



Centre For High Technology

Ministry of Petroleum & Natural Gas Government of India



Announcement 27th Energy Technology Meet



12-14th November, 2024

At "The Leela Bhartiya City" Bengaluru, Karnataka





पेट्रोलियम एवं प्राकृतिक गैस मंत्रालय MINISTRY OF PETROLEUM AND NATURAL GAS Government of India

INTRODUCTION

Centre for High Technology (CHT), under the aegis of Ministry of Petroleum & Natural Gas (MoP&NG), Government of India, in association with various Oil Companies in India, organizes Energy Technology Meet (ETM) every year.

The first event was held 35 years ago and so far, 26 such conferences have been organized in association with Indian oil companies on various themes relevant to the oil industry. The event has become much sought-after annual event globally, attended by large number of delegates from India and abroad including senior officials of MoP&NG & major Oil & Gas and Petrochemical companies.

The last 26th ETM, organized by CHT in association with EIL and NRL during 9-11 October, 2023 at Bharat Mandapam, New Delhi, was a grand success with participation of record number of more than 1300 delegates/invitees from India and abroad. The Theme of the Meet was "Emerging Energy Trends & Future of Refining". A total of 77 oral papers including 8 Panelist and 58 from international consultants, spread over 15 Technical Sessions and 66 digital posters were presented during the two and half day Meet. 27 Exhibition Stalls were put up by leading technology / service providers showcasing their Technology, product and services.

CHT is now organizing the "27th Energy Technology Meet (ETM)" during 12-14th November, 2024, at The Leela Bhartiya City, Bengaluru, Karnataka India with Indian Oil Corporation Limited as co-host.

Indian Oil Corporation Limited, a leading integrated energy company in India and one of the largest state-owned oil and gas corporations in the country. Established over six decades ago, today IndianOil has evolved into a comprehensive hydrocarbon enterprise with global footprints. IndianOil plays a pivotal role in India's energy landscape, ensuring energy security for the nation. With a rich legacy and a commitment to innovation and sustainability, IndianOil's business operations span the entire hydrocarbon value chain, encompassing exploration, production, refining, marketing and distribution of petroleum products. IndianOil proudly holds the 94th spot on the prestigious Fortune Global 500 list of 2023. IndianOil rightfully claims its place as the foremost Indian entity in the recently unveiled Bloomberg NEF Energy Transition Score 2023, elevating its stature to an impressive 23rd rank among Global Oil & Gas Companies.

IndianOil group, the largest fuel refiner and retailer of the country, operates 10 refineries with a processing capacity of 80.75 MMTPA and is all set to further maximize the capacity to 107.4 MMTPA by the year 2030. As 'The Energy of India', IndianOil aim to become the nation's lead energizer, fulfilling 12.5 % (1/8th) of India's energy needs by the year 2050. Its goal to attain a revenue of one trillion dollars is set against the backdrop of India's vision to transform into an economy of over \$30 trillion by the year 2047. IndianOil is the second-largest domestic petrochemical player. IndianOil is targeting an increase of 13 MMTPA of petrochemicals and achieve a Petrochemical Intensity Index (PII) of 15% by 2030.

IndianOil has resolved to achieve net-zero operational emissions by the year 2046. The plan adopts a multi-pronged approach with an investment plan of over Rs. Two lakh crore, on several emission mitigation pathways like Green Hydrogen, Biofuels, Renewables, Carbon offsetting through ecosystem restoration and CCUS, among others.

As a continuous effort towards improvement in production of better quality and value added product, and improving energy efficiency, IndianOil has adopted state-of-the-art indigenously developed technologies by IOCL R&D like **INDMAX** Technology for converting heavy distillate and residue into LPG/light distillate products, **Octamax** Technology for production of High-octane Gasoline blending stream from refinery LPG streams, **2G Ethanol** Unit based on rice straw feedstock, **indCoker** Technology with two stage cracking process to reduce the coke yield and increase the distillate yield from the unit, **indSelectG** Technology for selective hydro-desulfurization of cracked gasoline.

Through persistent research and innovation, specialty products are being developed by IndianOil. **AVGAS 100 LL** is one such product that fuels the aircraft operated by FTOs and Defence forces. IndianOil has indigenously developed 'reference' grade petrol (E-10/ E-20) and diesel (B-7), so far imported for calibrating and testing vehicles by OEMs and institutions engaged in testing and certification. Another specialty product, developed in recent times is **Storm—X ultimate racing fuel**.

ABOUT THE MEET

In current scenario, Refining Industry faces more challenging and complex market to align with the Net Zero Targets. The impending cap on the demand of auto fuels forces refinery to adapt new technologies such as Crude to chemical, carbon Capture, Biofuels and Green power etc. for cost effective solution. With increasing electrification of the economy including mobility & building sectors and decarbonization of industry, the energy mix shall transition to renewable electricity, biofuels and green hydrogen. In the interim period, low-carbon options like gas shall play its role. Driven by a range of factors, the deployment of renewables in different sectors will occur on different timeframes and scale for different reasons including availability, techno-economic consideration, regulatory push, etc. Therefore, all renewable resources should be viewed as a complement to other alternative energy sources rather than a standalone solution. In the period of transition even role low carbon options cannot be ignored. The advancement and development in the above technologies with help refinery to prepare a clear road map for the future of Refinery.

India is set to achieve its short term and long-term targets under the **Panchamrit** action plan, like- reaching a non-fossil fuel energy capacity of 500 GW by 2030; fulfilling at least half of its energy requirements via renewable energy by 2030; reducing CO2 emissions by 1 billion tons by 2030; reducing carbon intensity below 45% by 2030; and finally pave the way for achieving a Net-Zero emission target by 2070. Diversifying India's energy sources and reducing reliance on fossil fuels can enhance energy security and reduce vulnerability to price fluctuations in the global market. Investing in renewable energy and sustainable practices can create new job opportunities and stimulate economic growth in sectors such as clean energy and technology. The transition to net zero emissions brings its own challenges and may require

significant investments in infrastructure and technology, which could pose financial challenges for India, especially in the short term. The meet provides an excellent opportunity for exposition of recent advances and technological developments that are of direct relevance to the downstream hydrocarbon sector.

The focus areas of the Meet will be:

- 1. Changing Energy landscape
- 2. Driving Refining toward sustainable future
- 3. Aligning refineries towards Net Zero
- 4. Advances in Petrochemical technologies, Feed stock diversification and Crude Oil to Chemical (COTC)
- 5. Advances in Refining Technologies and Catalysts
- 6. Emerging role of gas-based economy: CBG/LNG/CNG/HCNG in Energy mix
- 7. Aligning Pipelines toward sustainable future
- 8. Advances in Green Hydrogen value chain, Storage & Transportation
- 9. Issues and developments including standards and codes towards achieving role of hydrogen as major constituent in the future energy mix
- 10. Synthetic Aviation Fuel (SAF): Feedstock assessment and relevant production pathways for India
- 11. Biomass Valorization-Global Outlook, Various Pathways and economic viability
- 12. Water Management in Refinery & Petrochemicals, Bio refineries and Hydrogen
- 13. Environment Management
- 14. Energy efficiency Improvement
- 15. Process Optimization and best Practices in refineries
- 16. Role of AI & ML in refining sector for improvement of profitability and units' operational availability
- 17. Carbon Capture Storage and Utilization
- 18. Developments in Alternative sources of Energy

Eminent speakers & domain experts will deliver lectures and make technical presentations during the conference. Experts are drawn from the energy sectors including renewables, mobility sector, operating oil & gas and petrochemical companies, R&D institutions, consultants, process licensors, catalyst manufacturers, renowned EPC contractors, etc. both from India and abroad. Besides this, case studies will also be covered.

Besides oral presentation, Panel discussion and additional technical papers shall be covered under 'Poster Session'. Exhibition Stalls will also be provided at the venue for display of products/services by vendors/consultants/service providers etc. connected with the Energy Sector.

Submission of Technical Papers for Presentation

Abstracts may be submitted online on CHT website www.cht.gov.in for selection for oral presentation and poster display.

Who should attend

Professionals from energy sectors, oil refining, petrochemicals, gas processing, engineering

professionals involved in the design, operation & technical services and business development in energy sectors, process licensors, consultants, vendors, scientists, academicians and manufacturers.

Nodal Person for paper Selection:

Mr. K Arunachalam, Director Mr. Kishore Kumar Bhimwal, Addl. Director

Mobile: +91-9820646952 Mobile: +91-9958798282

Language

English will be the official language of the ETM.

Registration Fee

The Registration Fee for Indian Participants attending the Meet is ₹ 35,400 (₹ 30,000 plus GST @ 18%) and 500 USD (Including GST) for Foreign participants.

The registration fee is to be paid by Demand Draft in favor of 'Centre for High Technology', payable at NOIDA, India or through direct inter-bank money transfer to the following account in HDFC Bank:

 PAN of CHT: AAATC0412A
 GST No.: 09AAATC0412A1ZN

 D.D. No.________ Date______ Amount ______
 ________ Branch_______

Registration and Payment can be made online through CHT website www.cht.gov.in

There will be no registration fee for the presenters of the papers in Technical Sessions/ Poster Sessions. However, travel and accommodation arrangements are to be made by themselves. Spot Registration can also be done at the conference venue from 1700 Hrs to 2000 Hrs on prior day of the event and from 1400 Hrs on the first day of the event onwards.

Nodal Person for Delegate Registration:

Mr. Dipankar Saha, Addl. Director

Email: <u>n.jain@cht.gov.in</u>

Mobile: +91-9868842451

Email: <u>d.saha@cht.gov.in</u>

Mobile: +91-9920629514

Accommodation

Delegates / Speakers / Presenters participating in the conference have to make their own arrangements for accommodation.

Sponsorship

The ETM is expected to be attended by about 1300-1500 delegates from India and abroad that would provide an excellent platform for networking with Oil Companies, Process Licensors, Design & Engineering Companies, R&D/Academic institutes, etc. and will be a good

business exposure for all the participating companies.

The sponsorship opportunities are available for bulk participation and branding (Last date 15th October, 2024). The name of the sponsoring organization along with 'Logo' will be displayed adequately in all venues, prints and electronic display as acknowledgement of support and sponsorship. In addition, Sponsors will be entitled for complimentary registration of their delegates as follows:

Category	Sponsorship Amount		Complementary
	Indian* (₹ lakhs)	Foreign** (USD)	Delegates
Platinum	20	29,000	50
Diamond	15	22,000	30
Gold	12	17,500	20
Silver	9	13,000	10
Pearl	6	8,700	5

^{*}GST @ 18% is payable additionally directly by the Indian Sponsors. ** Inclusive of 18% GST

Nodal Person for Sponsorship:

Mr. Manish Agarwal, Joint Director	Mr. Lav Kumar, Addl. Director
------------------------------------	-------------------------------

Email: <u>m.agarwal@cht.gov.in</u>

Mobile: +91-7060577075

Email: <u>lav.kr@cht.gov.in</u>

Mobile: +91-9758802988

Exhibition Stalls

Exhibition Stalls of size 3 m x 3 m will be provided at the venue for display of products/ services by vendors / consultants / service providers etc. connected with the Hydrocarbon Sector. The rate for each stall will be Rs 4.72 lakh (Rs 4.00 lakh plus GST@18%). Vendors booking the exhibition stalls will be entitled for free complimentary registration for two delegates.

Nodal Person for Exhibition Stall Booking:

Mr. Kishore Kumar Bhimwal, Addl. Director Mr. Gaurang Mishra, Joint Director

Mobile: +91-9958798282 | Mobile: +91-7535065000

Overall Coordinators

Mr. S. R. Kulkarni, Director
Tel: +91- 9892067088 (M)

E-mail: kulkarni@cht.gov.in

Mr. Baljeet Singh, Director
Tel: +91- 9849968570 (M)

Tel: +91- 9868842451 (M)

E-mail: singh.baljeet@cht.gov.in

E-mail: n.jain@cht.gov.in

For updates, please keep visiting CHT website: https://www.cht.gov.in



Venue: The Leela Bhartiya City

Vidhana Soudha



Big Banyan Tree

Bangalore Palace





Centre For High Technology Ministry of Petroleum & Natural Gas Government of India











26th ETM: PLATINUM SPONSORS















26th ETM: DIAMOND SPONSORS





Honeywell UOP

26th ETM: GOLD SPONSORS











TOPSOE

27th Energy Technology Meet







26th ETM: SILVER SPONSORS

LanzaTech









26th ETM: PEARL SPONSORS



An Ecolab Company











27th Energy Technology Meet

26th ETM: EXHIBITORS



















TOPSOE









































