



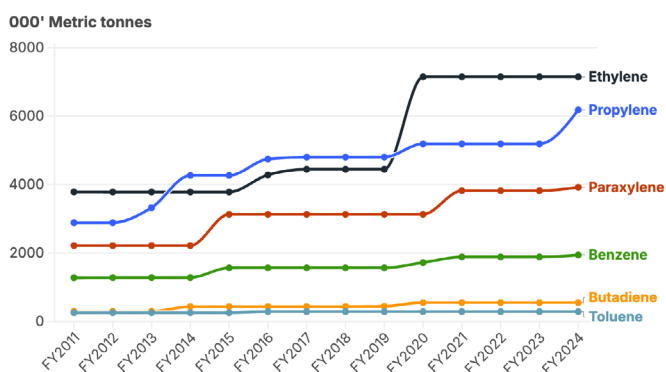
Fact Sheet

Installed Capacity and Production of Key Petrochemical Building Blocks in India

While India's large population may drive domestic plastic consumption, the petrochemical industry faces challenges from a global slowdown, potential restrictions on plastic production under the international plastics treaty currently being negotiated and pressure to reduce emissions. With much of the proposed build-out still in the planning stage, Indian oil companies have the opportunity to reassess their petrochemical growth strategies.

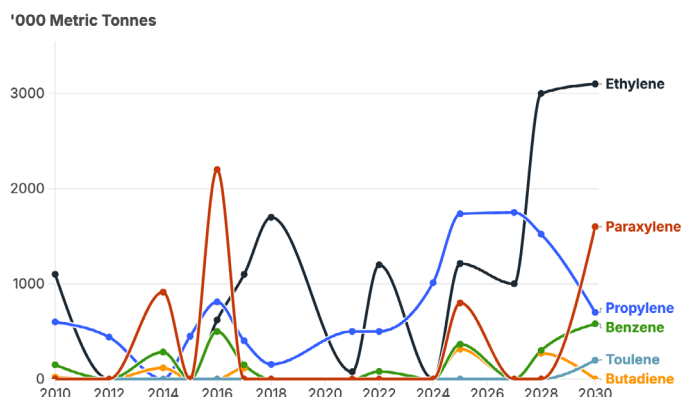
Installed Capacity

Installed Capacity of Key Olefins and Aromatics Between FY2010-24



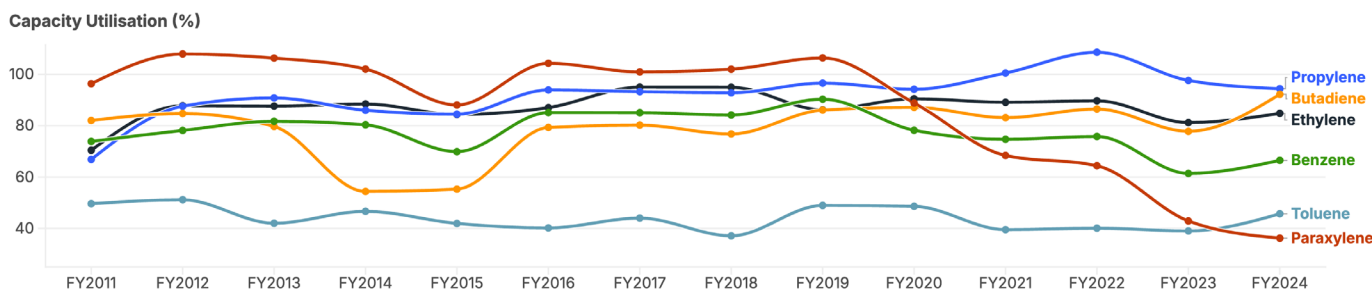
Source: Department of Chemicals and Petrochemicals Annual Statistics-at-a-glance

Year-wise Capacity Addition from 2010-30



Source: BloombergNEF's Petrochemical Projects Dataset

Capacity Utilisation of Key Olefins and Aromatics Between FY2010-24

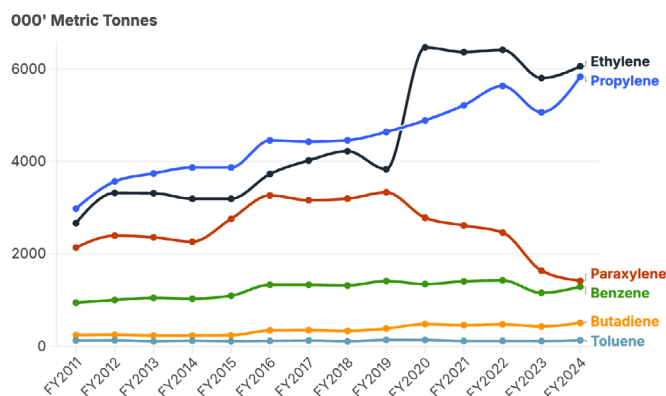


Source: BloombergNEF Petrochemicals Project Dataset

Ethylene and propylene are the key olefins used in plastic production, particularly in single-use plastics, which are the most problematic and account for 40% of all plastics produced. Both olefins have the highest installed capacity in India. India's aspiration to be a regional hub for petrochemical production led to several projects being conceptualised in the past decade. There are plans for significant capacity addition of ethylene and propylene beyond 2024. Of the new capacity planned, 80% of ethylene and 89% of propylene are in the construction and engineering stage. While India was banking on a robust petrochemical market while planning these projects, the current overcapacity might impact the profitability of these projects. Capacity utilisation has been mildly erratic but largely consistent.

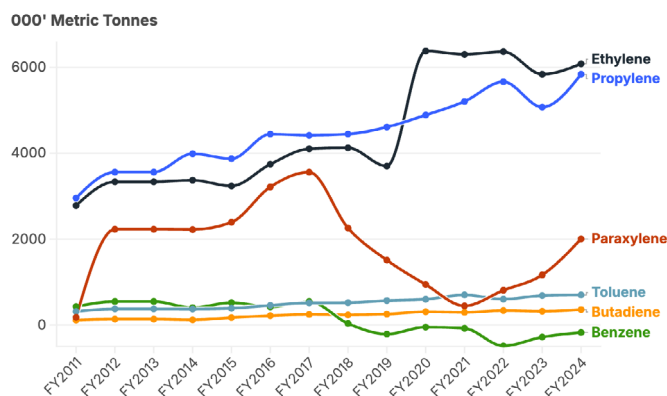
Production and Consumption

Production of Major Petrochemical Building Blocks



Source: Department of Chemicals and Petrochemicals Annual Statistics-at-a-glance

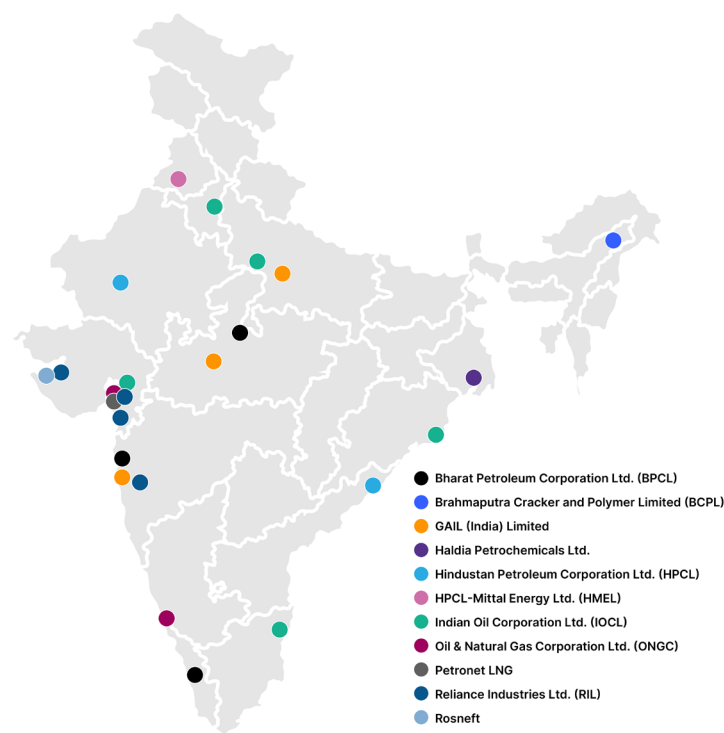
Consumption of Major Petrochemical Building Blocks



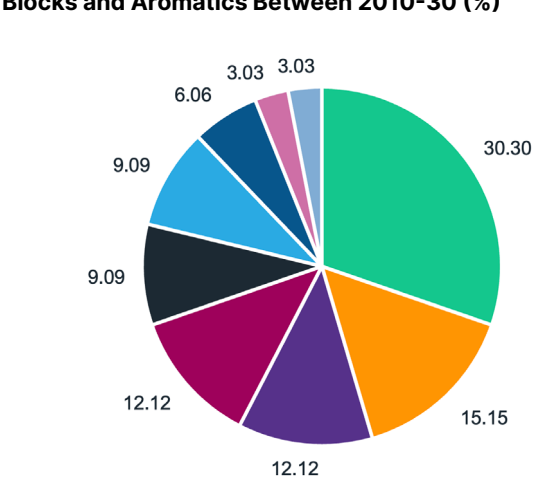
Source: Department of Chemicals and Petrochemicals Annual Statistics-at-a-glance

Companies Producing Key Petrochemical Building Blocks

Companies Producing Key Petrochemical Building Blocks



Share of Companies in the Build Out of Key Building Blocks and Aromatics Between 2010-30 (%)



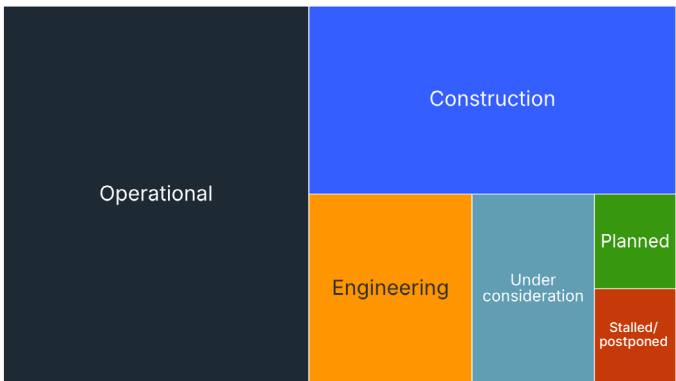
Source: BloombergNEF's Petrochemical Projects dataset

Most petrochemical complexes are located on the coast since India imports more than 85% of its crude oil, which affects coastal ecosystems.

Reliance Industries Limited is the largest petrochemical producer in India, followed by Indian Oil Corporation Limited. Between 2010 and 2030, public sector undertakings led the development of key petrochemical building blocks, accounting for 87% of total capacity additions.

Trends in Development of Key Petrochemical Building Blocks Between 2010 and 2030

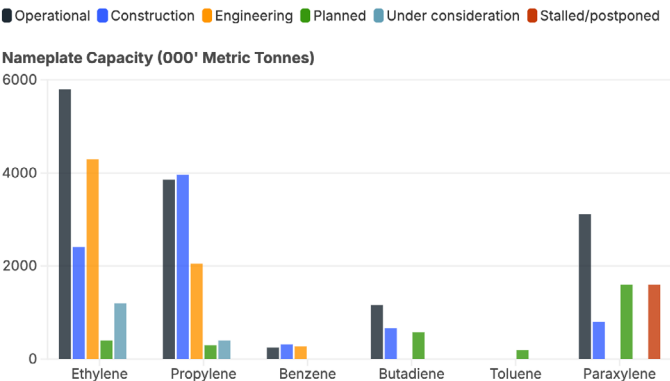
Status of Petrochemical Projects Commissioned / to be Commissioned Between 2010-30: (Number of Projects)



Source: BloombergNEF's Petrochemical Projects dataset

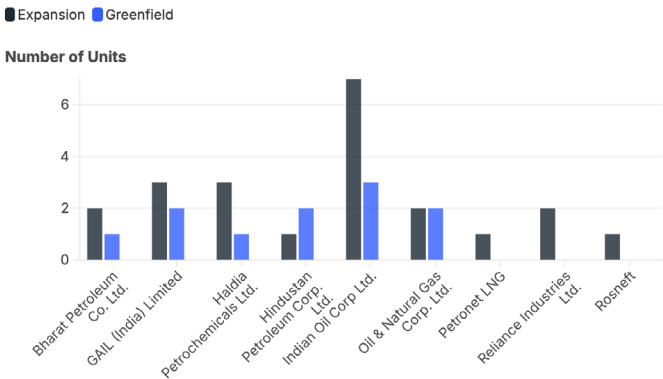
Out of ethylene projects that were commissioned / to be commissioned between 2010 and 2030, about 41% were operational by 2023. While about 17% of the capacity expected to come online between 2024 and 2030 is under construction, a significant 30% of the projects are still in the engineering stage. This is an opportunity for companies to rethink their ethylene strategy, considering there is structural overcapacity. Similarly, 19% of polypropylene is in the engineering stage.

Status of Projects Commissioned / to be Commissioned Between 2010-30



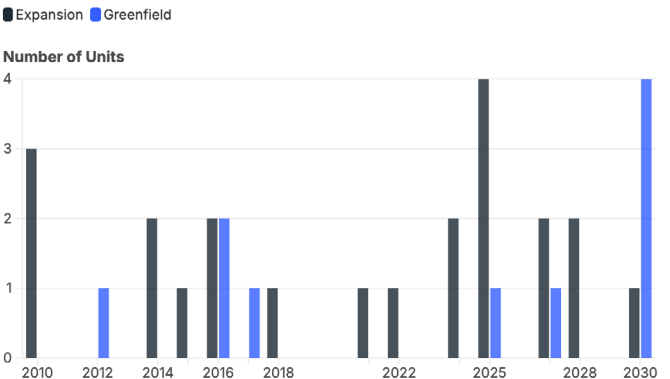
Source: BloombergNEF's Petrochemical Projects dataset

Company-wise Type of Projects Commissioned / to be Commissioned Between 2010-30



Source: BloombergNEF's Petrochemical Projects dataset

Year-wise Type of Projects Commissioned / to be Commissioned Between 2010-30



Source: BloombergNEF's Petrochemical Projects dataset

Most projects are understandably expansions of existing facilities. Companies prefer to expand their existing facilities as the capital expenditure required is much lower than in the case of greenfield projects. Greenfield projects are also prone to delays and cancellations since land acquisition has proven to be a challenge owing to community opposition.