

# Global Chemicals & Petrochemicals Manufacturing Hubs in India 2023

Post Show Report

27 - 28 July 2023





# Table of Contents

<b>1</b>	<b>Event Snapshot</b>	<b>4</b>
<b>2</b>	<b>Introduction</b>	<b>6</b>
<b>3</b>	<b>Program Schedule</b>	<b>7</b>
<b>4</b>	<b>Highlights from the Day 1</b>	<b>8</b>
4.1	Inaugural Session	8
4.2	Session 1: The captivating opportunities of PCPIRs/Chemical Hubs	13
4.3	Session 2: Roadmap to Net Carbon Zero	19
4.4	Session 3: India's journey to be energy self – sufficient by 2047 and way forward	24
4.5	Session 4: FTAs – Connecting the world – Vasudhaiva Kutumbakam “One Earth, One Family, One Future”	28
4.6	FICCI Chemicals & Petrochemicals Industry Awards	32
<b>5</b>	<b>Highlights from the Day 2</b>	<b>34</b>
5.1	Session 5: Role of Banks and Private Equity Funds in supporting organic and inorganic growth in the chemicals space	34
5.2	Session 6: Fueling R&D, Skill Development, and Innovation in CPC Industry	37
5.3	Session 7: Sustainability through Circular Economy	42
<b>6</b>	<b>Valedictory Session</b>	<b>47</b>
<b>7</b>	<b>Digital Amplification</b>	<b>50</b>
<b>8</b>	<b>PR Coverage</b>	<b>55</b>



# 1. Event Snapshot

---

**Organizer**



Government of India  
Ministry of Chemicals and Fertilizers  
Department of Chemicals and Petrochemicals

**Knowledge Partner**







## 2. Introduction

The chemical industry and its ability to understand and modify the interaction of different elements to produce desired commercial products has significantly contributed to the development of human life. Industry contributes significantly to almost every key area of human development – be it food, healthcare, or energy. The industry has been constantly responding to needs of growing population ranging from access to food to medical care to increased connectivity by providing us with (developments across) fertilizers, pesticides, pharmaceuticals, plastics, insulation, wiring, battery chemicals, adhesives, etc.

Heading into 2023, the chemical industry is in a strong financial position. The year ahead could be a turning point when companies emphasize the long-term viability of product portfolios in the context of sustainability in a move toward asset-oriented deal-making.

Digital implementation is changing the decision-making landscape of chemical producers. However, the near-term focus will be on stabilizing current platforms and capabilities, with the intent to monetize the current investment pool before expanding to newer areas. Producers may increasingly use digital technologies to empower materials innovation and expedite low-cost formulations by evaluating, optimizing, and assimilating ingredient recipes and domain knowledge.

With the support of the Indian government, the chemical industry in India witnessed significant growth. The industry has been modernizing over time through the development of novel molecules, technological advancements, improvement in product quality and launch of new product profiles to become a contemporary world-class chemical industry prepared to face international competition. Even at a time of increased global unpredictability, the sector remains a desirable center for prospects. Global dynamics that are affecting the chemical industry would present lucrative opportunities for the Indian chemical sector in the future. The strategic choice to prioritize and realize this value-creation potential would determine the direction of India's chemical sector and its trade performance in the future.

In pursuance to the objective of making India as Global Manufacturing hub with, Department of Chemicals and Petrochemicals, Ministry of Chemicals & Fertilizers, Government of India and Federation of Indian Chambers of Commerce and Industry (FICCI) organized the 3rd edition of India: Global Chemicals and Petrochemicals Manufacturing Hubs" (GCPMH) held on 27th - 28th July 2023 at Hotel Le Meridien, New Delhi with the theme, "Global Chemicals and Petrochemicals Manufacturing Hubs: Sustainability and Circularity".

The primary goal of the summit is to bring together global leaders, CEOs, government authorities, key industry players, state governments and subject matter experts from around the world in an open dialogue, under one roof to discuss the key developments, sectoral issues, and the way forward with respect to Indian chemicals and petrochemicals industry. The summit will help to develop possible strategies, sharing insights, exploring opportunities and challenges which will shape the Chemicals and Petrochemicals Industry in India and across the world in the next decade.



### 3. Program Schedule

#### Day 1

**Thursday, 27th July 2023**

0830 – 0930 Hrs.	REGISTRATION
0930 – 1100 Hrs.	INAUGURAL SESSION
1100 – 1130 Hrs.	Networking Tea Break
1130 – 1300 Hrs.	Session 1: The captivating opportunities of PCPIRs/ Chemical Hubs
1300 – 1400 Hrs.	Business Networking Lunch
1400 – 1530 Hrs.	Session 2: Roadmap to Net Carbon Zero
1530 – 1700 Hrs.	Session 3: India's journey to be energy self-sufficient by 2047 and way forward
1700 – 1730 Hrs.	Networking Tea Break
1800 – 1900 Hrs.	Session 4: FTAs – Connecting the world - Vasudhaiva Kutumbakam "One Earth, One Family, One Future"
1900 – 1930 Hrs.	FICCI Chemical and Petrochemical Industry Awards
1930 Hrs. onwards	Business Networking Dinner

#### Day 2

**Friday, 28th July 2023**

1030 – 1145 Hrs.	Session 5: Role of Banks and Private Equity funds in supporting organic and inorganic growth in the chemicals space
1145 – 1300 Hrs.	Session 6: Fueling R&D, Skill Development, and Innovation in CPC Industry
1300 – 1400 Hrs.	Business Networking Lunch
1400 – 1500 Hrs.	Session 7: Sustainability through Circular Economy
1530 – 1630 Hrs.	Valedictory Session

## 4. Highlights from the Day 1

### 4.1. Inaugural Session

Agenda	
Day 1: Thursday, 27 <sup>th</sup> July 2023	
0930 – 1100 hrs.	Inaugural Session
0930 – 0935 Hrs.	Lighting of the Lamp
	Felicitation of the dignitaries
0935 – 0940 Hrs.	Welcome Address by <b>Mr. Subhrakant Panda</b> , President, FICCI
0940 – 0945 Hrs.	Setting the tone by <b>Mr. Deepak C Mehta</b> , Chairman, FICCI National Chemical Committee and Chairman and Managing Director, Deepak Nitrite Ltd.
0945 – 0950 Hrs.	Sectoral Presentation <b>Shri Arun Baroka</b> , Secretary (Chemicals and Petrochemicals), Department of Chemicals & Petrochemicals, Government of India
0950 – 0955 Hrs.	Address by <b>Sri Gudivada Amarnath</b> , Hon'ble Minister for Industries, Infrastructure, Investment & Commerce, Information Technology and Handlooms & Textiles, Government of Andhra Pradesh
0955 – 1000 Hrs.	Address by <b>Shri Pratap Keshari Deb</b> , Hon'ble Minister of Industries, MSME & Energy, Government of Odisha
1000 – 1010 Hrs.	Special Address by <b>Shri Bhagwanth Khuba</b> , Hon'ble Minister of State, Ministry of Chemicals & fertilizers and Minister of State, Ministry of New & Renewable Energy, Government of India*
1010 – 1025 Hrs.	Chief Guest Address by <b>Smt. Nirmala Sitharaman</b> , Hon'ble Minister of Finance and Corporate Affairs, Government of India*
1025 – 1030 Hrs.	Release of Knowledge Paper
1030 – 1035 Hrs.	Concluding Remarks by <b>Mr. Prabh Das</b> , Chairman- FICCI Petrochemicals Committee and MD & CEO, HPCL - Mittal Energy Ltd.
1035 – 1130 hrs.	Inaugural Session



## Key Discussion Points

Global Chemicals & Petrochemicals Manufacturing Hubs in India 2023 inaugural session was held at the Hotel Le Meridien, New Delhi on 27th July 2023. The 3rd edition of the event was held in a physical format while also being live streamed on YouTube platform. This year the theme of the event was "Sustainability and Circularity", and the program was held from 27th - 28th July 2023.

Welcoming the gathering **the moderator, Swati (to be filled by FICCI)**, gave a few key insights into the objective of the event – to showcase tremendous potential and supportive government policy for sustainable growth in this sector and it being a single platform for both domestic and international investors and other stakeholders to interact and forge alliances, thereby providing immense potential for trade and investment in a mutually beneficial way.

The honorable chief guest and other distinguished dignitaries were invited on the stage to light the ceremonial lamp and formally inaugurate the exhibition and conference GCPMH 2023.

**Smt. Nirmala Sitharaman**, Hon'ble Minister of Finance and Corporate Affairs, Government of India, **Shri Bhagwanth Khuba**, Hon'ble Minister of State, Ministry of Chemicals & Fertilizers and Minister of State, Ministry of New & Renewable Energy, Government of India, **Shri Pratap Keshari Deb**, Hon'ble Minister of Industries, MSME & Energy, Government of India, **Shri Arun Baroka**, Secretary (Chemicals and Petrochemicals), Department of Chemicals & Petrochemicals, Government of India, **Mr. Deepak C Mehta**, Chairman, FICCI National Chemical Committee and Chairman and Managing Director, Deepak Nitrite Ltd., **Mr. Subhrakant Panda**, President, FICCI, inaugurated the event by lighting the ceremonial lamp.

**Mr. Subhrakant Panda**, President, FICCI, welcomed and felicitated the honorable chief guest **Smt. Nirmala Sitharaman**, Hon'ble Minister of Finance and Corporate Affairs, Government of India, and other dignitaries **Shri Bhagwanth Khuba**, Hon'ble Minister of State, Ministry of Chemicals & Fertilizers and Minister of State, Ministry of New & Renewable Energy, Government of India, **Shri Pratap Keshari Deb**, Hon'ble Minister of Industries, MSME & Energy, Government of India, and **Shri Arun Baroka**, Secretary (Chemicals and Petrochemicals), Department of Chemicals & Petrochemicals, Government of India, with a green certificate which is an initiative by FICCI wherein a grove of 10 trees will be planted in the Sundarbans National Park, West Bengal in the name of the honorable ministers and dignitaries.

The moderator then invited **Mr. Subhrakant Panda**, President, FICCI for the welcome address of the two-day summit. In his inaugural speech, Mr. Subhrakant Panda, President, FICCI discussed about India's chemical and petrochemical sector. He addressed the following key points:

- India's chemical sector is highly diversified with over 80,000 commercial products and provides key building blocks and raw materials for several downstream industries such as bulk chemicals, specialty chemicals, agrochemicals, petrochemicals, polymers, and fertilizers
- The sector has been growing at 1.2–1.5 times of the GDP, driven by growth in consumption and as well as enabling policies of the government
- India is the 6th largest chemical producer in the world and 4th largest in Asia. The exports of chemicals and allied products from the sector accounted for 12% of India's total exports in FY22 and has been growing rate at CAGR of 14% over the last several years.
- The sector creates large employment opportunities and has a significant role to play in India's journey in becoming a USD 5 trillion economy.
- The sector is currently valued at USD 220 billion according to a report from McKinsey and is expected



to grow at a CAGR of 11–12% in next few years, and 7–10% thereafter till 2040 reaching USD 300 billion by 2030 and staggering USD 1 trillion by 2040 accounting for 10–12% of global market. This growing market is expected to position India as a strong player in the times to come

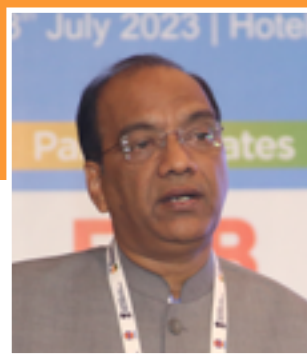
- The sector is expected to grow due to several initiatives such as 100% FDI, PCPIRs zones in various part of country and many other business friendly policies
- India is becoming an attractive business destination for global chemicals industry due to rising domestic consumption (with India accounting for 20% of incremental global consumption in next two decades), changing consumer preferences, growing demand for wire friendly products. Ease of doing business measures and enabling policies to create an environment of growth have been paying dividends for this sector
- The sector faces key challenges in the form of limited domestic feedstock availability, import dependence, scarcity of skilled R&D talent, and ESG concerns
- With respect to **“Sustainability and Circularity”**, the theme of the summit is obviously important in the present global context and a holistic approach will be required involving recycling, renewable feedstock platforms efficiency enhancements to get at it

**Mr. Deepak C Mehta**, Chairman, FICCI National Chemical Committee and Chairman and Managing Director, Deepak Nitrite Ltd. then sent the tone for the summit discussing about the global chemical industry. The following are the key points kept forward from him:



- The global chemical industry is currently close to about USD 8–9 trillion with China and India being USD 3 trillion and USD 300 billion respectively
- India appears to be one of the best locations in today’s context with Europe going into recession, challenges relating to oil prices, Ukraine – Russian war, and deflation going on in China. The industry accounts a demand around USD 180 billion and has a potential to reach USD 1 trillion in the next 10 years
- The real challenge lies in how much of this demand is met by domestic production and imports
- The whole idea of PCPIR was to create island of excellence such that the requirement of the chemical industry such as building blocks, ports, railways, etc. is met at one location and give the industry a competitive advantage. These regions have started off well but have not achieved what was intended
- For developing India as a global manufacturing hub, we will require major ministries such as ministry of commerce, ministry of revenue, etc. to work together with the department and find an interim solution

**Shri Arun Baroka**, Secretary (Chemicals and Petrochemicals), Department of Chemicals & Petrochemicals, Government of India, later addressed the gathering with the sectoral presentation. The following major points were covered:



- The Indian economy has been doing well with a growth rate of 6.8% compared to major countries worldwide. The economy appears to have a V shaped recovery because of the efforts taken by the government
- With the policy reform support in place and increasing domestic demand, India’s outlook remains strong and has the potential to develop a global manufacturing hub



- The Indian govt has been playing a supportive role and heavily investing in infrastructure projects to bring down the logistics costs and facilitate ease of doing business
- The industry landscape is driving India's chemical sector towards a next wave of growth and presenting new opportunities. Post covid, many global chemical players are considering India as a potential manufacturing hub and the government is intended to capitalize such opportunities by providing suitable ecosystem
- Enhanced demand of chemicals in other related sectors such as agrochemicals, automobiles, packaging, etc., the chemical and petrochemical sector is bound to have a double-digit growth in this decade

**Shri Pratap Keshari Deb**, Hon'ble Minister of Industries, MSME & Energy, Government of India, addressed the gathering by sharing key initiatives taken by the Odisha government towards the development of chemical sector in the state:

- The country has been growing at 8% domestically and to sustain this growth over the next 10 years 40% growth in the capacity is required
- The chemicals and petrochemicals sector has been considered as a thrust sector (top priority) in Odisha's industrial policy IPR 2022. The policy provides 30% capital subsidy, electricity duty is exempted, etc. The policy is sustainable and is anticipated to remain sustainable in the next 10 years



**Shri Bhagwanth Khuba**, Hon'ble Minister of State, Ministry of Chemicals & Fertilizers and Minister of State, Ministry of New & Renewable Energy, Government of India, addressed the gathering covering the following points:

- In last 9 years, India's per capita has almost doubled with consumption growing at the same rate resulting in growth opportunities seen in every sector but India is yet to seize many opportunities offered by the chemical sector
- Even after covid 19, India's GDP growth rate of 7-7.2%, inflation of 4.25%, and unemployment rate below 5% are considered the best among major economies in the world. Such indicators provide confidence to potential investors to invest in the country.
- The department of chemicals & petrochemicals have taken numerous initiatives such as chemicals parks, plastic parks, center of excellence, etc. to develop a growth ecosystem for India's chemical and petrochemical industry



**Smt. Nirmala Sitharaman**, Hon'ble Minister of Finance and Corporate Affairs, Government of India, in her addressing speech highlighted the following key points regarding India's chemical and petrochemical sector

- The potential and size of India's chemical and petrochemical industry makes it a part of India's economic fabric with several significant sectors of the economy being directly impacted by the products produced in the industry



- The current challenges of the industry include sustainability of the products, products recycling, adoption of Industry 4.0, and upskilling,
- Global players such as Aramco, BASF, Rosneft, Adnoc, Borealis, etc. have started to look for joint ventures in India. Hence, the partners in India should be aware of the major 4 challenges and address them to benefit from such joint ventures
- Industry bodies such as FICCI and its chemical and petrochemical wing must also look at the various ways for developing a sustainable and circular economy thus addressing the core issues of the industry

**Mr. Prabh Das**, Hon'ble Minister of Finance and Corporate Affairs, Government of India, in her addressing speech highlighted the following key points regarding India's chemical and petrochemical sector



- The initiatives taken by the government and its support will ensure India to be a global chemical and petrochemical hub. Also, the issues related to how to accelerate this development have been taken seriously by the government
- With respect to issue relating to sustainability and circularity, India has been working with the local bodies to increase recycling with India recycling 60% of its polymer products compared to US which recycles only 7%

The session was concluded after **Mr. Prabh Das**, Chairman – FICCI Petrochemicals Committee and MD & CEO, HPCL – Mittal Energy Ltd remarks



## 4.2. Session 1: The captivating opportunities of PCPIRs/Chemical Hubs

### Agenda

Day 1: Thursday, 27th July 2023

1130 – 1300 Hrs.	<b>Session 1: The captivating opportunities of PCPIRs/ Chemical Hubs</b>
<p><i>PCPIRs/Chemical Hubs offer captivating opportunities for businesses in the petroleum, chemical, and petrochemical sectors. With their strategic location, integrated infrastructure, incentives, and cluster effect, these hubs create a favourable environment for growth and innovation. By capitalizing on the advantages provided by PCPIRs/Chemical Hubs, investors and businesses can unlock significant potential and contribute to the overall development of the industry. This session will explore the various aspects that make PCPIRs/Chemical Hubs an attractive proposition for investors and businesses alike. The session will focus on the various aspects like Integrated Infrastructure, Attractive incentives, tax benefits, and policy support by the Government to promote investments in PCPIRs/Chemical Hub, Market Access, and R&amp;D. The session will have both the International and Indian Industry perspective on the Chemical Hubs.</i></p>	
1130 – 1135 Hrs.	Moderation and Context Setting by <b>Mr. Jayant V Dhobley</b> , Business Head and CEO - Global Chemicals, Fashion Yarn & Insulators, Aditya Birla Group
1135 – 1145 Hrs.	Government Perspective by <b>Shri Susanta Kumar Purohit</b> , Joint Secretary (Chemicals), Department of Chemicals & Petrochemicals, Government of India
1145 – 1255 Hrs.	<p>(Talk/ Presentation)</p> <p><b>International Perspective on the Chemical Hubs:</b></p> <ul style="list-style-type: none"> <li>• Presentation by <b>Mr. Dennis Tan</b>, Senior Director - Energy &amp; Industrial, Surbana Jurong Group on "Surbana Jurong's Experience with Chemical Hubs"</li> <li>• Presentation by Representative from <b>Mr. Daljit Singh Kohli</b>, India Representative, Port of Antwerp – Bruges</li> </ul> <p><b>Indian Perspective on the Chemical Hubs:</b></p> <ul style="list-style-type: none"> <li>• <b>Mr. Siraj Saiyed</b>, Director, Arete Group of Companies</li> <li>• <b>Dr. PP Lal Krishna</b>, Managing Director &amp; CEO, Ramky Pharma City</li> </ul> <p><b>PCPIRs/ Chemical Hubs Perspective:</b></p> <ul style="list-style-type: none"> <li>• Talk by <b>Shri Pravin Kumar</b>, IAS, Commissioner of Industries, Commerce &amp; Export Promotion, Government of Andhra Pradesh</li> <li>• Talk by <b>Dr. Narander Kumar Meena</b>, Joint Managing Director, GIDC, Government of Gujarat</li> <li>• Talk by <b>Shri Hemant Sharma</b>, IAS, Principal Secretary, Industries Department, Government of Odisha</li> <li>• Talk by <b>Shri Kulveer Singh</b>, IAS, General Manager, RIICO Government of Rajasthan</li> </ul>
1255 – 1300 Hrs.	Concluding Remarks by <b>Mr. Jayant V Dhobley</b> , Business Head and CEO - Global Chemicals, Fashion Yarn & Insulators, Aditya Birla Group
1300 – 1400 Hrs.	<b>Business Networking Lunch</b>

## Key Discussion Points

The key agenda of the session was to understand the international, domestic and government's perspective of chemicals and petrochemical parks in India.

**Mr. Jayant V Dhobley**, Business Head and CEO – Global Chemicals, Fashion Yarn & Insulators, Aditya Birla Group, moderated the session discussing about the petrochemical's hubs and chemical parks.



- Chemical parks are the building blocks of the chemical industry which represent the necessary infrastructure of the chemical industry. China has 600 chemical parks and 10% among them are national level parks. Europe has over 50 chemical complexes.
- Chemical Parks is a dense infrastructure that brings together the overall efficiencies of the chemical system

**Shri Arun Baroka**, Secretary (Chemicals and Petrochemicals), Department of Chemicals & Petrochemicals, Government of India, elaborated on the government perspective regarding the chemical parks in India



- 4 Petroleum, Chemical and Petrochemical Investment Regions (PCPIRs) are currently developed in the coastal region of the country. Some of these parks have been doing good while some of them require support in certain areas
- Based on the feedback from the industry, future focus will be on developing smaller areas parks in focused manner such as specialty chemical parks
- Many private players have also constructed their own chemical parks or chemical hubs in the country such as Ramky group in Vishakhapatnam and Payal Industries in Gujarat
- The Department has been engaging with the states having better infrastructure facilities, proximity to ports, and have identified few land parcels which have the potential to get converted into chemicals park



**Shri Rajeev Singh Thakur**, Additional Secretary, Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce & Industry, Government of India elaborated on potential solutions to for the development of chemical and petrochemical parks in India



- Surbana has been involved in developing chemical park projects in China, UK, and Singapore
- Surbana already has a petrochemical in China and is currently working on developing another park with a state enterprise in the province of Hainan
- In UK, Surbana has been working on a site in northeastern UK called T-side trying to rejuvenate a mature industry that has seen the rise and demise of steel making, the collapse of ICI, etc. Europe has also been very aggressive with adoption of sustainable fuels. Hence, Surbana is also observing many sustainable fuels projects interest in the country
- In Singapore, Surbana has been partnering with different stakeholders and government is focusing on circularity at Jurong island on the adoption and push of renewables

**Mr. Daljit Singh Kohli**, India Representative, Port of Antwerp – Bruges, elaborated on the success journey of Bruges in developing one of the largest chemicals clusters in the Europe



- Bruges chemical cluster is the largest in Europe while second in World after Houston followed by clusters in Singapore and Shanghai
- Key success factors implemented by Bruges for developing the chemical cluster were Vision and Strategic Focus, Community Builder & Facilitator, Integrated Clusters, Infrastructure & Connectivity, and Innovative Spirit
- Bruges have also invited startups in addition to the major chemical players at their parks providing innovative solutions around sustainable chemical industry

**Mr. Siraj Saiyed**, Director, Arete Group of Companies, highlighted the approach taken by Payal Industries in developing their PIP (Payal Industrial Park)



- The major problem while setting up an Industrial Park include availability of land, quality of infrastructure, maintain sustainable production operations, etc.
- PIP, launched in December 2021, is located in Dahej PCPIR
- PIP was developed by not only addressing the challenges towards the land and infrastructure but also the services post the industries starts their operational plants
- To create value for such industries at PIP, Payal Industries have abided three core values namely: Agility, Quality, and Customer Centricity



**Dr. PP Lal Krishna**, Managing Director & CEO, Ramky Pharma City, elaborated on the Pharma Industrial Park in the Vishakhapatnam PCPIR



- Jawaharlal Nehru Pharma City (JNPC) is an exclusive pharma and chemical hub initiated by the AP government
- 4 important parameters namely Socially Sustainable, Environmentally Sustainable, Economically Sustainable, and Digitalization are important links while setting up an industrial park. These parks are developed on 4 pillars: External Infrastructure, Internal Infrastructure, Environmental & Social Compliances, and Business Support
- JNPC operation started during 2008-09 and have occupied 86% of the park's land capacity has been occupied. The park has provided direct employment to 32,000 people
- Major advantages of JNPC: Park level environmental clearance, 30% reduction on capital investments, 5% cost saving in water supply & storage, and common facilities and services

**Shri Pravin Kumar**, IAS, Commissioner of Industries, Commerce & Export Promotion, Government of Andhra Pradesh, elaborated on overall strengths of Andhra Pradesh and the state government perspective about the future of India's chemical and petrochemical sector



- Andhra Pradesh has consistently ranked number one in ease of doing business based on 100% perception survey
- The state has recently invested INR 13.42 Lakh Cr and generated 6.05 Lakh employment with major contribution towards the chemicals and petrochemicals sector
- There are 3 major industrial corridors in the state – Vishakhapatnam - Chennai, Chennai – Bengaluru, and Hyderabad – Bengaluru
- The state consists of 6640 m2 define PCPIR and as per DPIIT, as of now the region has received around INR 51,481 Cr of investments

Just not a REAL ESTATE OR  
INFRASTRUCTURE  
COMPANY but one  
committed for Holistic  
solutions





- Major players in the oil & gas sector have been operating in across the state's PCPIR and the presence of refineries in the region provides the required feedstocks for downstream industries
- Industrial parks such as JNPC (Pharma City), APIC, and few private sector parks are nearly saturated but parks such as IP Atchutapuram, Nakkapali, Rambilli Clusters, and Kakinada SEZ in the state will be suited for new upcoming ventures/industries in the chemicals and petrochemicals sector
- Other than the PCPIR and Coastal PCP, the state also consists of many non-coastal parks such as Krishnapatnam (Kris City), Koppaarthi Node, Orvakal Node, IP Naidupeta, and Srikalahasti Chittoor which can be targeted by the chemicals and petrochemicals industries
- With respect to projects in AP focused on sustainability, the state is planning to come up with a Green Hydrogen project (biggest in India) from NTPC partnering with an Australian counterpart with almost INR 150,000 Cr investments. Along with this, an ethanol blending project will be coming up in the state ensuring sustainability always remains an important factor of consideration in AP

**Dr. Narander Kumar Meena**, Joint Managing Director, GIDC, Government of Gujarat, elaborated on the development journey of PCPIR in Gujarat



- Gujarat's PCPIR was the first PCPIR region in the country out of the 4 current operating regions. The region consists of location advantage in terms of availability of roads, railways, ports, power, gas, water, etc. The region also consists of chemical ports with the availability of liquid cargo storage facilities
- The PCPIR region consists of 5 GIDC Estates primarily focusing on chemical, petrochemical, dyes & pigments, and textiles. The region has received INR 107,235 Cr investments till date providing 61,285 and approx. 183,855 direct and indirect employment respectively
- With respect to ports infrastructure, the region consists of 32.9 MMTPA operating terminal capacity. With respect to effluent disposal, the region consists of 80 MLD capacity of CETP out of which only 42 MLD capacity is currently being utilized

**Shri Hemant Sharma**, IAS, Principal Secretary, Industries Department, Government of Odisha, elaborated on the key aspects which distinguishes Odisha from most other states



- Odisha's polity (political stability), economy, geography (mineral wealth with largest source of iron ore, coal, magnesium, silica, quartz, bauxite, and magnesium), policy and demography make it an attractive investment destination
- The state aims to diversify from the minerals led development to a chemical driven industrial economy
- The state has provided 30% capital investment subsidy without any upper limit, 100% exemption from electricity duty and INR 2 per unit discount on electricity tariff for a period of 10 years, 100% reimbursement of ESI and EPF for any domestic employee for a period of 7 years on the new projects in the chemicals and petrochemical sector in the state

- The current cost of industrial tariff in the state stands at INR 3.45 per unit for chemical and petrochemical industry
- The state offers Ready to Move In land (30 acres in 30 days, 50 acres in 50 days, 100 acres in 100 days) with factory gate availability of water, power, and connectivity

**Shri Kulveer Singh, IAS, General Manager, RIICO Government of Rajasthan,** elaborated on the Rajasthan Petro Zone



- Rajasthan has the access to 40% of India's northern market, robust infrastructure of about 390 industrial areas, effective governance, skilled manpower, and strong policy support
- The Rajasthan Petro Zone is planned for an area of ~60 sq km right now focusing on smaller area hubs too as per the suggestions from central government. The government has rated 25 IP of Rajasthan among the 68 top IP of India
- Rajasthan also offers one of the best investment promotion schemes such as asset creation scheme, special incentive scheme, and certain exemptions. Petrochemical sector has been notified as a thrust sector in the state

The session was concluded with a Vote of Thanks by **Mr. Jayant V Dhobley**, Business Head and CEO – Global Chemicals, Fashion Yarn & Insulators, Aditya Birla Group



### 4.3. Session 2: Roadmap to Net Carbon Zero

Agenda	
Day 1: Thursday, 27th July 2023	
1400 – 1530 Hrs.	Session 2: Roadmap to Net Carbon Zero
<p><i>Achieving Net Carbon Zero in the chemicals and petrochemicals industry requires a comprehensive and collaborative approach. By transitioning to low-carbon feedstocks, improving energy efficiency, embracing CCUS technologies, adopting circular economy principles, fostering innovation, and implementing supportive policies, the industry can play a crucial role in combating climate change and building a sustainable future. This session will address the significance of supportive policy and regulatory frameworks in facilitating the industry's decarbonization efforts. This session will address the significance of supportive policy and regulatory frameworks in facilitating the industry's decarbonization efforts</i></p>	
Moderation by Mr. Vaibhav Singh, Executive Director, Energy, PwC	
1400 – 1410 Hrs.	Chief Guest <b>Shri Bhupendra Yadav</b> , Hon'ble Minister of Environment, Forest and Climate Change, Ministry of Environment, Forest and Climate Change, Government of India (Video Message)
1410 – 1420 Hrs.	Keynote Address and Perspective of Environment Ministry by <b>Dr. Prashant Gargava</b> , Member Secretary, Central Pollution Control Board, Ministry of Environment, Forest and Climate Change, Government of India*
1420 - 1520 Hrs.	(Panel Discussion) <ul style="list-style-type: none"> <li>• <b>Mr. Rajendra Gogri</b>, Chairman &amp; Managing Director, Aarti Industries Ltd.</li> <li>• <b>Mr. Mukesh Malhotra</b>, Country Manager &amp; Managing Director, Solvay India</li> <li>• <b>Mr. Alexander Gerding</b>, Managing Director, BASF</li> <li>• <b>Mr. Bala Ramani</b>, Director - Sustainability Consulting &amp; Asia Strategy Advisor, ICIS</li> <li>• <b>Mr. Pranjal Jain</b>, Partner, Bain &amp; Company</li> <li>• <b>Mr. Ashish Modi</b>, President, Honeywell India</li> </ul>

### Key Discussion Points

The key agenda of the session was to address the significance of supportive policy and regulatory framework in facilitating chemical and petrochemical industries decarbonizing efforts.

**Shri Bhupendra Yadav**, Hon'ble Minister of Environment, Forest, and Climate Change & Labor and Employment, Government of India elaborated on key role of chemicals and petrochemicals in Indian economy

- The chemicals and petrochemicals sector has played a foundational role in the economic development of India and have been achieving national priorities of development, innovation, value addition, and research.





- As a developing nation, India's role in the global chemical industry is rapidly increasing making the responsibility of managing chemicals a paramount priority. Also, chemicals are an interior part of the modern society and their diverse use enhance the quality of experience of the products and articles we use
- Being an active member of all multilateral environment bodies, India has successfully implemented major environmental provisions and ratified 19 chemicals for banning and severe relegation regulation under the Stockholm convention. Also, a robust institutional mechanism has been put in place to regulate the international trade of hazardous chemicals under Rotterdam and Minamata convention
- Ministry of Environment, Forest, and Climate Change has been working on circular economy aimed at life cycle management of chemicals and wastes. The primary objective is to implement the principle of Reduce, Reuse, and Recycle. To achieve this environment sustainability, the ministry has been actively taking up the regulation of Waste Management to align them with the sustainability principles of extended producer responsibility, circular economy, and resource efficiency
- Being one of the fastest growing economies in the world, the chemical and petrochemical industry play a significant role in meeting our Net Zero goals and commitment towards the challenge of climate change

**Mr. Rajendra Gogri**, Chairman & Managing Director, Aarti Industries Ltd, set the context for the session with a brief presentation covering the following points



- Top 7 CO<sub>2</sub> emitters in the world accounted for 55% of global GHG emissions in 2020. The G20 nations are responsible for ~75% of global GHG emissions
- In 2020, the global per capita GHG emissions accounted for 6.3 t CO<sub>2e</sub> while India accounted for 2.4 t CO<sub>2e</sub> well below the average
- India's has the potential to lead in Net Zero transition in chemicals which is highly dependent upon technology, finance, and government policy initiatives, commitment from all stakeholders and collaboration between them
- India is blessed with abundant sunshine and wind for production of Green Chemicals which will transform energy intensive chemical industry, generate employment in the sector, attract new manufacturing industries, provide opportunity for global companies to forge partnerships with domestic players, and strengthen India's role in the global climate change flight





- The path to net carbon zero will require key actions from the industry and as well as government support
- In terms of required supporting policies and reforms to achieve net zero, some sort of tweaking in the existing policies and methodologies will be required such as implementing marine discharge instead of zero liquid discharge (where steam is being utilized), incentivizing R&D, creating SOPs considering the carbon footprints and net zero targets, etc.

**Dr. Prashant Gargava**, Member Secretary, Central Pollution Control Board, Ministry of Environment, Forest and Climate Change, Government of India elaborated on the initiatives taken by CPCB, Ministry of Environment, Forest, and Climate Change to address waste management in the country



- CPCB has come out with the close to 90 processes' standard operating procedures of utilizing hazardous waste materials
- CPCB is trying to put up a transparent mechanism for all the processes to handle and monitor waste management through a common portal wherein the producer can also get registered, his targets are automatically calculated, and the liabilities are cross verified through registered processors thereby accounting for the entire chain in a closed loop
- CPCB is also working with the industries to set up a system to minimize waste generation and its impact on the environment



**Vaibhav Singh**, Executive Director, Energy, PwC India then started moderating the session discussing on the relevance of the decarbonization and net zero targets, problem associated to achieving those targets and potential solutions for the same

**Mr. Alexander Gerding**, Managing Director, BASF, elaborated on BASF's net zero targets, plans to achieve them and potential hurdles



- BASF has set a target to achieve net zero by 2050 and reduce CO<sub>2</sub> emissions by 25% by 2030
- BASF considers 3 vertical pillars that are key and fundamentals to achieve their ambitions: Carbon Management, Circularity, and Portfolio of Sustainable Products
- The path to net zero can only be achieved through partnerships among private companies, public sector undertakings, and a strong support from the government
- In terms of leveraging advanced R&D in India, the Indian government will need to enable systems to facilitate and encourage investments in the R&D of technologies such as Green Hydrogen, Green Ammonia, etc.

**Mr. Mukesh Malhotra**, Country Manager & Managing Director, Solvay India elaborated on the initiatives and investments made by Solvay to reduce carbon emissions scope 1, 2, and as well as 3



- Solvay has also targeted to achieve carbon neutral for scope 1 and scope 2 by 2040 for all business segments except for soda ash which is being aimed by 2050 due to its energy intensive nature
- To achieve these ambitions, Solvay has invested EUR 2 billion, undertook 59 energy transition projects, and switched 30% of the operating plants towards renewables
- Solvay is aiming to reduce 3.5 million tons of CO<sub>2</sub> emissions every year targeting 30% to 31% of its CO<sub>2</sub>e reduction by 2030
- In terms of product placement or selection to reduce emissions, we will require technologies which can convert renewable feedstocks into sustainable products, evaluate products in terms of their carbon footprint, environmental footprint, etc., and develop a holistic view on the product manufacturing process

**Mr. Ashish Modi**, President, Honeywell India highlighted technologies promoted by Honeywell to reduce CO<sub>2</sub> emissions



- Significant number of technologies are already available today for customers to achieve their net zero goals. Honeywell has recently partnered with Exxon Mobil to capture 98% CO<sub>2</sub>e from their new hydrogen plant
- With respect to the financing vs technology chicken & egg problem, early stages of any technology adoption require assistance in terms of financing, government policies and regulations
- In terms of other technologies, Honeywell provide catalyst coated membrane for green hydrogen, upcycle technology for plastic recycle, etc.

**Mr. Bala Ramani**, Director - Sustainability Consulting & Asia Strategy Advisor, ICIS elaborated on the different pathways for the transition of the chemical sector towards a more environment friendly and decarbonized world



- Globally, the chemical industry is the third largest emitter of CO<sub>2</sub> emissions. But the industry can be a key enabler of sustainability for a wide range of end use sectors since many downstream industries depends on the chemical industry
- Few chemicals such as ammonia, methanol, olefins, aromatics, related derivatives being the building blocks of other downstream chemicals are among the highest CO<sub>2</sub> emitting industries. Hence, it becomes important to develop different pathways to reduce the emissions from these industries

- Simple steps can be implemented to optimize the supply chains in the chemical industry such sourcing raw materials from suppliers who are low in terms of emissions or who are near the plant location
- Different pathways for decarbonizing the chemical industry would include Energy Efficiency (moving the energy mix towards renewables or alternate energy sources), Alternate Feedstocks (moving towards alternate non-fossil fuel derived feedstocks), and Management of Product's End of Life

**Mr. Pranjal Jain**, Partner, Bain & Company, elaborated on the Net Zero strategies and roadmap developed by Bain for organizations in the chemical sector



- 3-4% of the global CO2 emissions are accounted by the petrochemical industry and with respect to various scopes its 20% of scope 1, 10% of scope 2, and 35% of scope 3 in each upstream and downstream industries
- Scope 1 emissions can be reduced by reducing energy consumption and changing fuel mix. With respect to Scope 2 emissions, shifting towards renewable energy sources can aid in reducing the overall carbon footprint

**Mr. Alexander Gerding**, Managing Director, BASF, also highlighted certain innovations incorporated by BASF for their decarbonization goals and achieve UN Sustainable Development Goals such as



- E-Furnace – electricity powered steam cracker
- Electrolysis
- Incorporation of heat pumps in day-to-day operations in a massive industrial scale

Discussion ended with few questions from the audiences.





## 4.4. Session 3: India's journey to be energy self – sufficient by 2047 and way forward

### Agenda

Day 1: Thursday, 27th July 2023

**1530 – 1700 hrs.**      **Session 3: India's journey to be energy self-sufficient by 2047 and way forward**

*India's vision of energy self-sufficiency by 2047 presents significant opportunities and challenges, particularly in the petrochemicals industry. Through diversification of energy sources, increased energy efficiency, domestic oil and gas exploration, adoption of advanced technologies, sustainable production practices, and collaboration, India can pave the way for a self-sufficient and sustainable future in the petrochemicals sector. This Session will highlight the government's efforts to accelerate renewable energy deployment through favourable policies, incentives, and investment frameworks. Collaboration between the government, industry stakeholders and research institutions are crucial for driving India's energy self-sufficiency journey in the petrochemicals industry. The session will emphasize the importance of policy support, regulatory frameworks, and financial incentives to attract investments, promote sustainable practices, and drive innovation.*

**Moderation by Mr. Deepak Mahurkar, Partner, PwC**

<b>1530 – 1645 Hrs.</b>	(Panel Discussion) <ul style="list-style-type: none"> <li>• <b>Shri Deepak Mishra</b>, Joint Secretary (Petrochemicals), Department of Chemicals and Petrochemicals, Government of India</li> <li>• <b>Mr. Janardhanan Ramanujalu</b>, Vice President, Regional Head- South Asia &amp; Australia, SABIC India</li> <li>• <b>Mr. Navanit Narayan</b>, Director &amp; CEO, Haldia petrochemicals Limited</li> <li>• <b>Mr. Sankash Venkatesh</b>, Managing Director, and Partner at BCG</li> <li>• <b>Mr. Sujoy Choudhury</b>, Director (Planning &amp; Business Development), IOCL</li> <li>• <b>Ms. Vartika Shukla</b>, CMD, EIL</li> </ul>
<b>1645 – 1700 Hrs.</b>	Chief Guest Address by <b>Shri Hardeep S Puri</b> , Hon'ble Minister of Petroleum and Natural Gas & Housing and Urban Affairs, Government of India
<b>1700 – 1800 Hrs.</b>	<b>Networking Tea Break</b>

## Key Discussion Points

The key agenda of the session was to address the potential approaches, hurdles, and solutions related to achieving energy self-sufficiency in India through the growth of India's chemical and petrochemical sector.

**Mr. Deepak Mahurkar**, Partner, PwC, set the tone for the session highlighting India's current energy supplies & demand scenario and relevant questions with respect to India's energy self-sufficiency from chemicals and petrochemicals sector



- The primary energy demand in India has grown at a CAGR of 4% and is anticipated to grow at the same rate till 2030–35 but India's GDP has and is projected to grow at around 6–9% in this period wherein the subject of energy securitization arises due to a supply-demand gap
- But despite this scenario, India has never suffered from energy supplies. India being the 3rd largest energy consumer in the world have imported ~53% of its primary energy demand
- Relevant questions highlighted:
  - Challenges of feedstocks for India's chemical and petrochemical sector
  - Import dependency on feedstocks, etc.

**Mr. Janardhanan Ramanujalu**, Vice President, Regional Head- South Asia & Australia, SABIC India elaborated on the feedstocks challenges for the chemicals and petrochemicals sector



- The chemical industry consumes only 10–12% of the hydrocarbons as feedstocks. In terms of capacity, the global refining capacity is 5 billion MT, and the global chemical and petrochemical capacity is 400 million MT constituting around 1/10th of the refining capacity. Hence, the feedstock challenge for chemicals and petrochemicals is not a major one
- With respect to scenarios of high feedstock prices, despite fluctuations in the feedstock prices, these commodities have been providing money profitably for the last 150 years. Companies aiming for long-term assets operating for 40–50 years can withstand such pricing cycles and still be profitable

**Mr. Sujoy Choudhury**, Director (Planning & Business Development), IOCL, elaborated on the management of feedstocks for fuels and chemicals & petrochemicals production and feedstock dependency on imports & domestic



- The primary concern as the citizen of India, our foremost responsibility to ensure that energy is available at an affordable rate
- Growing energy demand and urbanization rate leads to growing chemicals and petrochemicals demand in India. Hence, it becomes utmost important to maintain a balance between fuels and chemicals in each situation

- Modern refineries are designed in a way to provide flexibility in switching to chemicals whenever required
- With respect to import and domestic dependencies of feedstocks, India appears to be a bit balanced on the building blocks but on the intermediates and end products, India is highly import dependent

**Ms. Vartika Shukla**, CMD, EIL, elaborated on the progress India has made from design engineering of energy efficiency assets and finesses of Indian companies in terms of feedstock utilization and prospects of a real chemical industrial belt wherein all required utilities will be set up by a single company



- EIL has worked on almost all PSU refineries in India and has provided them short term and long-term goals and gap reduction interventions with respect to development of energy efficient refineries
- With respect to chemicals and petrochemicals, current refineries configurations are customized for petrochemicals. But being energy intensive, newer technologies and newer high efficiency equipment's will play a very crucial role in effective petrochemical integration
- With respect to feedstock utilization, India still faces challenges in the petrochemical feedstock. But the utilization of EVs in the transportation segment will result in substantial release of naphtha component in the current and upcoming petrochemical complexes thus providing higher proportion of feedstocks
- With respect to the chemical industrial belt, it is very difficult to put this up because of its complexity. Such intentions will require methodical feasibility and location specific tie ups with specific industries providing assurance on a project-to-projects basis





**Shri Deepak Mishra**, Joint Secretary (Petrochemicals), Department of Chemicals and Petrochemicals, Government of India elaborated on government's perspective of India's chemicals and petrochemical industries and its target for carbon emissions



- With the focus shifting on sustainability, clear carbon neutral targets, and regulations from Ministry of Environment, Forest, and Climate Change in terms of producer responsibilities; the government is also focusing on the chemicals and petrochemicals sector along with other sectors for achieving Net Zero ambitions
- With respect to domestic industry, India's chemical and petrochemical sector is on a turbo growth path with lots of investments inflowing in the sector today

**Mr. Navanit Narayan**, Director & CEO, Haldia petrochemicals Limited highlighted key aspects on Indian petrochemical industry's dependence on feedstock imports and on the availability of key technology essential for the chemicals and petrochemical sector in India



- Haldia Petrochemicals and other petrochemical companies in India imports more than 50% of their feedstock requirement (Naphtha) and this huge import dependency impacts Indian economy during geopolitical events in the forms of huge fluctuations in costing suggesting that there is always an element of risk involved in feedstocks dependency from imports
- With respect to technology availability, India has an opportunity to build in more technologies ourselves for e.g., Lamas has got a big R&D center in Gurgaon leveraging India's talent pool to create more technologies which the industry will need

**Mr. Sankash Venkatesh**, Managing Director, and Partner at BCG, elaborated on how feedstock import dependency will impact growth of diesel like products and chemical feedstocks in India



- In terms of India's perspective, we need to keep an eye on how much light motor vehicle fuel will be required from gasoline side while still getting prepared for over index session on the diesel and other lighter feedstocks
- Since chemicals side of thing will pretty much drive the value pool (if commercial viability is established) but integration of pet chem is absolutely a no brainer which can bring in interdependencies and make sure we have the flexibility to switch from gasoline pools to diesel to petrochemicals side of things

The discussion was ended by Vote of Thanks from **Mr. Deepak Mahurkar**, Partner, PwC.

## 4.5. Session 4: FTAs – Connecting the world – Vasudhaiva Kutumbakam “One Earth, One Family, One Future”

### Agenda

Day 1: Thursday, 27th July 2023

1800 – 1900 hrs.	<b>Session 4: FTAs – Connecting the world - Vasudhaiva Kutumbakam "One Earth, One Family, One Future"</b>
------------------	---

*Free Trade Agreements (FTAs) signed by the Indian chemical and petrochemical industry are playing a significant role in connecting the world by increasing trade and investment flows between India and other countries. It facilitates the establishment of efficient supply chains, which enable Indian chemical and petrochemical companies to access raw materials and other inputs from other countries. This helps to create a more connected and efficient global supply chain, which benefits all stakeholders involved. FTAs help to attract foreign investments into India's chemical and petrochemical industry by providing a conducive environment for foreign companies to invest. This results in the creation of new jobs and the development of new infrastructure, which further strengthens the industry's ability to connect with the world.*

**Moderation by Mr. Kamal Nanavaty, President, CPMA**

1800 – 1805 Hrs.	Context Setting by <b>Shri Arun Baroka</b> , Secretary (Chemicals and Petrochemicals), Department of Chemicals & Petrochemicals, Government of India
------------------	--

1805 – 1835 Hrs.	(Panel Discussion) <ul style="list-style-type: none"> <li>• <b>Mr. Deepak C Mehta</b>, Chairman and Managing Director, Deepak Nitrite Ltd.</li> <li>• <b>Mr. Bimal Goculdas</b>, Managing Director and CEO, Dharamsi Morarji Chemical Co. Ltd. and President, Indian Chemical Council</li> <li>• <b>Mr. Prabh Das</b>, MD &amp; CEO, HPCL - Mittal Energy Ltd.</li> <li>• <b>Mr. AS Sahney</b>, ED Petrochemicals, IOCL</li> </ul>
------------------	--

1835 – 1840 Hrs.	Guest of Honor Address by <b>Shri Bhagwanth Khuba</b> , Hon'ble Minister of State, Ministry of Chemicals & Fertilizers and Minister of State, Ministry of New & Renewable Energy, Government of India
------------------	---

1840 – 1855 Hrs.	Chief Guest Address by <b>Shri Piyush Goyal</b> , Hon'ble Minister of Commerce & Industry, Consumer Affairs, Food & Public Distribution, Textiles, Government of India
------------------	--

1855 – 1900 Hrs.	Concluding Remarks & Vote of Thanks by <b>Mr. Shailesh K Pathak</b> , Secretary General, FICCI
------------------	--



## Key Discussion Points

The key agenda of the session was to address how FTAs can play a major role in the development of India's chemical and petrochemical industry

**Mr. Deepak C Mehta**, Chairman and Managing Director, Deepak Nitrite Ltd set the tone for the session



- India is being considered as the 2nd best source of supply of chemicals after China. But while focusing on exports and the Indian industry, we need to see that technologically we are as good if not better than the world in few critical areas
- Earlier when India used to sign FTAs with foreign countries, we used to not feel bold as we are today. Today, under the leadership of Shri Piyush Goyal, Hon'ble Minister of Commerce & Industry, Consumer Affairs, Food & Public Distribution, Textiles, Government of India, we can talk with the world leaders, look at mutual interest rather than one-sided interest. Such FTAs could prove beneficial to the domestic sector and develop it as a hub for manufacturing for the world
- With the working out of both the ministries, Ministry of Commerce & Industry and Ministry of Chemicals & Fertilizers, we might make India's chemicals and petrochemicals sector competitive at the global level



**Shri Piyush Goyal**, Hon'ble Minister of Commerce & Industry, Consumer Affairs, Food & Public Distribution, Textiles, Government of India addressed the gathering



- Sustainability and Circularity are the future of the world and India's own role as a responsible global citizen in meeting the very serious challenge of climate change
- Promoting circularity will help us in embracing sustainability and the conscious initiatives taken by India's chemicals and petrochemicals industry to find ways and means for the solution will reflect to world that Indian products and processes are moving towards carbon utility and are engaged in a mission to balance our carbon needs with other sustainable practices
- India's chemical and petrochemical sector has grown in a large industry base having tentacles in agriculture, pharmaceuticals, healthcare, textiles, etc.
- Even though India doesn't have crude oil resources like Middle East, but India's domestic market is so large that if we focus on scale, quality, innovation, etc. we can step ahead of the rest of the world
- India's growth story to USD 35 trillion economy is not possible without chemicals and petrochemicals. Hence, the industry should be looking forward for big targets, scales, and intent to capture international markets



## 4.6. FICCI Chemicals & Petrochemicals Industry Awards

### Agenda








Day 1: Thursday, 27th July 2023

1900 – 1930 Hrs.	FICCI Chemical and Petrochemical Industry Awards
1900 - 1910 Hrs.	Welcome Remarks by FICCI
1910 - 1920 Hrs.	Address by <b>Shri Arun Baroka</b> , Secretary (Chemicals and Petrochemicals), Department of Chemicals & Petrochemicals, Government of India
1920 - 1930 Hrs.	Chief Guest Address by <b>Shri Bhagwanth Khuba</b> , Hon'ble Minister of State, Ministry of Chemicals & fertilizers and Minister of State, Ministry of New & Renewable Energy, Government of India
1930 - 2000 Hrs.	FICCI Chemicals & Petrochemicals Awards Distribution
2000 hrs. Onwards	Business Networking Dinner

### Key Discussion Points

FICCI initiated the "FICCI Chemicals and Petrochemicals Awards Scheme" in 2012. The basic purpose of this Award Scheme is to encourage innovation, process excellence, sustainability and facilitate best practices in the Chemical and Petrochemical industry. FICCI Chemicals and Petrochemicals awards 2023 were distributed on 27th July 2023 at Le Meridien, New Delhi in the presence of eminent dignitaries from Industry and Ministry of Chemicals and Fertilizers.



Awards	Category	Company
<b>For Product Innovator of the Year</b> 	Chemicals	Hindustan Petroleum Corporation Limited (BCA)
	Chemicals	Epsilon Advanced Materials Limited
	Petrochemicals	Asian Paints Limited
<b>For Sustainability in Best Green Product</b> 	Chemicals	Tata Chemicals Limited
	Petrochemicals	Asian Paints Limited
	Petrochemicals	Indian Oil Corporation Limited – Panipat (3G Ethanol)
<b>For Sustainability in Excellence in Safety</b> 	Chemicals	National Peroxide Limited
	Chemicals	Tagros Chemicals India Private Limited – Cuddalore Plant
	Chemicals	Lanxess India Private Limited
	Petrochemicals	Indian Oil Corporation Limited – LAB Plant
	Petrochemicals	Indian Oil Corporation Limited Petrochemicals (Paradip & Panipat)
<b>For Leader of Energy Management</b> 	Chemicals	Grasim Industries Limited, Chemical Division – Ganjam
	Chemicals	Gharda Chemicals Limited, Lote Division
	Chemicals	Jubilant Ingrevia Limited, Gajraula Plant
<b>For Leader of Water Management</b> 	Chemicals	Rallis India Limited - Dahej
	Petrochemicals	Deepak Nitrite Limited
	Petrochemicals	Xpro India Limited, Biax Division - Barjora Unit II
<b>For Excellence in Corporate Environment Responsibility</b> 	Chemicals	Godavari Biorefineries Limited
	Chemicals	Gharda Chemicals Limited, Lote Division
	Petrochemicals	Brahmaputra Cracker and Polymer Limited
<b>For Exemplary Performance for Supporting "Make in India"</b> 	Chemicals	Excel Industries Limited
	Chemicals	Epsilon Advanced Materials Limited



<b>For Excellence in Sub-Sector</b>  ★★★	<b>Agrochemicals</b>	UPL Limited, Unit-5
	<b>Plastics, Polymers &amp; Polymer Processing/compounding chemicals</b>	Indian Oil Corporation Limited
	<b>Plastics, Polymers &amp; Polymer Processing/compounding chemicals</b>	Ddev Plastiks Industries Limited
<b>For Digitech front Runner of the Year</b>  ★★★	<b>Chemicals</b>	Reliance Industries Limited
<b>For Sustainability in Driving Circular Economy</b>  ★★★	<b>Chemicals</b>	S.A. Pharmachem Private Limited
	<b>Chemicals</b>	Excel Industries Limited
	<b>Chemicals</b>	Aarti Industries Limited
	<b>Petrochemicals</b>	Indian Oil Corporation Limited
<b>For Front Runner in GHG Emissions Reduction</b>  ★★★	<b>Chemicals</b>	Asian Paints Limited
<b>For Company of the Year</b>  ★★★	<b>Chemicals</b>	Jeevan Chemicals Private Limited
	<b>Chemicals</b>	Gharda Chemicals Limited, Lote Division
	<b>Chemicals</b>	Balaji Amines Limited
	<b>Petrochemicals</b>	Reliance Industries Limited
	<b>Petrochemicals</b>	Indian Oil Corporation Limited
<b>For Lifetime Contribution to the Industry</b>  ★★★	<b>Lifetime Achievement</b>	Shri Sujoy Choudhury – Director (Planning & Business Development) – Indian Oil Corporation Limited
	<b>Lifetime Achievement</b>	Shri Nand Kishore Aggarwal – Chairman – Crystal Crop Protection Limited
	<b>Lifetime Achievement</b>	Shri Vinod Saraf – Chairman- Vinati Organics Limited

## 5. Highlights from the Day 2

### 5.1. Session 5: Role of Banks and Private Equity Funds in supporting organic and inorganic growth in the chemicals space

#### Agenda

Day 2: Friday, 28th July 2023

1030 - 1145 Hrs.

**Session 5: Role of banks and Private Equity funds in supporting organic and inorganic growth in the chemicals space**

*The chemicals and petrochemicals industry (CPC) is highly susceptible to various types of risks such as market risks, credit risks, operational risks, and regulatory risks. Overall, effective risk management is critical to ensuring financial stability and long-term success in the CPC industry. By using a combination of strategies and tools such as hedging, insurance, diversification, risk assessment and management, cash reserves, financial derivatives, and scenario analysis, CPC companies can manage risk and navigate the uncertainties of this volatile industry.*

**Moderation and Context Setting by Mr. Saurabh Batra, Partner, PwC**

1030 – 1145 Hrs.

Chairperson: **Shri Sanjay Rastogi**, Additional Secretary and Financial Adviser, Minister of Chemicals and Fertilizer, Government of India  
(Talk/ Presentations)

- Talk by **Mr. Koushik Bhattacharya**, Managing Director and Head - Industrials Investment Banking, Avendus Capital
- Talk by **Mr. K. Satyanarayana Raju**, Managing Director and CEO, Canara Bank
- Talk by **Mr. S Srinivasa Rao**, Deputy Managing Director & Chief Risk Officer, SBI (State Bank of India)
- Talk by **Mr. Piyush Jindal**, Group Director – Safex Chemicals India Ltd.
- Talk by **Mr. Suyog Kotecha**, Strategy – Petrochemicals, Reliance Industries Limited

#### Key Discussion Points

**Mr. Koushik Bhattacharya**, Managing Director, and Head - Industrials Investment Banking, Avendus Capital shared his views on private equity funds in India

- When a private equity fund looks at investing, they look at finite market and typically think about exiting the market in 6-7 years
- In the post COVID era, between 2020 and 2022, there have been more than 20 IPOs





**Mr. K. Satyanarayana Raju**, Managing Director and CEO, Canara Bank talked about receiving more support from the government when the investment risks are higher

**Mr. S Srinivasa Rao**, Deputy Managing Director & Chief Risk Officer, SBI (State Bank of India) highlighted following points



- They provide qualitative guidance to the business
- Highlighted that the capital expenditure in 2023 is double of 2022 already
- SBI also offers private equity funds and not only loans
- SBI Capital Markets is India's leading investment bank and project advisor and directly invest into market instruments of these companies
- There are no set rules in manufacturing industry when it comes to investments, however there are few risks that are looked at crude price movement, forex change, climate change, ESG
- Business development parks are treated as infrastructure and if project is viable, they will finance it







**Mr. Suyog Kotecha**, Strategy – Petrochemicals, Reliance Industries Limited highlighted following points

- There are 3 different types of M&A – Large deals; Opportunistic deals; Programmatic M&A String of pearls which are bite sized acquisitions
- 80% value is created by advantage value to feedstock and technology and the access to customers
- Cost of capital is one of the main points evaluated by MNCs when they look at other countries to invest in



**Mr. Piyush Jindal**, Group Director – Safex Chemicals India Ltd. talked about the company and its growth curve highlighting that the company is a decade old and in the last 5 years, the company has grown at a CAGR of 22%

## 5.2. Session 6: Fueling R&D, Skill Development, and Innovation in CPC Industry

### Agenda

Day 2: Friday, 28th July 2023

**1145 – 1300 Hrs.**      **Session 6: Fueling R & D, Skill Development and Innovation in CPC Industry**

*The chemicals and petrochemicals industry (CPC) is a highly competitive and dynamic industry that requires continuous innovation and skill development to stay ahead of the competition. Some strategies that can be implemented to increase R&D, skill development, and innovation in the CPC industry are collaboration, focus on R & D, Training and Development, Encouraging Employee Innovation, Leveraging Digital Technologies etc.*

**Moderation by Mr. Prashant Sinha, ED - Skill Development, PwC Partner**

<b>1145 – 1235 Hrs.</b>	<p>Context Setting by <b>Shri Arun Baroka</b>, Secretary (Chemicals and Petrochemicals), Department of Chemicals &amp; Petrochemicals, Government of India (Panel Discussion)</p> <ul style="list-style-type: none"> <li>• <b>Mr. Jayant V Dhobley</b>, Business Head and CEO, Global Chemicals, Fashion Yarn &amp; Insulators, Aditya Birla Group</li> <li>• <b>Mr. U.K. Verma</b>, Executive Director, EIL</li> <li>• <b>Dr. Sangeeta Srivastava</b>, Executive Director, Godavari Refineries</li> <li>• <b>Prof. (Dr.) Shishir Sinha</b>, Director General, CIPET</li> </ul>
<b>1235 – 1245 Hrs.</b>	Address by <b>Shri Atul Kumar Tiwari</b> , Secretary, Ministry of Skill Development and Entrepreneurship, Government of India
<b>1245 – 1255 Hrs.</b>	Chief Guest Address by <b>Dr. Jitendra Singh</b> , MoS (Independent Charge), Department of Science and Technology, Government of India
<b>1255 – 1300 Hrs.</b>	Vote of Thanks by <b>Mr. Shailesh K Pathak</b> , Secretary General, FICCI
<b>1300 – 1400 Hrs.</b>	<b>Business Networking Lunch</b>

## Key Discussion Points

**Shri Arun Baroka**, Secretary (Chemicals and Petrochemicals), Department of Chemicals & Petrochemicals, Government of India, set the context of the session highlighting various initiatives taken up by the department of chemicals and petrochemicals in the country related to R&D, Skill Development, and Innovation

Chemicals and Petrochemicals forms the building block of the manufacturing sector. They are present everywhere in the plastic bottles, mobiles, laptops, cables, etc.



- For setting up a refinery of 1.2 MMTPA capacity, investment required would be INR 60,000 Cr. It has also been estimated that by 2040 if we must reduce our import dependence, an investment of INR 18 Lakh Cr will be required just for setting up refinery and petrochemical industry
- To create a positive ecosystem for the sector in the country, the department has deregulated, delicensed important requirements of the industry and has set up PCPIRs (regions exclusively setting up chemical industries)
- Based on the feedback from the industry, the department has started trainings for the sector in the form of short term, monthly courses and even PhD through CIPET (Central Institute of Petroleum Engineering). Currently, 46 such centers are present in India providing environment for upskilling but much more needs to be done in future
- For further development in the sector, we need to develop strategies which can be implemented to increase not only R&D, Skill Development, CPC Industry Collaboration, Encouraging Employee Innovation, etc.





**Mr. Prashant Sinha**, ED - Skill Development, PwC Partner started the panel discussion by briefly discussing about the key insights found by PwC regarding upskilling requirement in India



- PwC's study resulted that an investment of about USD 6 trillion and USD 560 billion will be required at global and domestic level for upskilling and to unlock the economic value because of Industry 4.0
- Skilling is central to not only transitioning to Green Energy, ESG, etc. but also to unlock the economic value within the industries

**Prof. (Dr.) Shishir Sinha**, Director General, CIPET, elaborated on the need on upskilling and industry academia or training center partnership evolving in India's CPC industry in India



- Considering 140 Cr population, variety of products, variety of manufacturing sectors, etc., there is utmost need for skilled manpower related to marketing, R&D, etc. in India's chemicals and petrochemicals sector
- In that regard, CIPET had organized around 125 industries meet within its 46 centers across India in the last financial year

**Mr. Jayant V Dhobley**, Business Head and CEO, Global Chemicals, Fashion Yarn & Insulators, Aditya Birla Group, elaborated on the industry requirement around skilling in the CPC sector and the R&D landscape of the sector in India



- Chemical industry is a knowledge and skill intensive industry wherein people, machines, and materials come together. So, if something goes wrong in any part of this triangle you can have productivity loss, quality loss, and even dangerous incidents. Hence, skill of people in the chemical industry is extremely important
- With respect to R&D landscape, the chemical industry exists because of R&D and the way to direct to R&D is to solve problems. We will have to keep allocating capital to R&D for developing efficient processes and solving challenges faced by current processes

**Dr. Sangeeta Srivastava**, Executive Director, Godavari Refineries, elaborated on the upcoming future skills required in the CPC industry



- Transitioning to sustainability and circularity practice will demand new set all sets for the chemicals and petrochemicals sector in India
- It's also important that the industry and academia come closer to reduce the skill gap

**Mr. UK Verma**, Executive Director, EIL, highlighted on the core elements for technology driven innovation culture in the country



- EIL has been associated with all the technology licensors in the world and a lot is to be done to develop indigenous technology in the country. Hence, EIL is being developing indigenous technologies with respect to the niche chemicals in India
- Patenting of domestic technologies will be of utmost importance for leveraging with respect to global players
- Also, there must be strong industry – academia partnerships so that we can nurture the young talent of the country

**Shri Atul Kumar Tiwari**, Secretary, Ministry of Skill Development and Entrepreneurship, Government of India, addressed the gathering highlighting various initiatives by the ministry and need of the hour with respect to the relevant courses for India's CPC industry



- Skilling in the chemicals and petrochemicals industry is an input to attain competitiveness, productivity, and aid in economic development of the country
- Typically, chemical industries in India spend 2-3% of their revenue on R&D which is required to increase in the future



- In the context of skilling in India's CPC industry, we have Rubber, Chemical & Petrochemical Skill Development Council (RCPSDC), 6 courses in ITIs, and 32 new courses are expected to be upcoming in the country
- Based on our analysis we found Automation Assistant, BIS data warehouse expert, robotics solution specialists, ergonomics, etc. are the new qualifications required in today's context for the CPC industry
- Recycle, Reuse, Industry 4.0, Nanotechnology, etc. are few other courses which are necessary to be brought in the academia and upskill the manpower in these areas

**Dr. Jitendra Singh**, MoS (Independent Charge), Department of Science and Technology, Government of India highlighted importance of skilling of mind and current innovation initiatives undertaken in India's CPC industry



- Skilling the mind is of utmost importance before skilling into a particular sector/industry. In the context of chemicals and petrochemicals areas, skilling and R&D has to be done constantly if you must sustain and grow in the market
- In the last 9 years, the Indian government has provided favorable milieu for experimentation, deliberate path breaking initiatives, etc.

We currently consist of ~6000 startups in the bioeconomy sector due to huge bioresources availability in the country

We also have huge amount of minerals and metals that lie at the bend of the sea that amounts to a huge wealth that no other country has today

Being the 5th largest economy in the world, we have jumped 40 places in the global innovation index

**Mr. Shailesh K Pathak**, Secretary General, FICCI concluded the session with the vote of thanks



### 5.3. Session 7: Sustainability through Circular Economy

Agenda	
Day 2: Friday, 28th July 2023	
1400 – 1500 Hrs.	Session 7: Sustainability through Circular Economy
<p><i>Sustainability through circular economy is a concept that aims to promote a more sustainable and efficient use of resources by reducing waste and promoting recycling and reuse. Circular economy is an economic model that is based on the principles of reducing, reusing, and recycling materials and resources. It promotes the reduction of waste by focusing on designing products and processes that produce less waste. This is achieved through practices such as designing products that are more durable and can be easily repaired, using materials that are recyclable or biodegradable, and reducing the use of non-renewable resources, encourages collaboration between different sectors and stakeholders to achieve a more sustainable and efficient use of resources. This is achieved through practices such as creating closed-loop supply chains, promoting circular business models, and working together to create sustainable solutions to common problems. It promotes sustainability by reducing waste, promoting recycling and reuse, increasing energy efficiency, promoting sustainable sourcing, and encouraging collaboration.</i></p>	
Moderation by Ms. Sangeetha Raghuram, Executive Director - Sustainability Practice, PwC	
1400 – 1450 Hrs.	(Panel Discussion) <ul style="list-style-type: none"> <li>• <b>Mr. Rakesh Mehta</b>, Director, ExxonMobil Product Solutions, Asia Pacific</li> <li>• <b>Mr. Avinash Verma</b>, President - PetChem, Reliance Industries Limited</li> <li>• <b>Mr. Amit Bansal</b>, Director of Sales - Process Catalysts (India, ASEAN, Oceania), BASF</li> <li>• <b>Mr. Manish Panchal</b>, Executive Director, Equirus Capital</li> </ul>
1450 – 1500 Hrs.	Chief Guest Address by <b>Dr. S.K. Goyal</b> , Chief Scientist and Head, National Environmental Engineering Research Institute

### Key Discussion Points

The key agenda of the session was to discuss the importance of a circular economy in order to attain sustainability goals

**Ms. Sangeetha Raghuram**, Executive Director - Sustainability Practice, PwC set the tone for the session by talking about circularity:



- Typical business model can be a linear model (take, make and dispose), whereas circularity is about closing the loop which will start with replacing raw materials which are using virgin materials with renewable and/or recycled materials
- Circularity can also be achieved by increasing the life of the product by increasing the lifespan, bringing in reusability in any manner and avoiding waste completely bringing in the aspects of recycling and refurbishing

- In today's world, the government, businesses, and people are talking about circularity because climatic events and resource availability are affecting supply chains, hence, circularity is an immediate need that everyone needs to look into
- Circularity is not only needed because it is the right thing to do due to compliance requirements but also because it makes business sense and to ensure sustainable business models
- The regulatory evolution that has happened in the recent past itself has changed the market with more emphasis on traceability and bringing in digitization to know from where the product is sourced

**Mr. Rakesh Mehta**, Director, ExxonMobil Product Solutions, Asia Pacific shared some insights on the sustainability and circularity initiatives that have been undertaken by ExxonMobil



- ExxonMobil is progressing on advanced recycling solutions globally. Advanced recycling is transforming plastic waste into molecules that can be further used as raw materials to produce virgin plastics and other valuable products.
- They have started a new plant in Baytown, Texas, USA in 2022 where they transform 40,000 tons of plastic waste in a year, and they intend to grow this capacity over the next few years. They are looking at opportunities across the globe in Singapore, Malaysia, Indonesia and few European countries and they expect that they will be able to transform 500,000 tons of plastic waste by end of 2026 through the advanced recycling process.
- ExxonMobil is also working on mechanical recycling and have set up a research & development lab that are working with the plastic industry in India, where they bring in new solutions to redesign the product and the mechanically recycled products into various applications
- Few challenges in bring these solutions to a commercial scale in India has been policies in terms of waste management systems, quality standards of recycled products, and creating an enabling environment to get more investments into the recycling solutions



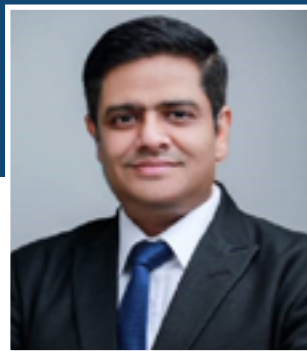
- They are still at the stage of building partnerships and collaborations and with the introduction of EPR regulations, with further progress and maturity with EPR, they will find more involvement from petrochemical producers, brand owners, recycling companies with more companies beginning to collaborate
- Science based thoughtful solutions need to be looked at for sustainability and circularity because plastics is not bad, but plastic waste is bad

**Mr. Avinash Verma**, President - PetChem, Reliance Industries Limited shared their experience and challenges faced in working towards sustainability and circularity



- The larger initiatives towards sustainability by Reliance are to be net-zero by 2035. They are venturing into new energy, green hydrogen, solar power among others. Total investments which have been planned are close to INR 70,000 Cr to promote sustainability in all aspects of Reliance Industries Limited.
- They are working on redesigning the products and materials, rewriting the recipe of materials so that it can promote circularity. They are also supporting the industry by creating a downstream ecosystem to promote circularity and creating a complete circular loop.
- Reliance works on recycling of polyester as well as polymers. They recycle PET bottles to fiber and into garments to promote it globally and has found worldwide acceptance of the recycled fiber that they produce which goes into 100% recycled fabric.
- In plastic recycling, they have created a complete system and created a brand to promote end-of-life plastic waste for application in road and have obtained vital certifications and approvals, although certain approvals are still in pursuit
- They are building the capability for chemical recycling in India which can convert end-of-life plastic to oil which will be then processed in their own refineries creating a circular loop. They have also launched circular plastic polymers in the market – EcoRepol and EcoRelene.
- Scalability will be a major challenge going forward with circularity, everyone needs to evolve the whole dynamics and ecosystem of how it can be scaled up to the levels it is expected to be scaled up to. The issues with collection and quality of collection, quality of recycled materials will have to be tackled through development of new solutions at every stage and simplification of products
- Big opportunities are available for new entrepreneurs that venture into the field of sustainability and circularity and get into the value chain of recycling and upcycling

**Mr. Amit Bansal**, Director of Sales - Process Catalysts (India, ASEAN, Oceania), BASF shared their experience and journey undertaking several initiatives to reduce emissions



- BASF believes chemical recycling is of utmost importance as mechanical recycling can lead to several loops which are definite, however, to have a sustainable recycled loop, chemical recycling is very important. They are already implementing plastic to bio-oil conversion and have already tied up with companies in North America where the bio-oil is being used as feedstock for crackers to generate plastic.



- Apart from typical HDPE and LLDPE recycling, they are also looking to bring new material loops like polystyrene, mattress foams like polyurethane into circularity so that these polymers can be converted back into monomers and then back into new materials
- They are looking to employ a new innovative approach called biomass balanced approach wherein they have been able to replace some of the feedstock for cracker and downstream petrochemical plants with bio-based feedstock. Partial volumes of feedstock are coming from bio-based feedstock and remaining portion is coming from fossil base feedstock.
- They have developed a biodegradable and fully compostable plastic called Ecovio® that is already available in the market. BASF has committed almost USD 4 billion in investments by 2030 in all these initiatives put together towards sustainability and circularity
- In the plastic recycling value chain, there are aggregators, sorters, convertors, and processors. One of the biggest challenges in this value chain was for the sorters, and to solve this, they worked with a company called Trinamix to develop a handheld spectrophotometer that can easily tell what the composition of the plastic product is

**Mr. Manish Panchal**, Executive Director, Equirus Capital shared his views on a broader perspective of industry 5.0 and sustainability



- The percentage of total circularity globally is 7.2% according to 2023 report which is expected to increase going forward and make it balanced.
- Industry 1.0 with the widespread use of coal and steam power went on for almost 200 years from 1700 to 1900; Industry 2.0 with the use of electricals for around 70 years from 1900 to 1970; Industry 3.0 with disruptions from electronics usage for around 40 years from 1970 to 2010; Industry 4.0 with digital initiatives and upgrades; Many people talk about Machine Learning (ML) and Artificial Intelligence (AI) as Industry 5.0, but there has to be something different in order to be classified as industry 5.0 and that is sustainability which has been talked about for quite some time.
- Taking Electric Vehicles (EVs) as an example, the number of components which are existing in the current IC vehicle which is using conventional transportation fuels such as diesel or petrol and the conversion of this IC vehicle to a lithium-ion battery powered vehicle has reduced the number of components from few hundred components to less than 70 components. The niche businesses into supply of auto components are in a mode of revamping / relooking / reimagining their businesses.
- There are 5Rs- Reduce, Reuse, Recycle, Replace and Reimagine. There are startups working on converting MSW to logs for wood replacement with patents granted and pilot tests concluded. Majority of the venture capitals are focused on tech-based startups, but more focus needs to be shown towards manufacturing startups focusing towards ESG and sustainability

**Dr. S.K. Goyal**, Chief Scientist and Head, National Environmental Engineering Research Institute gave his concluding remarks on sustainability and circularity



- Sustainability will help with more profitability, better and more efficient utilization of resources and reduction of impact on the environment in terms of waste, water and air
- Large refineries and petrochemical companies emit high amounts of hazardous waste, which is not being converted into value added products, hence, new solutions need to be developed to overcome the disposal of these wastes. Big industries need to interact with and support MSMEs who can help take this waste and convert them into value added products.
- For example, when conducting the Environmental Impact Assessment (EIA) study for Dahej PCPIR, it was found that there is hardly any correlation among the industries and most companies are working in isolation. When developing industrial parks / zones, companies need to be set up in such a way that there is cross-collaboration between companies to make use of waste generated need
- Majority of waste is generated due to the current lifestyle. For example, the packaging material from shopping online is typically sent to MSWs for disposal. Solutions need to be thought of developed to address these challenges
- What an individual can do in their personal life and professional life and think about further steps that can be taken in order to be integrated with the society and ecosystem



## 6. Valedictory Session

### Agenda

Day 2: Friday, 28th July 2023

#### 1530 – 1615 Hrs. Valedictory Session

*This Valedictory Session will mark the crowning moment of the Summit GCPMH 2023, a gathering that has ignited our minds and hearts with profound insights and knowledge in the realm of Chemicals and Petrochemicals. As we come together one final time with this session, we will take pride in celebrating the triumph of collaboration and the remarkable exchange of ideas that have enriched our collective understanding. This session will provide an opportunity to extend heartfelt gratitude to all the participants whose valuable contributions have fuelled the success of this third edition of Summit on Global Chemicals and Petrochemicals Manufacturing Hubs in India.*

**1530 – 1540 Hrs.** Welcome Address by **Mr. Prabh Das**, Chairman – FICCI Petrochemicals Committee and MD & CEO, HPCL – Mittal Energy Ltd.

**1540 – 1550 Hrs.** Debriefing by **Mr. Deepak C Mehta**, Chairman, FICCI National Chemical Committee and Chairman and Managing Director, Deepak Nitrite Ltd.

**1555 – 1600 Hrs.** Address by **Shri Arun Baroka**, Secretary (Chemicals and Petrochemicals), Department of Chemicals & Petrochemicals, Government of India

**1600 – 1610 Hrs.** Guest of Honor Address by **Shri Bhagwanth Khuba**, Hon'ble Minister of State, Ministry of Chemicals & fertilizers and Minister of State, Ministry of New & Renewable Energy, Government of India

**1610 – 1615 Hrs.** Chief Guest Address by **Dr. Mansukh Mandaviya**, Hon'ble Union Minister of Health & Family Welfare and Chemicals & Fertilizer, Government of India

Vote of Thanks by **Shri Susanta Kumar Purohit**, Joint Secretary (Chemicals), Department of Chemicals & Petrochemicals, Government of India

**1615 Hrs. onwards** Networking Tea

### Key Discussion Points

**Mr. Prabh Das**, Chairman – FICCI Petrochemicals Committee and MD & CEO, HPCL – Mittal Energy Ltd, addressed the gathering with few key highlights of the 2-day summit

- The Global Chemicals and Petrochemicals Manufacturing Hubs in India 2023 summit has already made a positive impact. The presence of hon'ble finance minister and hon'ble commerce minister has really given a boost to the chemicals and petrochemicals sector





- State governments of Andhra Pradesh, Gujarat, Odisha, and Rajasthan showcased that they are very serious in developing the sector in their respective states by walking through the initiatives, policies, schemes, etc. considered by the states

**Mr. Deepak C Mehta**, Chairman, FICCI National Chemical Committee and Chairman and Managing Director, Deepak Nitrite Ltd. highlighted key aspects of the 2 - day summit to the chief guest **Dr. Mansukh Mandaviya**, Hon'ble Union Minister of Health & Family Welfare and Chemicals & Fertilizer, Government of India



- Hon'ble minister in her speech shared that the chemicals and petrochemicals business in India is very important for the Indian economy. Hence, if the challenges and opportunities within the sector are appreciated by the ministry, we could receive a strong support in achieving our targets
- The minister specified 4 key areas/pillars related to sustainability and circularity with respect to chemicals and petrochemicals which are to be addressed for development of the sector
- In the last two days, we had good sessions consisting of national and multinational companies each discussing about the new technologies and solution which can be implemented in future
- It has been the first time that we had people from the banking sector discussing how can we address few major challenges in the chemicals and petrochemicals sector through banking support, banking infrastructure, investments, etc.
- The 2-day summit has paid its dividends by having all the people here discussing about various options and approaches in developing India's chemicals and petrochemicals industry as a hub for global manufacturing

**Shri Arun Baroka**, Secretary (Chemicals and Petrochemicals), Department of Chemicals & Petrochemicals, Government of India further highlighted additional points of the 2-day summit



- We are thankful for the hon'ble minister Dr. Mansukh Mandaviya, Hon'ble Union Minister of Health & Family Welfare and Chemicals & Fertilizer, Government of India for providing guidance in organizing the 2-day summit and guided on the various sessions to be included in the summit
- We had Smt. Nirmala Sitharaman, Hon'ble Minister of Finance and Corporate Affairs, Government of India, Shri Bhupendra Yadav, Hon'ble Minister of Environment, Forest and Climate Change, Ministry of Environment, Forest and Climate Change, Government of India (Video Meeting), Shri Piyush Goyal, Hon'ble Minister of Commerce & Industry, Consumer Affairs, Food & Public Distribution, Textiles, Government of India, and Dr. Jitendra Singh, MoS (Independent Charge), Department of Science and Technology, Government of India who shared their views on the importance and development of India's chemicals and petrochemicals sector
- In this edition of GCPMH, we also involved the banking sector since the development of the sector will require funding. Hence, potential routes of funding, funding mechanism were discussed

- We discussed on the Net Zero and various scenarios to attend Energy Self – Sufficiency by 2047. We also discussed about the future FTA's mechanism in detail. Being a knowledge intensive industry, we discussed about the level of skilling required at all levels for effective operations of the sector. Hence, based on our assessment, the 2-day summit was very successful

**Dr. Mansukh Mandaviya**, Hon'ble Union Minister of Health & Family Welfare and Chemicals & Fertilizer, Government of India highlighted on how Indian chemicals and petrochemicals industries can leverage Indian landscape to remain competitive at global scale



- Industries play an important role in the upliftment of a country's economy, economic generation, and its self-reliance. Industries satisfies a country's needs. Hence, it is the responsibility of a government to aid in the industrial development
- Companies in India's chemicals and petrochemicals sector have a great opportunity to collaborate with foreign players since the world considers India as one of the best destinations for investments due India's 1.4 billion population (making it world's biggest consumer) and huge diversity
- Hence, discussions are important on how to leverage India's advantage (as being the choice of global investments) with respect to the chemicals and petrochemicals industry. These initiatives will encourage manufacturing in the country and provide opportunities for joint ventures
- To achieve this, we need focus on our policy, analyze international markets to remain competitive with them, undertake government's support in terms of policies and schemes which will aid in remaining competitive with global players
- Also, continues brainstorming among the industrial players, government, and academia must be carried out comparing global competition because to remain competitive globally, we will have to consider global industries, global players, etc. and accordingly develop our policies and schemes
- Lastly, the output of the 2-day event must be discussed among a committee of 4-5 major players and effective measures must be identified towards implementing those outputs for the development of the chemicals and petrochemicals sector in the country

The session was ended by Vote of Thanks from Mr. Deepak C Mehta, Chairman, FICCI National Chemical Committee and Chairman and Managing Director, Deepak Nitrite Ltd.

## 7. Digital Amplification

## Massive growth in online conversations around summit day

## Potential Reach

21.8M

➤ 6.4M%

Compared to the previous period

One of our key benchmarks was the hashtag- #GCPMH2023 performed well with an organic potential reach of 21.8 Mn+

Key stakeholders and verified accounts with high-following engaged with the hashtag in the conversation regarding the Summit

## Hashtag performed massively well with consistent conversations

- There was **23%** positive sentiments and 0% negative sentiments for #GCPMH2023
- Potential reach: **21.8 Mn+**
- Main keywords related to the conversation included petrochemicals, g20 org, summit, global, nsitharaman, and so forth
- Twitter led the share of conversations with **99.6%**
- **79.2%** conversations belonged to males, while **20.8%** belonged to females
- The age group with maximum involvement in the conversation was 18-24 years with **40%**

## THEMES





## Most engaging posts



3rd edition of Global Chemicals and Petrochemicals Manufacturing Hubs in India begins at Hotel Le Meridien, New Delhi.



Ministry of Chemicals and Fertilizers organizes the 3rd edition of the Summit on Global Chemicals and Petrochemicals Manufacturing Hubs- #GCPMH2023 in New Delhi.



FICCI President Mr @subhrakantpanda welcomes Hon'ble Finance Minister Smt @nsitharaman with a Green Certificate.



Ministry of Chemicals and Fertilizers will organize the 3rd edition of the Summit on Global Chemicals and Petrochemicals Manufacturing Hubs- #GCPMH2023 in New Delhi tomorrow.

Source: Talkwalker Insights

## Key Insights: Our posts gained massive organic reach

We executed strategic and consistent social media amplification for the Summit on Global Chemicals and Petro-Chemicals Manufacturing Hubs in India, along with main day live tweeting and coverage.

Following are the key numbers to gauge the performance:



**Twitter**/@GCPMHIndia

Reach

**95K**



**LinkedIn**/@GCPMHIndia

Reach

**40K+**

Duration: 22nd May- 31st July 2023

## Posts at a Glance

### Pre-Event Posts

Consistently promoted the summit on Twitter and LinkedIn with **60+ posts**, from June to July, including speaker testimonials, posters, Gifs, videos, and so forth.




## During the Event

Amplified live updates of the summit on Twitter with **30+ live tweets**, covering each panel discussion as well as speeches by the Hon'ble ministers and guest of honors.

**Summit on GCPMH in India**  
@GCPMHIndia

We are commencing with the 'Summit on Global Chemicals & Petrochemicals Manufacturing Hubs in India', where sector specialists will outline the way forward for the overall growth of the industry.


#GCPMH2023



Nirmala Sitharaman and 4 others

**Summit on GCPMH in India**  
@GCPMHIndia

Winners shining in the glory of achievement, here at #GCPMH2023. Here's a look at some of the winners of FICCI Chemical and Petrochemical Industry Awards. Acknowledging the contribution in the sector's growth, these awards are a testament of the industry's potential.




FICCI and Department of Chemicals & Petrochemicals  
8:21 PM - Jul 27, 2023 - 43 Views

**Summit on GCPMH in India**  
@GCPMHIndia

Here's Mr. Deepak C Mehta, Chairman, FICCI National Chemical Committee and Chairman and Managing Director, Deepak Nitride Ltd, setting the tone for the upcoming session at #GCPMH2023

@GCPMHIndia

Watch the summit live here: [youtube.com/watch?v=XtJgRn...](https://www.youtube.com/watch?v=XtJgRn...)




FICCI and 2 others  
10:25 AM - Jul 27, 2023 - 42 Views

**Summit on GCPMH in India**  
@GCPMHIndia

LIVE NOW #GCPMH2023. Shri @nageswarbhatu, Hon'ble Minister of State, Ministry of Chemicals & Fertilizers and Minister of State, Ministry of New & Renewable Energy, Government of India delivering a special address. Stay in loop for live updates.

@GCPMHIndia




FICCI and Department of Chemicals & Petrochemicals

**Summit on GCPMH in India**  
@GCPMHIndia

Playing now: A video message by Chief Guest Shri @nageswarbhatu, Hon'ble Minister of Environment, Forest and Climate Change, @moef, on the growth trajectory of the chemical sector.

Stay tuned for live updates on #GCPMH2023.


@GCPMHIndia



FICCI and Department of Chemicals & Petrochemicals

**Summit on GCPMH in India**  
@GCPMHIndia

During Covid, India helped countries with vaccines while maintaining the quality quotient, India has become a hub for global investments, and we need to channelize that. Dr. @mansukhmandviya, Hon'ble Union Minister of @MoHFW\_INDIA, and Chemicals & Fertilizers, Govt. of India.




FICCI and Department of Chemicals & Petrochemicals

**Summit on GCPMH in India**  
@GCPMHIndia

Let's get started! Mr. @nageswarbhatu, President, FICCI welcomes everyone to #GCPMH2023 with a special address.


@GCPMHIndia

Watch the summit live here: [youtube.com/watch?v=XtJgRn...](https://www.youtube.com/watch?v=XtJgRn...)



FICCI and Department of Chemicals & Petrochemicals  
10:27 AM - Jul 27, 2023 - 41 Views

As a government, we recognise India's role in shaping the future, especially in tackling climate change and promoting sustainability with circular practices. @GCPMH2023, Minister of Commerce & Industry, Consumer Affairs, Food & Public Distribution, Textiles, Govt. of India.



FICCI and Department of Chemicals & Petrochemicals



## Post Event Video

Encapsulated the two days of the summit in a post-show video.



## Leveraging YouTube

Populated GCPMH Youtube channel with exclusive video content including pre-event teaser and Mr. Arun Baroka's testimonial recording.



## 8. PR Coverage

**PM: AIM TO MAKE INDIA A MANUFACTURING HUB**  
**Chemicals, Petrochem PLI Likely**  
 PM Narendra Modi on Thursday said the government is considering a production-linked incentive (PLI) scheme for the chemicals and petrochemicals sector. **++ 17**

**Centre to consider PLI scheme for chemicals and petrochem industry**  
 New Delhi, Friday, 28 July 2023 (Page No-41)  
 PM Narendra Modi on Thursday said the government is considering a production-linked incentive (PLI) scheme for the chemicals and petrochemicals sector. **++ 17**

**GREEN GROWTH**  
 Union finance minister Nirmala Sitharaman  
 I would urge the [chemical and petrochemicals] industry to focus on sustainability and India's national commitment towards the environment

**ET THE ECONOMIC TIMES**  
 New Delhi, Friday, 28 July 2023 (Page No-41)  
**PM: AIM TO MAKE INDIA A MANUFACTURING HUB**  
**Chemicals, Petrochem PLI Likely**  
 PM Narendra Modi on Thursday said the government is considering a production-linked incentive (PLI) scheme for the chemicals and petrochemicals sector. **++ 17**

**BID TO MAKE INDIA A MANUFACTURING HUB**  
**FM: PLI Scheme Likely for Chemicals & Petrochem**  
 Says global firms in chemicals sector want to diversify their production

**Green Goals**  
**Small FM Says**  
 PM Narendra Modi on Thursday said the government is considering a production-linked incentive (PLI) scheme for the chemicals and petrochemicals sector. **++ 17**

**ET THE ECONOMIC TIMES**  
 New Delhi, Friday, 28 July 2023 (Page No-41)  
**PM: AIM TO MAKE INDIA A MANUFACTURING HUB**  
**Chemicals, Petrochem PLI Likely**  
 PM Narendra Modi on Thursday said the government is considering a production-linked incentive (PLI) scheme for the chemicals and petrochemicals sector. **++ 17**

**Business Standard**  
 New Delhi, Friday, 28 July 2023 (Page No-41)  
**PM: PLI for chemicals, petrochem sector likely**

**THE FINANCIAL EXPRESS**  
 New Delhi, Friday, 28 July 2023 (Page No-41)  
**PM: PLI for chemicals, petrochem sector likely**

**THE TIMES OF INDIA**  
 New Delhi, Friday, 28 July 2023 (Page No-41)  
**Govt may extend PLI scheme to chem, petrochem, says FM**

**THE FINANCIAL EXPRESS**  
 New Delhi, Friday, 28 July 2023 (Page No-41)  
**India seeking review of FTAs with Japan, Korea: Goyal**

**DH DECCAN HERALD**  
 Bangalore, Saturday, 29 July 2023 (Page No-42)  
**'Directions issued for setting up chemical parks'**  
 Union Minister for Chemicals and Petrochemicals, Dr. H. D. Dethlefsen, has issued directions to the concerned departments for setting up chemical parks in the country. **++ 17**

**दैनिक जागरण**  
 New Delhi, Friday, 28 July 2023 (Page No-41)  
**केमिकल-पेट्रोकेमिल क्षेत्रों पर विचार: मोदी**

**THE HINDU**  
 New Delhi, Friday, 28 July 2023 (Page No-41)  
**Govt. may extend PLI scheme to chemicals, petrochemicals**

**THE FINANCIAL EXPRESS**  
 New Delhi, Friday, 28 July 2023 (Page No-41)  
**'India needs 4-5 petrochemical crackers urgently'**

**ET THE ECONOMIC TIMES**  
 New Delhi, Friday, 28 July 2023 (Page No-41)  
**PM: AIM TO MAKE INDIA A MANUFACTURING HUB**  
**Chemicals, Petrochem PLI Likely**  
 PM Narendra Modi on Thursday said the government is considering a production-linked incentive (PLI) scheme for the chemicals and petrochemicals sector. **++ 17**

**बिज़नेस स्टैंडर्ड**  
 New Delhi, Friday, 28 July 2023 (Page No-41)  
**रसायनों के लिए पीएलआई**

**live mint**  
 New Delhi, Friday, 28 July 2023 (Page No-41)  
**Govt may offer PLI for chemicals, petrochem**

**BusinessLine**  
 New Delhi, Friday, 28 July 2023 (Page No-41)  
**PLI scheme for chemicals and petrochemicals sector likely**



Government of India  
Ministry of Chemicals and Fertilizers  
Department of Chemicals and Petrochemicals

The Ministry Chemicals & Fertilizers implements policy and programmes for achieving growth and development of the chemical and petrochemical sectors in the country.



**Industry's voice for policy change**

Established in 1927, FICCI is the largest and oldest apex business organisation in India. Its history is closely interwoven with India's struggle for independence, its industrialization, and its emergence as on one of the most rapidly growing global economies.

FICCI, Federation House, Tansen Marg New Delhi, 110001

[www.gcpmh.in](http://www.gcpmh.in)