas Sector

Mr. Subhash Kumar Director (Finance), ONGC delivering inaugural address.



Mr. Debasish Misra, Deloitte, India, sharing his thoughts on Digitalisation & its future in energy sector.



## One Day Conference on "Digital Transformation in Oil & Gas Sector"

The Federation of Indian Petroleum Industry (FIPI) organized a one-day conference on "Digital Transformation in Oil & Gas Sector" on February 8, 2019 in New Delhi, as a precursor to Petrotech 2019. This program was uniquely designed to bring various technology leaders under one roof to explore the opportunities for the Indian oil and gas industry in Digital Transformation. The event witnessed participation of over 120 executives from various oil companies across the country.

Many industry leaders from 14 companies namely ONGC, HPCL, Cairn India, Reliance Industries Limited, Deloitte, Schlumberger, Baker Hughes, Siemens, Honeywell, Larsen & Toubro, SAP, Kongsberg Digital and Hexagon Capability Center India made their presence to showcase the opportunity to know the current status of digitalization in O&G sector and the experience of the prominent organizations in this direction. M/S Deloitte provided the knowledge partnership for the conference.

The event opened with a warm welcome address from Mr. NK Bansal, Director — Oil Marketing & Refining, FIPI. Mr. Bansal underlined that the objective of the conference to focus on the current status, opportunities, issues, challenges and future pathways to accelerate the pace of digital transformation in O&G sector. Inaugural address was given by Mr. Subash Kumar, Director (Finance), ONGC.

Industrial Internet of Things, Digital Oilfield 4.0, Industry 4.0, Augmented and Virtual Reality, Machine Learning, Big Data Analytics etc., were some of the key topics discussed. Conference was aimed at providing the focus on issues and challenges and future pathways to accelerate the pace of digital transformation in O&G sector. The conference was carefully designed with a perfect blend of information and experience on the latest technology trends in the O&G industry from both technology provider/manufacturer and end-user side.

One of the highlights of the conference was the display of AR/VR simulation models by Deloitte and Siemens, which attracted a lot of interest from the participants.



The panel on the Digital Application in energy Sector. Moderated by Mr. Shree Parthasarathy.



Discussion on building Digital DNA within Oil & Gas sector moderated by Ms. Kalpana Jain, Deloitte India.

## 2<sup>nd</sup> program on Realising Hydrocarbon Vision 2030 for North East India

The 2nd one and half day workshop on 'Realising Hydrocarbon Vision 2030 for North East India' was held at The Hotel Polo Towers, Shillong on 29th & 30th November 2018. The program was attended by the participants from various Oil PSUs viz. ONGC, IGGL, IOCL, OIL, NRL, BCPL, HOEC, Cairn and an official from MoEF&CC, Regional Office Shillong, Govt. of India.

In the opening address Dr R.K. Malhotra, Director General, FIPI reiterated the key objective of North East Vision Document i.e. Leveraging Hydrocarbon sector for development of the region. He spoke about the first programme organised by FIPI in 2017 at Kaziranga after the Vision document was released in 2016. He also mentioned that the second such programme organised by FIPI is to review the progress and capture the challenges & constraints in the region.

Shri S. K. Moitra, Director (Onshore), ONGC in his opening speech showed his aspiration of doubling the production from 4 MMT to 8 MMT, the target set in the vision document, by drawing analogy between reserve base of Assam & Rajasthan which is 450 MMT vs 251 MMT respectively. He mentioned that even Rajasthan with a lower reserve base is producing more than double production of Assam. So, there is no doubt that by induction of technology and removing small bottlenecks, North East can achieve the Vision targets.

In his inaugural speech Shri Utpal Bora, Chairman & Managing Director, Oil India Ltd. mentioned that based on the recent reassessment of sedimentary basins reserve all over India, the potential is 42 billion tonnes of O+OEG & only 12 billion tonnes of O+OEG has been discovered. Out of 42 billion tonnes Assam Arakan basin holds 18% of it and out of 12 billion tonnes of discovered reserves A&A basin holds 16%. So there is a huge potential of yet to find reserve (YTF) in NE region.



**Valedictory Session** 



Technical Session 3 on Marketing, Pipeline and Gas.



Dr R K Malhotra, Director General FIPI delivering Welcome Address during the Inaugural Session.



**Inaugural Session in progress** 



Technical Session I on Exploration - Production & Environment.



Technical Session 2 on Refining, Petrochemical and Marketing.

# PoddAR Comment of the Comment of the

Hon'ble Minister Dharmendra Pradhan, MoP&NG along with H.E Sultan Ahmed Al Jaber, Minister of State, United Arab Emirates(UAE); the Director-General and CEO of the Abu Dhabi National Oil Company (ADNOC Group) inaugurating the India Pavilion set up by FIPI at ADIPEC.



Hon'ble Minister Dharmendra Pradhan with H.E Sultan Ahmed Al Jaber at FIPI stall.



Group photograph with Hon'ble Minister Dharmendra Pradhan.



Indian Strategic Petroleum Reserves (ISPRL) inked a memorandum of understanding (MoU) with the Abu Dhabi National Oil Company (ADNOC) to explore the possibility of storing ADNOC crude oil at ISPRL's underground oil storage facility at Padur in Karnataka.

# FIPI sets up India Pavilion at ADIPEC 2018: Synergy in Energy

As entrusted by the Ministry of Petroleum and Natural Gas, Government of India, Federation of Indian Petroleum Industry (FIPI) setup India Pavilion at the Abu Dhabi International Petroleum Exhibition & Conference (ADIPEC) from 12th – 15th November 2018 at Abu Dhabi. ADIPEC is one of the world's largest, most important and influential oil and gas events that brings together industry stakeholders and experts to share knowledge and exchange ideas on future of energy sector. The theme of the pavilion set up by FIPI was "Synergy in Energy" which showcased the Indian oil and gas sector to the international world. An eminent delegation of Indian oil and gas companies encompassing the entire hydrocarbon value chain took part in ADIPEC 2018. In the India Pavilion set up by FIPI, 7 organizations viz. ONGC, IOCL, OIL, HPCL, BPCL, EIL and L&T participated. This was the first time FIPI had taken the lead in setting up such a pavilion at an international level.

The India Pavilion was formally inaugurated by Shri Dharmendra Pradhan, Hon'ble Minister of Petroleum & Natural Gas and Skill Development & Entrepreneurship and H.E. Sultan Ahmed Al Jaber, Minister of State, UAE & Director General & CEO of ADNOC in an impressive ceremony held on 12th November in the presence of global as well as Indian dignitaries from the oil industry. Mr. Navdeep Singh Suri, Ambassador of India to the UAE and other senior government officials from India were also present at the inauguration.

An exclusive India Session, titled 'India's Growing Energy Demand & Race for Energy Independence' was coordinated by FIPI. The panel discussion, which was moderated by Dr. R.K. Malhotra, Director General, FIPI included Mr. Shashi Shanker, CMD, ONGC and Chairman, FIPI; Mr. Sanjiv Singh, Chairman IOCL and Co-Chairman FIPI; Mr. M.K. Surana, CMD HPCL; Mr. Subramanian Sarma, CEO & MD, L&T Hydrocarbon Engineering; Mr. P.K. Sharma, Director (Operations), OIL; Mr. Vinod Kumar Mishra, Director (Finance), Petronet LNG as panelists who gave useful insights about their respective areas of business.



Dr. R.K. Malhotra also participated in a panel discussion on Downstream Diversification & Growth: How can diverse, effective human capital shape the future of the downstream sector.



Team FIPI with Hon'ble Minister Dharmendra Pradhan.

## Workshop on 'Winners: Women in India's Energy Sector'

Federation of Indian Petroleum Industry (FIPI) along with the Knowledge Partner the Boston Consulting Group (BCG) organised a one-day workshop on "WINNERS: Women in India's Energy Sector" on October 31, 2018. The workshop was attended by about 300 participants.

Dr R. K. Malholtra, Director General, FIPI presented welcome note to the attendees in the conference by re-instating PM Narendra Modi's view that multitasking is a key in managerial world. He said that Indian women have been multitasking since ages and their efforts have contributed a lot in bringing our country at this level especially rural women. Dr. Malhotra added that there's a large participation of women in sectors such as service and hospitality. However, energy sector remains to be least gender diverse. He recognised social and cultural reservations affecting participation of Indian women in this area. He also mentioned various steps that could help increase the women workforce. Dr. Malhotra on his ending note empahised that we need to educate women, employ them in dignified jobs and empower them with conducive environment through policy intervention to help them go further and faster.

Dr. Alka Mittal, Director-HR, ONGC addressed the conference by highlighting under representation of women at corporate level. She presented business case for women through skills they owe naturally. She said, pain points such as security, legal protection, biases at workplace if addressed can help increasing gender diversity. She mentioned countries such as Israel, Norway and Sweden where women workforce increased after changes in regulatory framework. This was observed in India too after Company's Act 2013. Dr. Alka shared ONGC's views and best practices in maintaining gender diversity. Sharing her experiences she mentioned that although female workforce at entry level are the highest, it keeps declining at mid management and almost diminishes at top management level. Accordingly, she said interventions are required to retain female talent. Dr. Alka also shared that women do enjoy and perform in challenging roles of technical fields. Hence, infrastructure, security, mentorship and development programmes are some of the ways to retain talent. She ended her session with the thought that it is time that we progress by letting go gender related perceptions and normalise it with gender neutral policies and evaluating parameters.



Dr. R. K. Malhotra, Director General, FIPI delivered the welcome address.



Dr. Alka Mittal, Director-HR, ONGC addressed the conference by highlighting under representation of women at corporate level



Dr Niru Kumar, Gender Diversity Consultant & Trainer speaking on Gender Diversity.



Wise words from Ms Nishi Vasudeva first female CMD, HPCL.



Ms. Ulrike Von Lonski, Director of Communication, WPC moderating the panel discussion on 'Role of women in energy sector', Importance of adequate utilization of opportunities by women was discussed by women professionals in prominent positions.



During panellist discussion moderated by Ms Shelly Trench.

Dr. Niru Kumar, Gender Diversity Consultant & Trainer at Pepsico, Vodafone, E&Y emphasised on the need to change lens of perception. She spoke about psychological perspective on gender diversity. Dr. Kumar illustrated various psychological aspects and stigmas that impact professional life of women. She mentioned that while world is moving towards created facilitating diversity at micro level by being inclusive of disability and LGBT, India still is an underperformer since we have not been able to sustain growth of women workforce. According to her, it is unconscious conditioning of both men and women that needs re-programming. She also highlighted that it is necessary to balance professional, personal, mental and physical health of women. She shared an analysis where the productivity was seen highest in well lead diverse team in comparison of homogenous team and poorly lead diverse team have the lowest productivity. Dr. Kumar ended her engaging session by sharing her personal journey of professional and personal life which was very encouraging for the participants.



Dr. Jyoti Kiran, Chairperson, Rajasthan State Finance Commission shared her empowering thoughts on working women as a professional in a high ranking role during a panel discussion in 'Women who inspire'

Ms. Nishi Vasudeva, Former CMD, HPCL reiterated that women are untapped reservoir for industry and more so for energy sector. She said it is commendable that women workforce in energy has increased and it is heartening to see them on field jobs. She said women need to be encouraged at the young age at entry level. Thus, mentorship should be introduced formally in organisations. She said women should be confident to identify and use the opportunity available to them, which goes a long way. She also talked about knowing beyond designated roles, learning and asking for feedback which helps in self-improvisation. Ms. Vasudeva also encouraged women to embrace tough assignments to get noted and be a trusted leader. She mentioned organisational support is much more crucial and should be imbibed in way of thinking. She said as women professionals we are at par, and it is about taking and grabbing an opportunity in different roles to reach up corporate ladder.



Mr. M. A. Pathan, former chairman, IOCL delivered the valedictory address at the closing session.

Mr. M A Pathan, Former Chairman, IOCL recounted his early days of career and commended that India has evolved in terms of its women workforce. He further said that they are not only doing desk jobs but are now taking up challenging roles on field, working in shifts with full zeal and enthusiasm. He added that a lot is being taken up at policy level such as mandate to have women representation at board. There's Human Resource taskforce of 7 public sector oil and gas companies working on five areas that is source (supply side of talent), develop (leadership development), perform (performance management), affiliate (engagement and aligning different set of employees) and HR excellence (transforming HR functions as process custodian) to retain talent. Adopting best practices from other companies that can befit employees is also amongst other areas on which the task force is working. Mr Pathan ended his session by emphasising on gender equality and providing more opportunities for women in India's energy sector.



Concluding session moderated by Mr. Anirban Mukherjee, Partner & MD, Energy Practice, BCG, ended with a panel discussion on policy measures and interventions required for increased role of women in energy sector.

# 8-10 October, 2018 KDMIPE, Dehradun

Mr T. K. Sengupta, Director (E&P), FIPI and Dr Hari Lal, ED-Head KDMIPE during the Inaugural Session.

# F

Dr Hari Lal, ED-Head KDMIPE making presentation on the theme program during the inaugural session



Mr. Rajeev Tandon, GM (GP), GEOPIC making presentation on Futuristic technology in line with Advancements in Seismics during the program



Dr. Snehasish Chakraborty, Chief Geologis giving presentation on Sedimentary Structures and their significance in interpretation of paleodepositional environment.

## 13<sup>th</sup> Program on 'Modern Practices in Petroleum Exploration'

Federation of Indian Petroleum Industry (FIPI) organized the 13th Program on 'Modern Practices in Petroleum Exploration' in association with Keshava Deva Malviya Institute of Petroleum Exploration (KDMIPE), ONGC from 8th-10th October 2018 at KDMIPE-ONGC, Dehradun.

The objective of organizing this Industry-Academia workshop was to have a two-way interaction between practicing managers and the learned faculty of academic institutions covering various aspects of oil exploration to enrich knowledge on both the sides.

The programme was designed by experts from ONGC for the teaching faculty of Engineering Colleges, Universities, Industry members as well as students from institutes to make them aware of the latest developments in the oil and gas arena. Twelve faculties from various educational institutes viz. IIT Kharagpur, Kurukshetra University, Goa University, Andhra University, Banaras Hindu University, UPES and DIT University, 10 students from UPES & DIT University, 14 practicing Manager from industry viz Cairn Oil & Gas Vedanta Ltd, HOEL, Oil India Ltd, BPRL and Prize Petroleum Ltd attended the programme. The program consisted of two days classroom sessions covering Geochemistry, Geophysics, visiting VRC Lab & GEOPIC, and one day visit to geological sites.

The programme covered a wide range of topics like Futuristic technology in Seismics, Sedimentary Structures and their significance in interpretation of paleo depositional environment, Drilling Challenges in Petroleum Exploration, Modern Trends in Seismic data processing, Advances in Non-Seismic Methods, High Resolution Geochemical tools in Hydrocarbon exploration, Petroleum System Analysis, New vistas in Petroleum Exploration in Frontier Basin, Recent Advances in Well logging, Advances in Remote sensing for hydrocarbon Exploration and Structural Modeling in Hydrocarbon exploration.



Mr S. Pahari, DGM(Chemistry), KDMIPE making presentation on Petroleum System Analysis during the program



Mr. D. K. Phaye, Chief Geologist KDMIPE making presentation on New vista in Petroleum Exploration in Frontier Basin.

#### **LNG for Road Transportation**

Federation of Indian Petroleum Industry (FIPI) organized a session on "Liquefied Natural Gas (LNG) as fuel road transportation" in association with Petronet LNG Ltd on September 28, 2018 at India Habitat Center with an objective to discuss the outcome of the study "Viability Assessment of Liquefied Natural Gas (LNG) as a fuel for long distance transportation" which was being carried out by FIPI in association with IOCL, BPCL, GAIL, Petronet LNG, Shell, India Gas Solutions (JV of RIL & BP) and Exxon Mobil with PWC as knowledge partner.

The session was attended by representatives of key stakeholders such as GAIL, Petronet LNG, Shell, Exxon, BPCL, India Gas Solutions, Petroleum & Natural Gas Regulatory Board (PNGRB), Indraprastha Gas Limited, Green Gas Limited and Center for Energy Studies – IIT Delhi.

The session commenced with a presentation by PWC on the subject. The key points that emerged during the presentation were that, use of LNG for transportation can be beneficial for a wide range of stakeholders – i.e. society, government, LNG companies, Fleet operators and OEMs in terms of environmental benefits due to lesser greenhouse gas and particulate matter emissions and economic viability due to the price differential between diesel and natural gas. The participants in the session also made key observations such as developing a plan of action by building consensus among various stakeholders, for developing a LNG based fuelling infrastructure, presenting to the government about global developments and the plan for setting up infrastructure in India, evaluation of post GST sensitivities for estimating price differential of LNG & diesel and incentives required for OEMs and truck fleet operators for shifting to LNG fuelled trucks.



Mr. Praveen Rai, Deputy Director (Economic Policy & Planning), FIPI welcoming the participants



Mr. Sourabh Jha, Principal Consultant, PwC delivering his presentation.



Dr. R. K. Malhotra, Director General, FIPI raising his query.





Mr. Prabhat Singh, MD & CEO, Petronet LNG Ltd giving his prespective.



Mr. Deepak Mahurkar, Partner and Leader Oil & Gas Industry Practice, PwC answering the queries.

## Head is

Dr Ahindra Chakrabarti, Professor of Finance and Energy, Great Lakes addressing the participants.



Section of the participants.

Distribution of Certificates to the participants in the presence of the Mr. N. K. Bansal, Director(ORM), FIPI

## Five days Training Programme on 'Business Analytics'

FIPI, with faculty assistance from Great Lakes Institute of Management, Gurugram, organised a five days advance programme on 'Business Analytics; at India Habitat Centre from September 24 to 28th, 2018. The objective of the programme was to develop skills and competency, i.e, in the middle management executives in descriptive a nalytics and build their mindset to use analytical tools for fast and efficient decisions to respond to the dynamics of market realities.

Twenty Five middle management executives of various disciplines from member organisations joined the course.

The course, second in the series, was designed with advance contents like

- Analysis of Social Media Trend Data
- Market basket Analysis
- Cluster Analysis
- Machine Learning and Neural Network Formation

Beside tools of Statistics for Hypotheses Testing , Forecasting . During the program , the Faculty explained the basic principles of each analytical tool , its practical use with industrial case and examples.



Group photograph

#### 9<sup>th</sup> Industry Educational Programme on 'Trends in Oil and Gas Management & Technologies'

FIPI has an MoU with University of Alberta, Canada for promoting management & technical training and facilitating technical & professional exchanges between the two institutions. Under the MoU, industry educational and collaborative research programs have been organized for the benefit of its members. These programs have proven to be highly educative & useful and have provided an opportunity to the participants to update themselves with the technologies of the future.

Encouraged by the past response, FIPI in collaboration with the University of Alberta organized the 9th certification program entitled "Trends in Oil and Gas Management & Technologies" on September 16-22, 2018 with an additional emphasis on Risk Management. A special feature this year was visit to Fort McMurray which covered tour of Oil Sands mining & upgrading operations. One week program covered areas like:

- Academy-Led Engineering Safety and Risk Management
- Innovations in Alberta's Energy Sector
- Financial Management in Oil and Gas
- Industry-led Oil and Gas Safety and Risk Management
- Tour of oil sands mining operations
- Tour of Fort McMurray area
- Enhancing Environmental Performance
- Site visits to upstream and midstream headquarters
- Site visit to downstream/pet chem producer

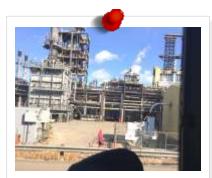
The program was designed for the benefit of all the three streams: Upstream, Downstream & Midstream.

Seventeen senior executives from various oil & gas companies viz, Cairn Oil & Gas Vedanta Ltd, Oil India Ltd, Hindustan Petroleum Corporation Ltd and Federation of Indian Petroleum Industry participated in the program.

97% of participants rated the program as very good/excellent, which signifies the importance of the industry attaches to the educational program.



Visit to Fort Mc Murry (Suncor Site) (Mine Complex, Plant 300 Extraction, Upgrading, Mining & Reclamation)



Visit to Fort Mc Murry (Suncor Site) (Mine Complex, Plant 300 Extraction, Upgrading, Mining & Reclamation)



Group Photograph of the participants.



Academy-Led Engineering Safety & Risk Management Presenter: Dr Gordon Winkel, Program Director, Faculty of Engineering.



**Group at NISKU Training Centre** 



Certificates of participation were given away by Ms Stefanie Claro, International Partnership coordinator and Ms Suman Gupta

Mr. T.K. Sengupta, Director (E&P), FIPI addressing the participants



Prof. Suresh Kumar, Dean-SoE, UPES addressing the participants



IIT (ISM) Dhanbad - Recipient of **Best Chapter Award** 



Vidvapeetham, Coimbatore.

### 8<sup>th</sup> Annual Convention of FIPI **Chapters**

The 8th Annual Convention of FIPI Chapters was held at University of Petroleum and Energy Studies (UPES), Dehradun on 7th September 2018 on the theme "Future of Oil for Transportation". The FIPI Chapters were instituted to provide a platform for all academicians, students, technologists and management experts of the university/college for regular exchange of ideas in all areas of Oil & Gas Sector.

Faculty members and students from nine FIPI Chapters, viz Amrita Vishwa Vidyapeetham; IIT Guwahati; IIT (ISM) Dhanbad; JNTU Kakinada; MIT Pune; Osmania University; PDPU Gandhi Nagar; RGIPT Rai-Bareilly, UPES Dehradun participated in the Convention. Ms. Malvika Bajpai & Amey Avanish, Student Members, FIPI and UPES Chapter welcomed the gathering.

Prof. Suresh Kumar, Dean, School of Engineering, UPES addressed the participants and also welcomed the senior faculty members and students from various universities/institutes. Prof. Kumar spoke about digitalization and automation happening in every industry and how the conventional technologies will need to be supported by IT and Automation in near future.

On the basis of activities performed by various chapters during the previous year, Mr. T.K. Sengupta, Director (E&P) evaluated the performance of each chapter and declared ISM Dhanbad as the best chapter for various activities carried out during the previous year.

All the chapters made 10 minute presentations on the theme "Future of Oil for Transportation". After evaluating the presentations, the best presentation award was given to UPES Dehradun and the Presentation Runner-up award to MIT Pune. Mementos to the faculty coordinators were also presented by Mr. T.K. Sengupta.

While addressing the gathering, Mr. T.K. Sengupta, Director (E&P), FIPI congratulated all the chapters for making wonderful presentations and presenting various ideas for Future of Oil for Transportation. Mr. Sengupta emphasised on the need to bring uniformity in the parameters for evaluation of the activities performed by various chapters.

Dr. Mandira Agarwal, Professor, Deptt. of Petroleum Engineering and Earth Sciences, UPES proposed the vote of thanks. Dr. Agarwal congratulated all the chapters and complimented FIPI and all members of the UPES chapter for their sincere efforts to make the Convention a grand success. After conclusion of the convention, participation certificates were distributed to each participant.



Participants from JNTUK Kakinada.



### **Workshop on Decommissioning and Abandonment of Oil & Gas Facilities**

A workshop on Decommissioning and Abandonment was organized on 5th September 2018 at Inspire Hall, Hotel Le-Meridien, New Delhi. Around 80 executives from Indian & International companies attended the one-day program. The notable companies were ONGC, OVL, OIL, IOCL, RIL, SHELL, BP, CAIRN, PwC, BHC, PDi, Lloyd's Register, BHGE, McDermott, Oceaneering, DGH and OISD. The programme was organized by FIPI and supported by OISD and BHC.

Shri Amar Nath, Joint Secretary (Exploration) MoP&NG inaugurated the workshop. In his opening remarks Mr. Amarnath congratulated FIPI for organizing this workshop on a relevant topic and creating a platform for knowledge sharing, deliberation and discussion in this important area. He mentioned the importance of environmental impact during decommissioning process and the responsibility of the operator to follow the Site restoration guidelines. He also mentioned that there is a need to assess the decommissioning & abandonment expenditure upfront & have a realistic estimate in the capital expenditure during FDP preparation.

While congratulating FIPI on the initiative to bring in various industry professional, companies and regulators together for a workshop on decommissioning, Sh. V. J. Rao, Executive Dirctor OISD explained the role of OISD as a regulator in Offshore E&P and the genesis of Site Restoration Guidelines. He also spoke about IMO regulations, various international guidelines, conventions etc and OISD standards related to well plug and abandon, demarcation of roles of DGH, DGMS & OISD and third-party certification of work done by the Operators within specified time limits. OISD has recently granted an in-principle approval to Tapti facilities of PMT JV and Reliance FPSO decommissioning is also underway. He ended the keynote address by wishing the workshop a grand success.

The programme attended with a thanking note from Mr. T K Sengupta, FIPI. He mentioned that North Sea is a matured field w.r.t. decommissioning activities and India is in a nascent stage in this area. This is the time for Indian Industries to create more such common platform for knowledge sharing, discussion on specific issues, understanding the rules and regulation of North Sea activities, the technical challenges and the remedial measures. He urged BHC to take lead and arrange more meetings between regulatory and technical bodies both in India & UK to have smooth D&A activities in India in future.

The Workshop received a high level of appreciation from the participants.



Mr Steve Gilbert, Global Director of Asset Management & Decommissioning, Lloyd's Register Group delivering his presentation on 'Ageing Oil & Gas infrastructure: decommissioning - are we prepared?'



Mr Andrew Livingstone, Decommissioning Director, BHGE delivering the presentation on 'Process for Decommissioning and International Case Studies'



Mr. T. K. Sengupta, Director(E&P), FIPI welcoming the participants



Address by Mr Amar Nath, Joint Secretary – Exploration, MoPNG



DECO SSIONING ABA ONMENT OF CILITIES



Mr Dirk Heseman, Project Manager, Service Technology & Rentals – Asia, Oceaneering International Services Ltd delivering the presentation.

## India's efforts at Global Outreach in Oil & Gas Sector

Dr. R. K. Malhotra, Director General, FIPI welcoming the participants.

# India's efforts at Global Outreach In OIT & Gas Sector Fiel And Annual Contract of the Contr

Panel discussion in progress.



Sh. Sunjay Sudhir, JS (IC), MoPNG delivering the theme talk.



Sh. Rajeev Kumar, Director, BP India making a point.

### India's global outreach in the Oil & Gas sector

FIPI in association with The Energy Forum organized 'India's global outreach in the Oil & Gas sector' on 30 August 2018 in New Delhi. The primary objective of the event was to apprise the industry with India's successful global outreach in the Oil & Gas sectors and how the Government intends to further these efforts. The event was attended by Mr. Sunjay Sudhir Joint Secretary, International Cooperation, Ministry of Petroleum & Natural Gas (MoPNG) along with key representatives from all the major stakeholders in Indian oil and gas industry.

Mr Sudhir elucidated on the Government of India's approach for encouraging Indian oil & Gas Companies in making overseas investments. Such investments are in line with the Government of India's foreign policy to ensure energy security for the country. He mentioned the Government of India's 'Neighbourhood first' and 'Act East' policies and assured that the Government will provide the required support to Indian oil and gas companies to venture into these regions. He mentioned the recent asset acquisitions made by Indian oil and gas companies in Russia, UAE and Oman and the bilateral arrangements between Indian Companies and companies in USA, Russia, UAE, Saudi Arabia, Japan, and Israel. Many foreign companies have also made huge investments in Indian refining and Petrochemical sector. He also highlighted the government's effective role in re-negotiating LNG contracts, which have resulted in substantial savings for the country. He further mentioned that the Ministry has formed an international think-tank to advise the Government on crucial issues such as pricing gas infrastructure, better financial models for exploration and extraction of hydrocarbons and reducing import dependency.

At the panel discussion that followed, industry leaders acknowledged the support the Government has extended to the domestic and international companies. There was a general consensus among the participants that the flurry of targeted policy reforms introduced by the Government has not just a long period of non-activity in the sector but has also propelled it on a high growth trajectory.



Sh. Biswajit Roy, Director(BD & HR), OIL sharing his views.



Sh. Prabhat Singh, MD, Petronet LNG sharing his experience.

#### R & D Conclave 2018

FIPI along with industry partners organised R&D conclave 2018 between August 22-24, 2018 at Goa. The conclave focused on the theme 'Shaping the future through R&D' and covered topics like Alternative Energy & Emerging technologies, Innovation, Production Optimisation, Enhanced Oil Recovery, Heavy oil exploitation, Digital Refining, Oil spill mitigation and covered the entire spectrum of R&D in the upstream and downstream segments of the Oil & Gas business. It also included a panel discussion on HR & Material procurement issues and a special session on Impact of Digitalisation on R&D. Dr. Anil Kakodkar, Chairman, Scientific Advisory Committee (SAC) on Hydrocarbons, MoP&NG and INAE Satish Dhawan Chair of Engineering Eminence, BARC was the Chief Guest at the conclave.

The deliberations at the conclave stressed upon the need to create network and collaboration to improve the efficiency of translation of R&D ideas from lab to commercial implementation. The need for benchmarking R&D efforts of Indian oil and Gas companies against their international counterparts was strongly realized.

The two-day conclave at Goa received an overwhelming response from the industry and witnessed participation of over 100 delegates from companies across the oil and gas value chain. The event attracted scientists and experts from India as well as abroad and as many as 30 papers were presented on various topics at the conclave. PwC, engaged as knowledge partner for the conclave, summarized the findings and recommendations.



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



Mr. A.K. Dwivedi, Director (Expl.), ONGC delivering the special address.



Dr. R. K. Malhotra, Director General, FIPI welcoming the participants.



Mr. Gandham Sriganesh, ED, HPCL giving the theme address on "Shaping the future through R&D – Indian & Global Outlook".



Chief Guest Dr. Anil Kakodkar,
Chairman, Scientic Advisory Committee
(SAC) on Hydrocarbons, MoP&NG
and INAE Satish Dhawan Chair of
Engineering Eminence, BARC
delivering the Inaugural address.



**Concluding Session** 

Sh. Ashutosh Jindal, JS(M), MoP&NG addressing the workshop.



Sh. N. K. Bansal, Director (Oil Refining and Marketing), FIPI making presentation on industry issues.



JS(M); DG, FIPI and Chief Controller of Explosives-PESO discussing various issues.

## Workshop on "Setting-up of Retail Outlets (ROs) for Auto-Fuels Dispensation"

Issues resulting in procedural delays in setting-up of ROs have been under discussion with MoP&NG for a long time. In this regard, in July 2018, Joint Secretary (Mktg.), MoP&NG handed over an industry report to DIPP for their consideration. On request from the Ministry, FIPI organized a workshop with ministries and departments of the central government, involved in the system for granting approvals/consents etc. in August 2018 in New Delhi. Senior officials from Ministry of Petroleum & Natural Gas (MoP&NG), Ministry of Road Transport & Highways (MoRT&H), Department of Policy Planning & Promotion (DIPP), National Highway Authority of India (NHAI), Director General of Factory Advisory and Labour Institute (FASLI) and Petroleum & Explosive Safety Organisation (PESO) along with senior industry members participated in the workshop.

A brief presentation was made at this occasion by Mr N K Bansal, Director (Downstream), FIPI, on behalf of the oil industry, apprising the audience of the current status of the oil retailing and mentioned that the demand for gasoline and diesel will increase by an estimated three times by end of 2040. To accommodate this demand 120,000 additional ROs will have to be set up in next 20 years, averaging at 6000 ROs against the present rate of over 3000 ROs per year. This will require huge investments from oil marketing companies as well as dealers.

Under the current system, average time to set-up an RO may need 19 approvals (depending on type and location) and time up to 18 months (if land acquisition is involved). In some states, it could take up to three years' time to complete an RO. In order to keep pace with the huge demand in the market and attract investment to the sector, the procedure for grant approvals/consents/NOC needs to be streamlined. Further, the industry also needs to re-consider some of the industry practices, which will help smoothening the process without changing the current policies in place.

#### **Smart Ways to Execute Projects:** Technology Adoption & Digitalisation

FIPI and L&T IPM jointly organized a three days' residential programme on Smart Ways to Execute projects: Technology Adoption & Digitalisation from July 25-27, 2018 at L&T IPM Campus, Vadodara, Gujarat.

The programme was inaugurated on July 25, 2018 at L&TIPM, Vadodara. Shri Sudhir Kumar, Executive Director (Gujarat Refinery), IOCL was the Chief Guest at the Inaugural Session. Prof. V T C S Rao, Dean – L&T IPM welcomed the Chief Guest, Shri N.K. Bansal, Director (Oil Refining & Marketing), FIPI and participants at the programme.

In his address, Shri N. K. Bansal mentioned that Indian oil & gas sector is poised to take a big leap in next two-three decades to ensure uninterrupted supplies of energy to the economically rising the nation. He further mentioned that this would call for not only addition of green field capacity and infrastructure but also complete transformation of existing facilities to make them future-ready in terms of automation, energy efficiency and fast response to changing energy scenario in India and across the globe.

India is taking all actions to be a gas based economy with its contribution rising from 6% to 15% by 2040 in the primary energy basket. Therefore, infrastructure and projects for gas have to be established on a fast track to ensure its availability to the last milestone within this period.

He further expressed that Oil & Gas sector should be ready to adopt technologies and digital tools to fast track the projects in efficient manner without cost and time overrun.

Shri Sudhir Kumar, ED (Gujarat Refinery), IOCL mentioned the large number of brown and green field projects in Gujarat Refinery and specially highlighted critical situation as these projects have to be executed in an operating refinery with limited free land availability. Land resources have to be generated by dismantling and relocating existing facilities in more optimum ways.

He stressed upon the use of digital tools for all the domains of project management to ensure that milestones are achieved with optimum manpower and material resources. This will also help in maintaining the project cost within the approved units.

The programme received an overwhelming response. 40 participants from all the segments of Oil & Gas sector attended the programme. The content delivery by the faculty and the utility in the current scenario was well appreciated by the participants.



Lighting the lamp.



Mr. N. K. Bansal. Director (Oil Refining & Marketing), FIPI addressing the participants.



Section of the participants



Group photograph

# ONCE

Mr. T. K. Sengupta, Director(E&P), FIPI and Conference Co-chairman delivering the welcome address

# AL

Dr. R. K. Malhotra, Director General, FIPI and Conference Chairman delivering the special address



Mr. T. K. Sengupta making a point in the panel of valedictory session.

### Oil Spill India 2018

FIPI organized the Oil Spill India Conference & Exhibition during 5 and 6 July at New Delhi. Oil Spill India, the only conference of its type in the country, has over the years evolved to become one of the most important international forums dedicated to Oil Spill Planning, Preparedness, Response & Restoration systems. The conference series was started in light of the devastating impacts of the 2010 Gulf of Mexico oil spill. Oil Spill India, over the years, has proved to be an excellent forum for sharing knowledge, experience, technology, rules & regulations and spread awareness any such incidents in the country.

The conference, supported by Directorate General of Shipping, Ministry of Shipping, brings all the stakeholders at one platform to Oil Spill Response (OSR) preparedness, developments, methodologies, techniques and models used for combating spills of any kind or source.

Organized in association with the "Directorate General of Shipping", Ministry of Shipping, The Federation of Indian Petroleum Industry (FIPI) has supported the event this year. Oil Spill India provides an excellent forum for sharing of valued perspectives and brainstorming on Oil Spill Response (OSR) preparedness, developments, methodologies, techniques and models used for combating spills of any kind or source.

With more than 400 industry experts, representing 200 plus organisations in over 25 countries, Oil Spill India 2018 showcased 12 interactive sessions and a concurrent exhibition with the latest in global technologies & equipment.



Releasing the post show report on OIL SPILL INDIA 2018

#### Roundtable discussion on the study "Viability Assessment of Liquefied Natural Gas (LNG) as a fuel for long distance transportation"

Federation of Indian Petroleum Industry (FIPI) organized a roundtable to discuss the outcome of the study "Viability Assessment of Liquefied Natural Gas (LNG) as a fuel for long distance transportation" being carried out by FIPI in association with IOCL, BPCL, GAIL, Petronet LNG, Shell, India Gas Solutions (JV of RIL & BP) and Exxon Mobil with PWC as knowledge partner.

The roundtable chaired by Sh. Prabhat Singh, MD & CEO, Petronet LNG and was attended by representatives of key stakeholders such as GAIL, Petronet LNG, Shell, Exxon, BPCL, India Gas Solutions, Petroleum & Natural Gas Regulatory Board (PNGRB), Society of Indian Automobile Manufacturers, Center for Energy Studies – IIT Delhi, All India Transporter Welfare Association and transport fleet operating companies.

Dr. R.K. Malhotra, Director General, FIPI, while welcoming the participants highlighted the role that LNG can play in future as a fuel for Heavy Commercial Vehicles (HCVs) in India due to its environmental benefits and economic advantages over diesel. Mr. Prabhat Singh made a strong case for setting up LNG infrastructure in the country for enabling easy access to LNG as a fuel particularly for trucks. He added that since it is a viable business proposition the oil & gas companies need not look for financial support from government. The participants agreed that LNG is a viable fuel for HCVs for long distance transportation, since the technology is available and being put to use in various parts of the world such as China, Europe and USA.



Dr. R. K. Malhotra, Director General, FIPI welcoming the participants.



Mr. Souabh Jha, Manager, PwC delivering his presentation.



A section of participants.

Dr. R. K. Malhotra, Director General, FIPI welcoming the participants.

### Seminar on Unconventional Energy Sources

A seminar on "Unconventional Energy Sources" was organised by FIPI in association with Energy Think Tank on July 16, 2018 at India Habitat Centre, New Delhi. The seminar was attended by Mr Anil Razdan, former Secretary, Power, Government of India and Dr S K Roy, Advisor, DGH along with key representative from the industry and academia.

The conference discussed the various unconventional technologies and their viability in context of India. Dr. S. K. Roy, Advisor, DGH informed that India has an estimated shale gas resources of 96Tcf trapped in Cambay, KG, Gondwana and Vindhyan basins. However, it remains to be seen if India could replicate the US shale revolution. Mr Gaurav Dixit, Dy. Suptdg. Geo-Chemist, ONGC apprised the audience with India's gas hydrate campaign and the future roadmap towards their successful exploitation. He informed that National Gas Hydrate Programme (NGHP) 1 & 2 in the deep-water of KG 98/5 in Bay of Bengal is estimated to have a reserve of 933 Tcf. He further emphasized on the need for R&D for gas hydrates to face the challenges regarding successful exploitation of resources. Prof. K. K. Pant, IIT Delhi briefed Methanol Production from Coal Gasification route and explained the current issues at hand and the road map for methanol economy. Mr Razdan emphasized on the need for an enabling policy ecosystem to support the various technologies and the vital responsibility the young professionals in the industry have to shoulder to bring about this transition.



A section of participants.

#### Workshop on Changing Oil & Gas Landscape

FIPI organised a workshop in association with Stratas Advisors on "Changing Oil & Gas Landscape at Hotel Taj Mahal in New Delhi on 27th April 2018" by inviting international oil and gas experts who shared their insights on the emerging trends in transformation of the global oil and gas sector.

Mr. N. K. Bansal, Director(Oil Refining and Marketing), FIPI welcomed the participants to the workshop and gave a brief overview of the sessions to be taken by experts from Stratas Advisors.

To begin the workshop, Mr. John Paisie Executive Vice President, Stratas Advisors shared his understanding on emerging trends in clean energy sector. He outlined the importance of hydrocarbons in evolving transport sector and stated that the new found hydrocarbon potential in the US will result in flow of crude from the US towards global economies, majorly towards Asia as global demand of oil & gas makes a shift from the Atlantic basin to the Pacific basin. This growth & shift in demand will make larger refiners more resilient, with focus on 'lighter' production with 'tighter' fuel specifications. He also underscored that India's high crude imports will be driven by the growing investments in oil refineries and gas based crackers in the country, which will lead to cheaper access to Olefins and reduce Naptha demand in market.

Mr. Shuqiang Feng, specialist on Upstream Oil and Gas Field Development and Oilfield Service Market, discussed about the factors influencing the global hydrocarbon supply. He indicated that oil and gas sector will continue to grow supported by OPEC and the newly accessed US Shale and a major boom in Natural Gas and Natural Gas Liquids production is expected steered by strong backing from North America & Middle East.



the participants.



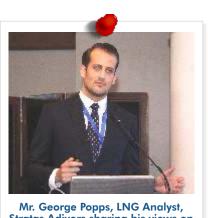
Mr. John Paisie Executive Vice President, Stratas Advisors overview the emerging trends in clean energy.



(Upstream), Stratas Advisors delivering the presentation on Hydrocarbon Supply.



Price Outlook.



Stratas Adivors sharing his views on **Global Natural Gas Dynamics** 



Global Automotive, Stratas Advisors delivering his presentation on **Automotive Outlook** 









**Q&A** session in progress

Ms. Ashley Petersen, Senior Oil Market Analyst, indicated that the hydrocarbon market is currently recovering from the price imbalance due to which supply capacity and capability will play a major role in oil and gas pricing. She further sighted a rise in petrochemical prices alongside crude as market maturity focuses on demand growth on selected products, which in turn will be supported by the strongly growing consumer class in the high demand regions. Sharing her perspective on Indian market, she highlighted a secured growth in country's LPG demand due to restructuring of Government of India's assistance program.

Mr. George Popps, specialist on World Trade of LNG, shared his analysis on gas market dynamics exploring the impact of geo-political ties and technological advancement in the LNG sector. He also discussed about the possibility of new gas hubs in Asia and increase in spot trade.

Mr. Trey Hohmann, specialist in Global Light-Duty Vehicle forecasting, Emissions Modeling, outlined India, China & ASEAN as the new hub of growing fuel demand and transformations in Automotive sector. He also indicated towards a rapid growth in petrol hybrids & xEVs in China's automotive market and a sustained growth in LMVs and two wheelers is expected for Indian automotive market.

Ms. Huiming Li, specialist in Fuel Quality and Policy Issues advised to lower the Sulphur content of fuels in all the developing demand-hub countries, like India & China. She also underscored the existing gap between fuel quality and emissions in developing countries where alternatives like MTBE and Ethanol are already available to meet the high octane needs.

The workshop was attended by senior oil and gas professionals from the industry and the intense debate during the sessions made it a highly productive one.



Mr. Rajiv Bahl, Director (Finance), **FIPI** sharing his views



FIPI sharing his perspective.



#### **Upcoming Events**

#### 1. Conference on 'Digitalization in the Oil & Gas Sector'

Digitalization has touched all walks of human life today and the oil and gas sector is no different. Digitalization of the oil and gas sector has not just improved efficiencies and increased outputs, it has helped the sector drastically reduce the number of accidents and fatalities. In view of the above, FIPI is organizing a conference on 'Digitalization in the Oil & Gas Sector' on 20 November, 2019. At this second edition of the conference, FIPI intends to bring together the major developments in digitalization of the sector under one roof and have targeted deliberations on the benefit businesses could reap by making use of these advanced technologies.

#### 2. The Abu Dhabi International Exhibition & Conference (ADIPEC 2019)

ADIPEC is one of the world's largest, most important and influential oil and gas events that brings together industry stakeholders and experts to share knowledge and exchange ideas on future of energy sector. FIPI intends to set up the India pavilion at the prestigious event, representing the Indian oil and gas sector. Keeping up with the ongoing tradition, the FIPI pavilion with a theme 'Synergy in Energy 2.0: Advantage India' will apprise the international audience with the latest developments in the Indian oil and gas industry and encourage potential investors to explore the plethora of opportunities presented by the Indian sedimentary basins. The FIPI India pavilion will also provide a unique opportunity to the Indian oil and gas industry to showcase their technologies to the world.

#### 3. FIPI Annual Convention and Awards Ceremony

In December 2019, FIPI is set to complete its third year. Over the last three years of its existence, FIPI has been at the forefront voicing industry concerns and has established itself as a trusted partner in the growth story of Indian oil and gas industry. To mark the occasion FIPI has organized a day long annual convention on 2 December, 2019 that will witness targeted discussions with industry leaders on various aspects of Indian oil and gas industry. The FIPI awards will also be given out at this occasion. The FIPI Oil and Gas Awards have been created to recognize 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.

#### 4. Conference on 'Realizing Hydrocarbon Vision 2030 for North East India'

The Hydrocarbon Vision 2030 for North East India document was launched by the government of India in February, 2016 and it aims to prepare a roadmap till 2030 to increase the production of oil and gas in northeast India and outline the necessary investment in the hydrocarbon sector to increase exploration activities, expand the piped natural gas (PNG) network and ensure availability of petroleum products, including LPG, in the remotest corners of the region. In this regard, FIPI is organizing the third edition of 'Realizing Hydrocarbon Vision 2030 for North East India' to check the country preparedness to accomplish the Hydrocarbon Vision 2030

#### 5. Expert Workshop on 'Innovation Energy Storage System'

The Government of India has set an ambitious target of developing 175 GWs of installed renewable energy capacity. The Government is also trying to move away from polluting conventional fuels in transportation sector towards cleaner EVs. However, the impact of renewables and the penetration of EVs in the Indian market will depend on the evolution of storage systems to a large extent. In this regard, FIPI is organizing an expert workshop on 'Innovation Energy Storage Systems' in association with World Petroleum Council (WPC). The deliberations at the workshop will explore the latest developments in the fields of battery storage and the role these new age storage systems will play in ensuring energy security for the country. The findings of the Expert Workshop will be presented at the 23rd World Petroleum Congress scheduled in Houston, USA in December 2020.

#### 6. Young Professionals Forum

FIPI is organizing the 'Young Professional's Forum' in February 2020. The forum will bring young oil and gas professionals from India and abroad under one roof and provide them with an opportunity to interact among themselves. The forum will witness various interesting discussions and experience sharing sessions among these future leaders of Indian and international oil and gas industry and see deliberations on prominent issues such as energy transition and changing energy industry. The objective of the forum is to help the future leaders of the industry gain a better understanding of the challenges being faced by the industry and how to strengthen collaborations with industry leaders to meet these challenges.

### **Membership Services**

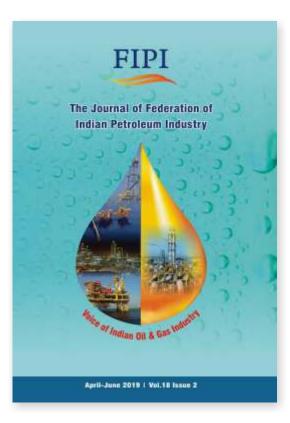
#### **Enrollment of Members**

The Federation of Indian Petroleum Industry (FIPI) has 49 member organizations. A detailed list of Members is provided towards the end of this report.

FIPI has introduced a new introductory category for Membership at a nominal entrance fee of Rs 2 Lakh and an annual membership fees of Rs 50,000. The new category of Membership is intended to attract the small and medium sized players in the industry with special focus on the new CGD entities.

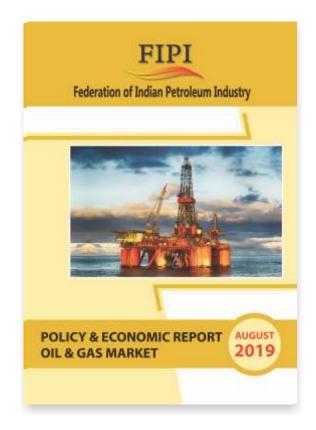
#### **FIPI Journal**

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. To partially defray expenses of publication we also accept a few advertisements from member companies.



#### **Economic Policy Report**

FIPI has started publishing 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 on the 1<sup>st</sup> 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, we bring 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.









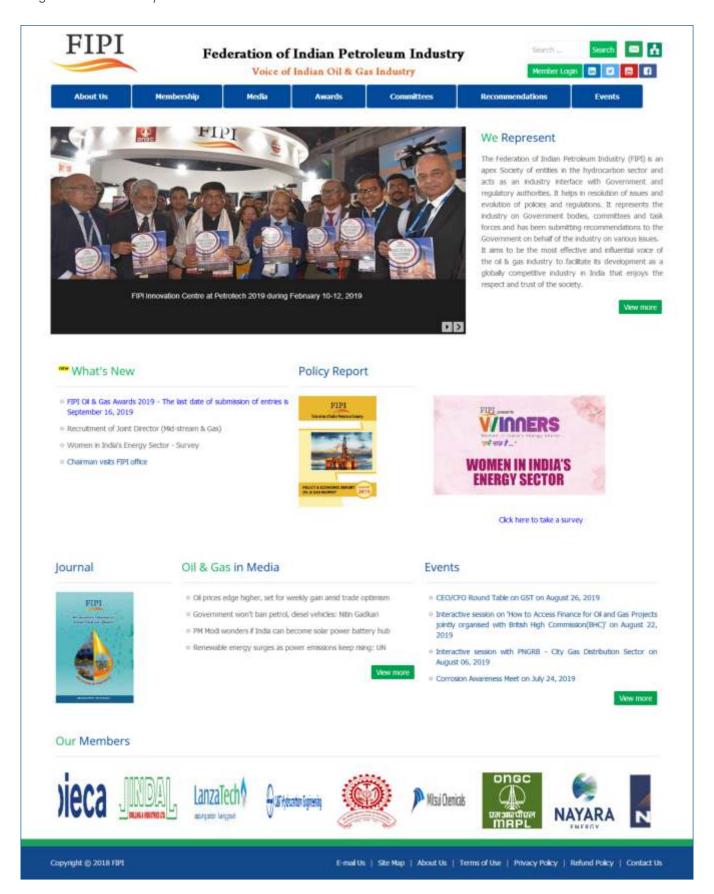






#### **Website**

The FIPI website **www.fipi.org.in** carries information about the Federation and its activities which is regularly updated. The 'Oil & Gas in Media' section 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 organizations 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 rewards 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 but have significant involvement in the oil & gas sector, are eligible to apply.

This year FIPI has revamped the Awards scheme making it more objective by adopting quantitative parameters to the extent possible. The parameters for existing awards have been modified and some new categories of awards have also been introduced. New categories of awards include 'Value Creator company of the year', 'Oil and Gas Retailer company of the year (with 500 or less outlets)', 'EPC company of the year 'and 'Young Achiever of the year'. The 'Exploration and Production company of the year' has been split into two categories viz. 'Exploration company of the year' and 'Development and Production of the year'. The 'Responsibly Growing company of the year' and' Environmental Sustainability company of the year' have been merged and modified to include more sustainability related parameters. This award shall henceforth be known as 'Sustainably Growing Corporate of the year'. Another important change made this year is the shifting the Awards function to 2nd December which coincides with the Annual day of FIPI. There are nineteen categories of awards in which the performance of oil and Gas companies will be judged.

All awards carry a trophy and a citation. The individual and team categories also carry a cash award.

#### **Evaluation**

The applications are evaluated by the Awards Committee comprising of experts from oil and gas industry. Evaluation by Award Committee is submitted to Jury for final verdict

The decision of the Jury for selection of a particular awardee will be final and binding.

#### Jury

The Jury for FIPI Oil & Gas Awards comprises:

Chairman - Dr. Anil Kakodkar  INAE Satish Dhawan Chair of Engineering Eminence at the Atomic Research Centre & former chairman, Atomic Energy Commission of India and Secretary to the Government of India.ary to the Government of India.	Chairman - Dr. R. A. Mashelkar President of the Global Research Alliance; Chairperson, National Innovation Foundation of India & former Director General, CSIR.
<b>Member - Shri M. A. Pathan</b> Former Chairman, Indian Oil Corporation Ltd	<b>Member - Shri S. C. Tripathi</b> Former Secretary to the Govt. of India
<b>Member - Shri B. C. Bora</b> Former Chairman, Oil & Natural Gas Corporation Ltd	

The Jury reviews the recommendations of the Awards Committee and selects the winner for each category.

#### **Awards Committee**

The Awards Committee for FIPI Oil & Gas Awards comprises:

Chairman – Shri G. C. Chaturvedi Former Secretary Gol.	
Member - Shri R. S. Sharma Former CMD, Oil & Natural Gas Corporation Limited	<b>Member - Shri S. Behuria</b> Former Chairman, Indian Oil Corporation Limited.
<b>Member - Dr. C. R. Prasad</b> Former CMD, GAIL (India) Ltd.	<b>Member - Shri Anand Kumar</b> Former Director (R&D), IOCL

### Winners of FIPI Awards 2017

Woman Executive of the Year • Service Experience less than 20 years • Service Experience more than 20 years	Ms. Ruma Barua, IndianOil Corporation Limited Ms. Kondapalli Shreya Chaudhary, Bharat Petroleum Corporation Ltd.
Innovator of the Year – Team	Team led by Dr. S.S.V. Ramakumar, Director, R&D, IndianOil Corporation Ltd.
Start-up in Oil & Gas Sector	Chakr Innovation Private Ltd.
Digital Initiatives in Oil & Gas Sector  – Company of the Year	Reliance Industries Ltd.
Project Management Company of the Year	Bharat Petroleum Corporation Ltd.
Service Provider Company of the Year	Tecnimont Private Ltd.
Oil & Gas Pipeline Transportation  – Company of the Year	IndianOil Corporation Ltd.
Refinery of the Year • Up to 9 MMTPA • More than 9 MMTPA	Bharat Oman Refineries Ltd. IndianOil Corporation Ltd. (Panipat Refinery)
Oil Marketing – Company of the Year	Hindustan Petroleum Corporation Ltd.
Exploration and Production - Company of the Year	Oil & Natural Gas Corporation Ltd.
Human Resource Management - Company of the Year	IndianOil Corporation Ltd.
Environmental Sustainability – Company of the Year	Oil & Natural Gas Corporation Ltd.
Responsibly Growing Corporate of the Year	Bharat Petroleum Corporation Ltd.













































#Gas4India is a unified cross-country, multimedia, multi-event campaign to communicate the national, social, economic and ecological benefits of using natural gas as the fuel of choice to every citizen who uses, or will use in the near future, gas in any way- cook, travel, light their homes, and power their businesses. #Gas4India includes social engagement via Twitter, Facebook, Youtube, LinkedIn, and its official blogsite, as well as offline events to directly promote use of natural gas as a preferred fuel through discussions, workshops and seminars. The campaign, a joint effort of public and private companies operating in India's natural gas space, was launched by the Hon'ble Minister of Petroleum and Natural Gas Mr Dharmendra Pradhan on 6 September 2016.

In an attempt to reinvigorate the campaign and amplify the social welfare message, FIPI is engaging with all stakeholders - industry, policymakers and the common man. To highlight the issued faced by the newly allotted CGD entities, in August 2019, FIPI organized an interactive session with Chairman, PNGRB. During FY 2019-20, FIPI intends to take the campaign to the next level to connect with the common man through various out-reach channels. The objective of the campaign is to make the consumers a crucial stakeholder in the journey to achieve the Prime Minister's vision of a gas based economy.



### **Member Organisations**

#### 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 Ltd	
Nayara Energy Limited	
Oil & Natural Gas Corporation Limited	
Oil India Limited	
Petronet LNG Limited	
Reliance Industries Limited	

#### Corporate - Group C Members: 5

Bharat Oman Refineries Limited		
	Engineers India Limited	
HPCL-Mittal Energy Limited		

Numaligarh Refinery Limited
Shell Companies in India

#### **Ordinary Members: 23**

Axens India (P) Limited	
Baker Hughes, A GE Company	
Deepwater Drilling & Industries Ltd	
Delonex Energy Advisors India Pvt. Ltd	
Dynamic Drilling & Services Pvt. Limited	
Ernst & Young LLP	
ExxonMobil Gas (India) Pvt. Limited	
GSPC LNG Limited	
Haldor Topsoe India Pvt. Limited	
IHS Markit	
IMC Limited	
Indian Strategic Petroleum Reserves Ltd	

Indraprastha Gas Limited	
IOT Infrastructure & Energy Services	
Jindal Drilling & Industries Pvt. Limited	
Lanzatech	
Larsen & Toubro Ltd	
Mitsui Chemicals India Pvt. Limited	
SAS Institute (India) Pvt Limited	
South Asia Gas Enterprise Pvt. Limited	
Total Oil India Pvt. Limited	
UOP India Pvt. Limited	
VCS Quality Services Private Limited	

#### **Ordinary Members against Cross-membership: 2**

(without payment of any fee by either party)

World LP Gas Association

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

Chandigarh University	MIT Pune
CSIR-Indian Institute of Petroleum, Dehradun	Rajiv Gandhi Institute of Petroleum Technology
Definadum	recrinology
IIT (ISM) Dhanbad	University of Petroleum & Energy Studies



Energy is a key driver of socio-economic growth and energy justice is a top priority for India

Mr. Narendra Modi, Hon'ble Prime Minister of India

The incremental requirement of fuels will have to be met through a combination of BS VI grade petrol and diesel, CNG and biofuels alongside EVs



Mr. Dharmendra Pradhan, Hon'ble Minister of Petroleum & Natural Gas and Steel



The importance of oil and the crucial role that it plays globally, makes it perhaps the most strategic growth engine of the global economy

Mr. Mohammad S Barkindo, Secretary General, OPEC

With new technologies like Electric Vehicles (EVs) and LNG driven vehicles on the horizon, the new generation of oil and gas professionals need to view these fuel technologies in combination as they will coexist in the near future



Mr. Sanjiv Singh, Chairman, FIPI and Chairman, IndianOil



Our focus has to be on developing an energy system that is cleaner, better and kinder to the planet

Mr. Bob Dudley, CEO, BP

In the growth story of natural gas in India, PNGRB wants to play the role of a facilitator rather than a regulator



Mr. D K Sarraf, Chairman, PNGRB



Humanity's future, to say nothing of its prosperity, will depend on how the world tackles two central energy challenges: securing reliable supplies for affordable energy and switching to efficient low carbon energy

Mr. Fatih Birol, Executive Director, IEA

....All stakeholders (oil and gas companies) need to remind themselves to contribute towards UN sustainable development goals by bringing energy access to all at affordable prices



Mr. Tor Fjæran, President, World Petroleum Council



With the developing world growing faster and countries aiming for double-digit Gross Domestic Product (GDP) growth, the role of energy in economic growth is taking center stage

**Dr. R K Malhotra,** DG, FIPI



#### Federation of Indian Petroleum Industry (FIPI)

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