## Govt. Schemes for India's Chemical Industry

India ranks fourth in the world when it comes to the largest consumers of crude oil and petroleum products. It is home to one of the biggest refineries in Asia, which is in Jamnagar, Gujarat and owned by Reliance Industries.

From the current value of approximately USD 220 billion, India's chemical industry is projected to achieve a USD 300 billion evaluation by 2025 and the USD 1 trillion mark by 2040. Covering more than 80,000 commercial products, the industry is expected to grow at 9.3% to reach USD 304 billion by 2025 Covering more than 80,000 commercial products, the industry is expected to grow at 9.3% to reach USD 304 billion by 2025 Covering more than 80,000 commercial products.

Indian economy accounts for the major chemical producer ranking at 6th in the world and 14th in export of chemicals. Chemical industry provides the building blocks for several other industries such as agrochemicals, pharmaceuticals, textile, paper, petrochemicals, paints, soaps etc.

## **Increase in Demand for Chemicals**

As per a McKinsey (2023) report, India is projected to be responsible for over 20% of the incremental consumption for chemicals around the globe over the next 20 years. The domestic consumption and demand are projected to grow from USD 170-180 billion in 2021 to USD 850 billion-1 trillion by 2040.

## **Government Incentives & Policy Supports**

#### **Production-Linked Incentives (PLI)**

(PLI Scheme for Investments in the Chemicals and Petrochemicals Sectors)

Under the PLI scheme, the Government of India offers companies incentives on incremental sales from products manufactured in domestic units. This aims to boost the country's manufacturing potential as well its reliance on imports.

In the Union Budget for 2023-24, the Department of Chemicals and Petrochemicals was granted USD 20.93 million by the Government of India.

The Petroleum, Chemicals and Petrochemicals Investment Regions (PCPIR) Policy's integrated manufacturing hubs shall receive an investment of approximately USD 276.46 billion by 2035.

The Government of India aims to create an Atmanirbhar Bharat (Self-Reliant India) in Urea and Di-ammonium Phosphate (DAP) production by using 'Green Hydrogen under the National Hydrogen Mission.'

# Petroleum, Chemicals & Petrochemicals Investment Regions (PCPIRs)

In India, Petroleum, Chemicals and Petrochemicals Investment Regions (PCPIRs), originally referred to as 'Mega-Chemical Industrial Estates' (MCIES) or chemical hubs, are special economic zones intended to facilitate production of petroleum and petrochemicals.

The Government aims to bring more investments and industrial development in these sectors. The PCPIR is expected to help gain the perks of co-siting, networking and better efficiency via usage of common infrastructure and support services. All

PCPIRs have been set to have a specific region of approximately 250 sq. kms., where about 40% of the area is reserved for processing activities.

Approved PCPIRs in India are as follows:

- Gujarat PCPIR (Dahej)
- Odisha PCPIR (Paradeep)
- Andhra Pradesh PCPIR (Vishakhapatnam Kakinada)
- Tamil Nadu PCPIR (Cuddalore Nagapattinam)

#### **Chemical Promotion Development Scheme (CPDS)**

The scheme was first implemented in 1997 in the Chemical Division under Plan Head of Account. The scheme aims to extend support in the form of grant aids, for conducting workshops and seminars to obtain necessary inputs for enabling the Department to firm its views on various policy matters related to the Chemical and Petrochemical sector.

- The support is extended by the Department of Chemicals and Petrochemicals or in collaboration with other organisations, government agencies, PSUs.
- There were certain web-based applications developed for CPDS and its integration with NGO-DARPAN Portal to issue grants-in-aid. Only the proposals received through the CPDS portal shall be processed. (http://cpds.chemicals.gov.in)

The scheme has three components:

i. Creation of knowledge products

This component aims at conducting studies/surveys, issuance of survey report, creation of data bank, production of promotional materials such as displays, booklets, broachers, etc. to create awareness.

#### ii. Knowledge dissemination

This component aims at conducting seminars, workshops, conventions, conferences, and investors meet to promote development of chemicals and petrochemicals sectors.

#### iii. Excellence Awards

This component aims at giving recognition in the field of research and innovation in Chemicals and Petrochemicals Sector.

#### **Plastic Park Scheme**

Plastic Park refers to industrial zones developed in clusters to establish units for different plastic companies and their allied industries. Various entities shall combine and synergize capabilities of the domestic downstream plastic processing industry. Plastic Parks play a major role in the development of plastic processing community material and equipment suppliers, plastic processing companies, plastic recycling companies.

#### Chemicals are one of the most vital aspects of the plastic industry.

A scheme to assist in establishing Plastic Parks as per requirements has been implemented by Department of Chemicals & Petro-Chemicals. It aims to assist the establishment of such parks on a need-basis that have world-class infrastructure, enable common facilities by adopting a cluster development strategy, to combine the capabilities of the domestic downstream processing industry. This scheme shall help boost investments, production potential and exports in the plastic industry.

Key goals of the scheme:

• Adopt modern, research and development-oriented measures to boost the competitiveness, polymer absorption capability and value addition in the domestic downstream plastic processing industry.

- Boost exports and value addition in the sector by encouraging more investments in this market through additions in capacity and production.
- Leverage innovative ways for waste management, recycling, etc. to achieve sustainable growth.
- Adopt a cluster development approach to realize the above-mentioned goals owing to benefits that arise due to optimized resources and economies of scale.

## **FDI allowance in Chemicals in India**

Apart from hazardous chemicals, 100% FDI in chemicals is permitted via the automatic route.

## **Growth Drivers**

- Rising disposable income, median age of population, urbanization and growing penetration and demand from rural markets.
- Asian and Southeast Asian countries are responsible for the increase in demand for chemicals & petrochemicals.
- Change in the consumers preferences, which leans towards a healthier lifestyle and ecofriendly products.
- PLI scheme for manufacturing Advance Cell Chemistry Battery under the 'Atmanirbhar Bharat Abhiyaan'.
- Emerging manufacturing centres.
- Rise in disinfectant demand post covid.
- Foreign investments.
- Skilled and inexpensive manpower.
- Growing end-use industries.

## **Global Chemical Investors**

Some of the global chemical players in Indian market are:

- BASF
- Adnoc
- Rosneft
- Aramco
- Mitsubishi Chemical
- SABIC
- ExxonMobil

## Conclusion

Some challenges faced by chemical industry in India are:

- Environmental Concerns: Increased air, water and soil pollution, and increased greenhouse gas emissions.
- Regulatory Compliance: The chemical industry is subject to a wide range of regulations and safety standards, which can be complex and costly. Ensuring compliance while maintaining profitability can be a significant challenge for companies.
- Operational Challenges: Volatility in raw material prices, cyber threats and complexity of supply chains.