

# India: Global Manufacturing Hub for Chemicals and Petrochemicals



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सत्यमेव जयते

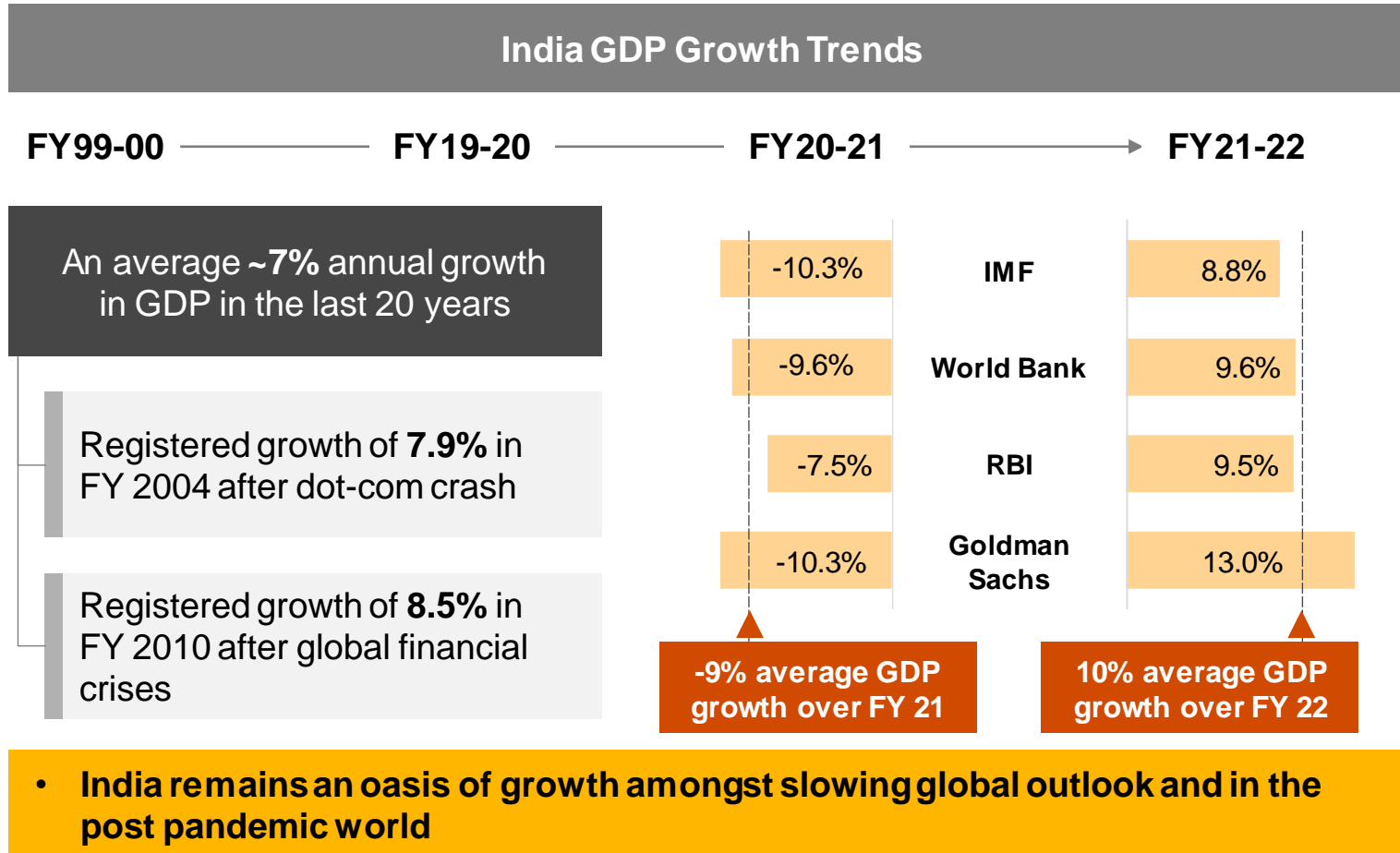
रसायन एवं पेट्रो-रसायन विभाग

DEPARTMENT OF

**CHEMICALS & PETRO-CHEMICALS**

March 2021

# India- one of the fastest growing economies of the world



### Real GDP Growth Forecast for Major Economies<sup>1</sup>

Country	2023	2025
India	7.6%	7.2%
China	5.7%	5.5%
France	2.3%	1.7%
United Kingdom	1.9%	1.6%
Germany	1.8%	1.2%
United States	2.3%	1.8%
Russia	2.1%	1.8%
Japan	1.2%	0.6%
<b>World</b>	<b>3.8%</b>	<b>3.5%</b>

Source: IMF, World Bank, RBI, Goldman Sachs  
 Note: 1- IMF estimates Oct 2020, calendar year basis  
 India: Global Manufacturing Hub for Chemicals and Petrochemicals  
 India Chem 2021

# India is emerging as an attractive and durable investment destination

## Advantage India

### FDIs

- **100%** FDI automatic route in manufacturing
- **USD 473 billion** FDI since 2010, **60%** of which was since 2015

### Ease of Doing Business

- Ease of Doing Business ranking has improved by **79 places** since 2014, ranked **63<sup>rd</sup>** in 2019
- Major **labor reforms** have been implemented to improve ease of doing business

### Innovation

- Global Innovation Index improved by **9 places** since 2018, ranked **48<sup>th</sup>** in 2020

Source: DIPP, Global Innovation Index, Invest India, World Bank, DCPC, CEFIC



### Start-up Culture

- **2<sup>nd</sup>** largest startup nation, **20,000+ startups**
- Large base of entrepreneurs- ranks **3<sup>rd</sup>** in the number of new firms created

### Infrastructure & Logistics

- **USD 1.4 trillion** infrastructure project pipeline to be completed by 2025
- World Bank's Logistics Performance Index has improved by **10** places since 2014, ranked **44<sup>th</sup>** in 2018

### Corporate Income Tax

- Aggressive corporate tax cuts and removal of dividend distribution tax
- **22%** for existing companies and **15%** for new manufacturing companies

# Manufacturing is a major growth sector for Indian economy

## India as a manufacturing destination

**Top 10** FDI destinations in the world<sup>1</sup>

**6<sup>th</sup>** among the top manufacturing countries<sup>2</sup>

**1<sup>st</sup>** among Greenfield FDI destinations in the world<sup>3</sup>

Over **63 million** registered MSMEs in India<sup>4</sup>

**7<sup>th</sup>** most valued national brand in the world<sup>5</sup>

**Most competitive economy** in South Asia<sup>6</sup>

## Strong consumer market with a large working population<sup>7</sup>

- **Urbanization:** Urban market shall account for 2/3<sup>rd</sup> of consumption growth by 2025
- **Working population:**
  - India's working age population will increase from to 1.03 billion (2030) from 0.86 billion (2015)
  - India's average median age shall be 37.3 years by 2050- amongst youngest nations

## Manufacturing Sector Competency



**2<sup>nd</sup>**

**Largest steel producer**



**3<sup>rd</sup>**

**Largest producer of pharmaceuticals**



**4<sup>th</sup>**

**Largest producer of chemicals in Asia**



**5<sup>th</sup>**

**Largest producer of cars**



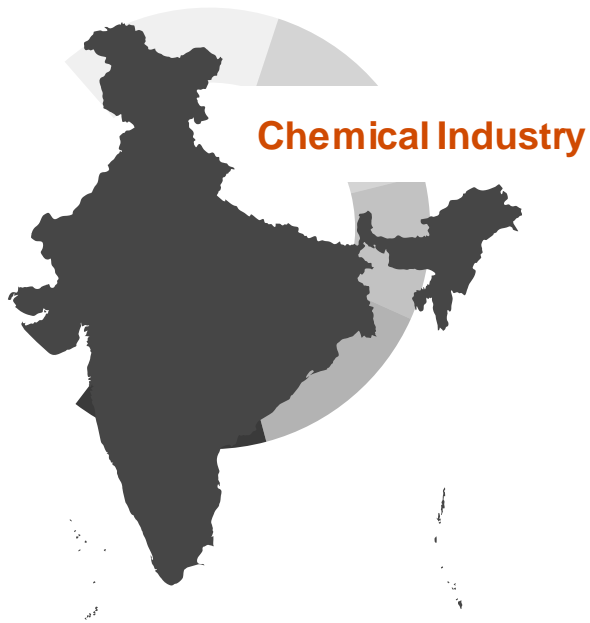
**5<sup>th</sup>**

**Largest exporter of textiles**

Source: 1- UNCTAD 2019, 2- UNIDO 2019, 3- Global Investment Trend Monitor, 4 Ministry of Micro, Small & Medium Enterprises, 5- Brand Finance, 6- WEF Global Competitiveness Index, 7- UNDP

# Chemicals industry contributes 8.8% to the manufacturing GVA

## Indian Chemical Industry



Covers > **80,000 products**, inevitable part of daily life<sup>1</sup>

Employs ~**2 million** people<sup>1</sup>

India contributes to ~**3%** of the **global chemical sales**<sup>2</sup>

Ranks **6<sup>th</sup>** in the World and **4<sup>th</sup>** in Asia for Chemicals sales<sup>2</sup>

**3<sup>rd</sup>** largest consumer of polymers globally<sup>1</sup>

**4<sup>th</sup>** largest producer of agrochemicals globally<sup>1</sup>

**2<sup>nd</sup>** largest manufacturer and exporter of **dyes**<sup>1</sup>

Weightage of **7.87%** - IIP<sup>4</sup>

Contributes **1.4%** to the **National GVA**<sup>3</sup>

Contributes **8.8%** to the **manufacturing GVA**<sup>3</sup>

Contributes **2.1%** to total **FDI Equity Inflows**<sup>4</sup>

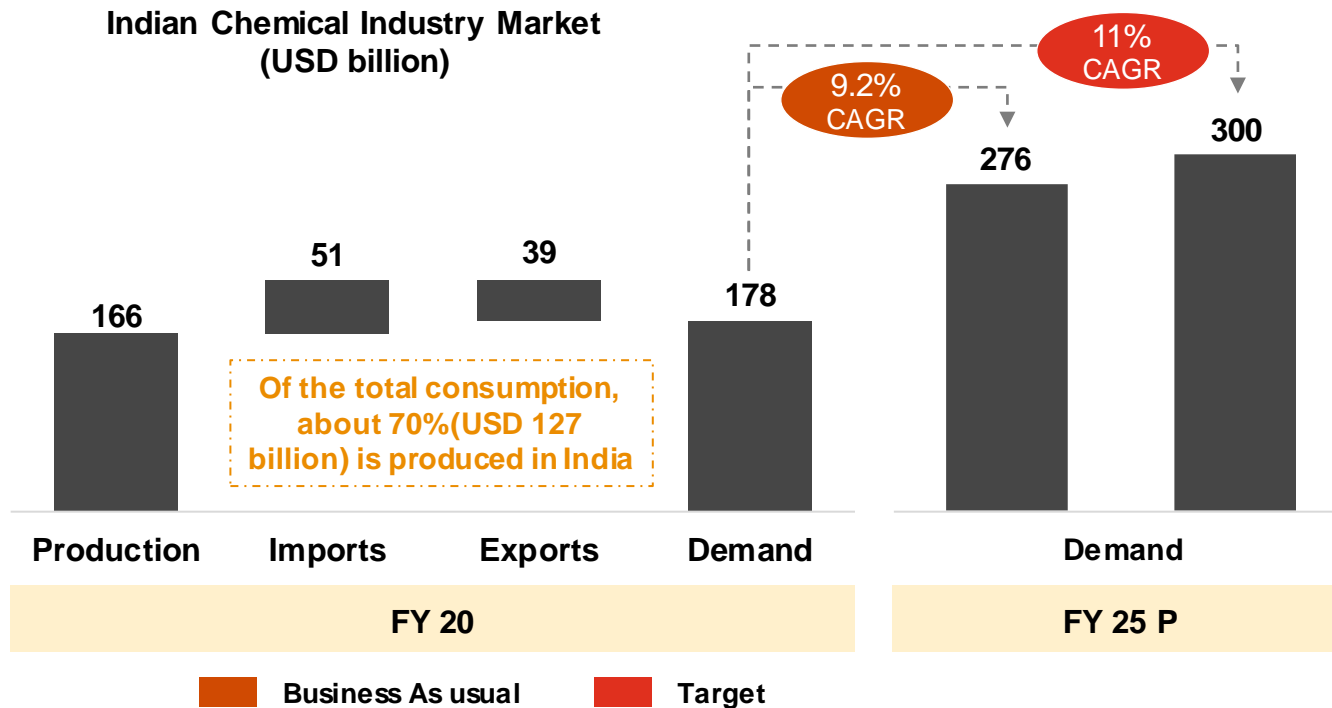
Contributes **11.3%** in India's exports<sup>5</sup>

Source: 1-DCPC, 2-CEFIC 2020 Facts & Figures, 3- Ministry of Stats and Programme Implementation (At Current Prices, for FY 19), 4- Department for Promotion of Industry and Internal Trade, 5- Ministry of Commerce & Industry, PwC Analysis

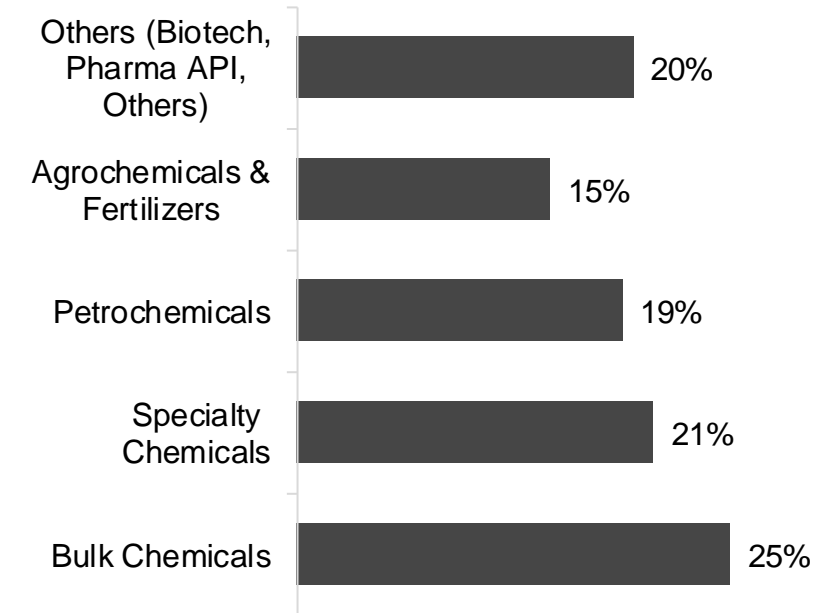
Note: 2- Excludes Pharmaceutical industry

# Indian Chemical Industry is poised to reach USD 300 billion by FY 25

## Indian Chemical Industry



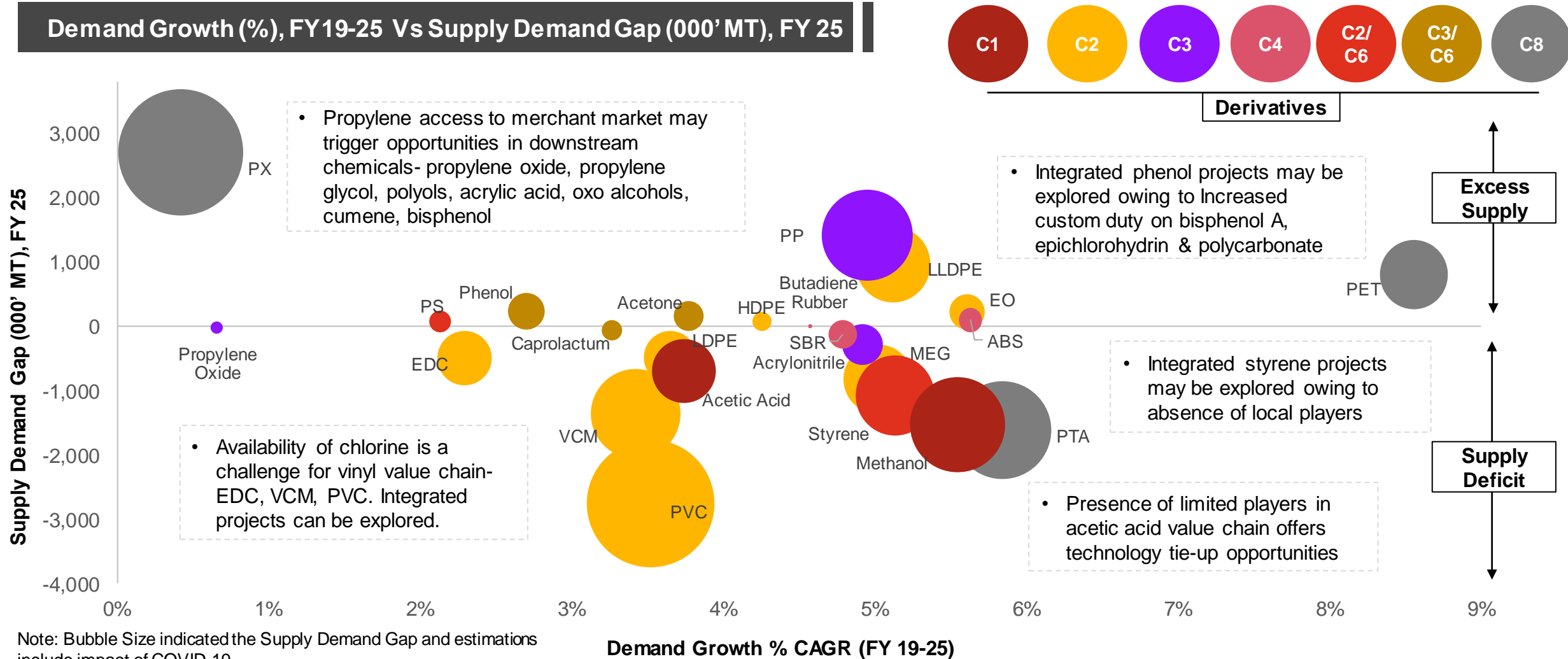
## Chemical Industry Market by Sub Segments, FY 20 (USD billion)



• Demographic Dividends, Low per capita consumption, increasing export demand and enabling government initiatives are the key growth drivers for the chemicals industry

Source: MOSPI, DCPC, Industry Sources, PwC Analysis

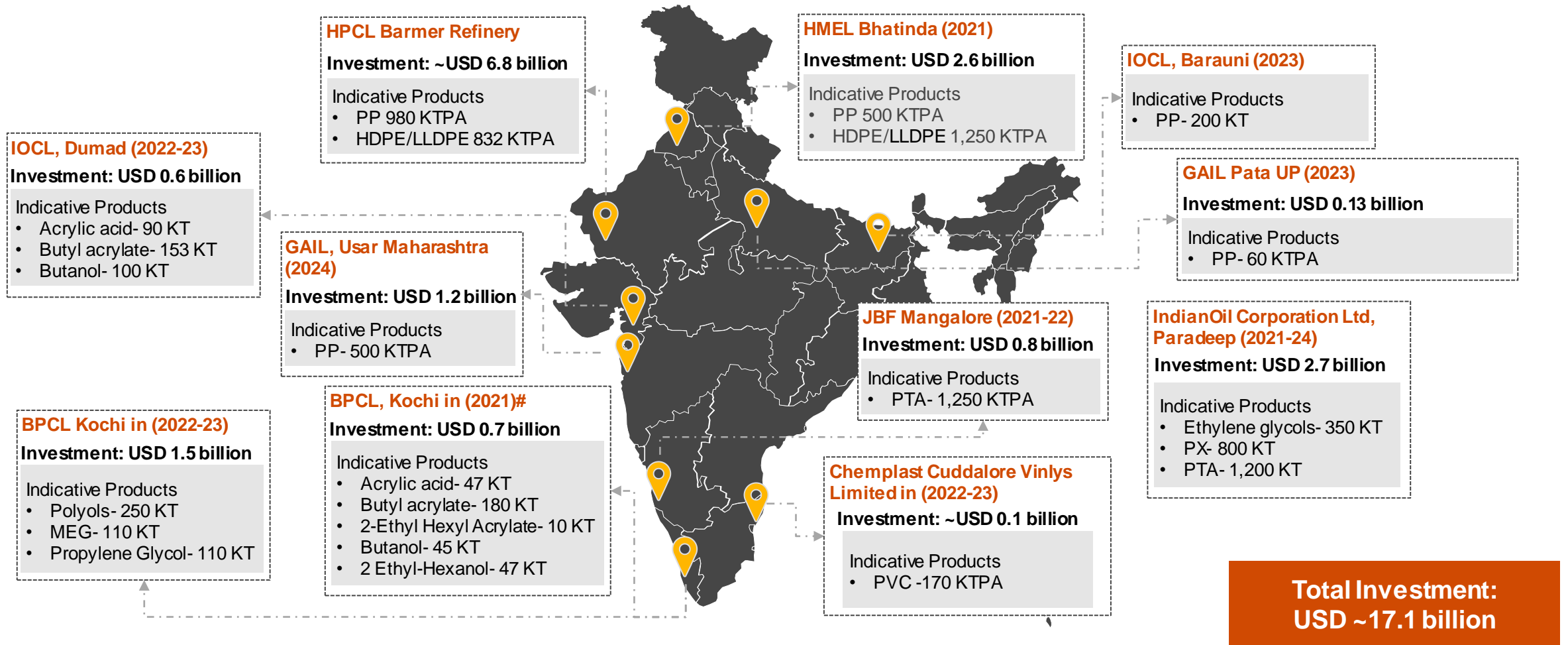
# Supply demand gap provides attractive business opportunities in 2025



Note: Bubble Size indicated the Supply Demand Gap and estimations include impact of COVID-19  
 Source: DCPC, Industry Sources, PwC Analysis & Research  
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# Major petrochemical projects under implementation



Source: CPMA, Industry Sources

Note: #- the complex is mechanically completed and is under commissioning

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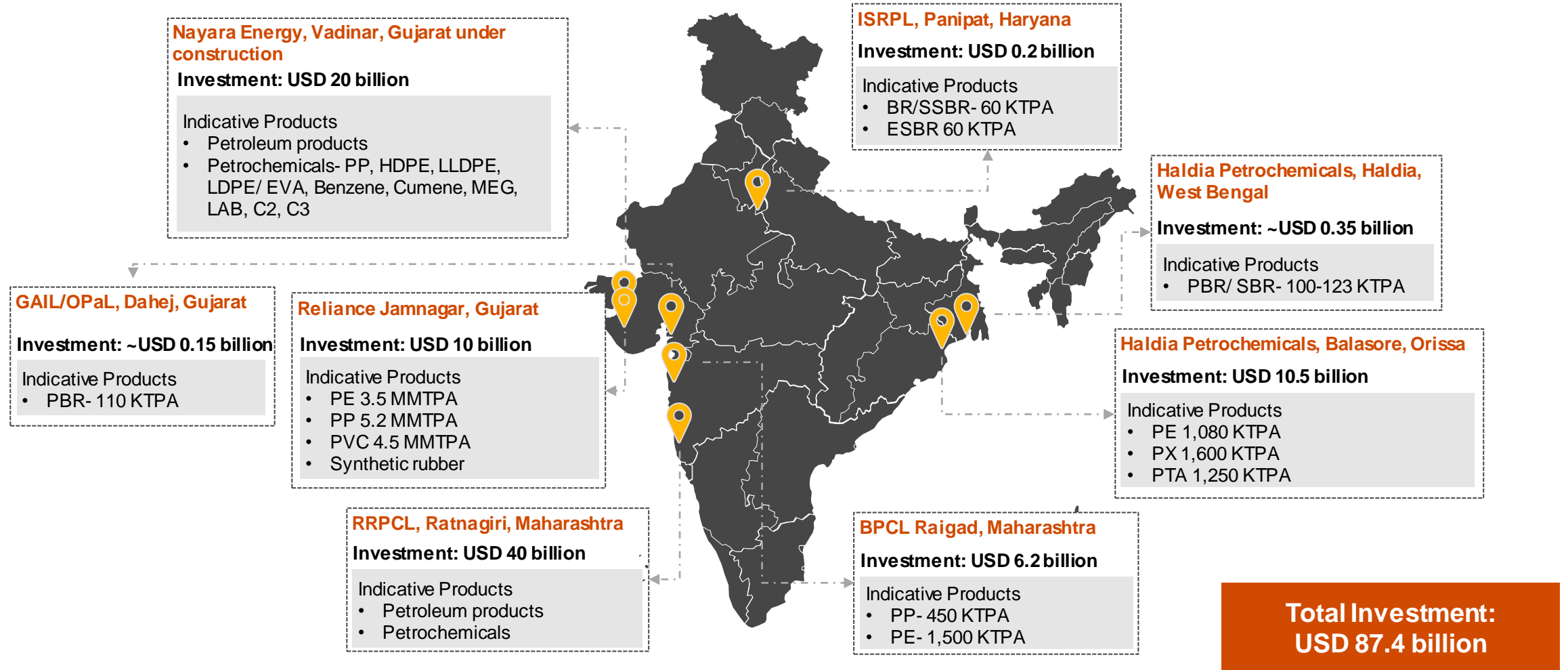
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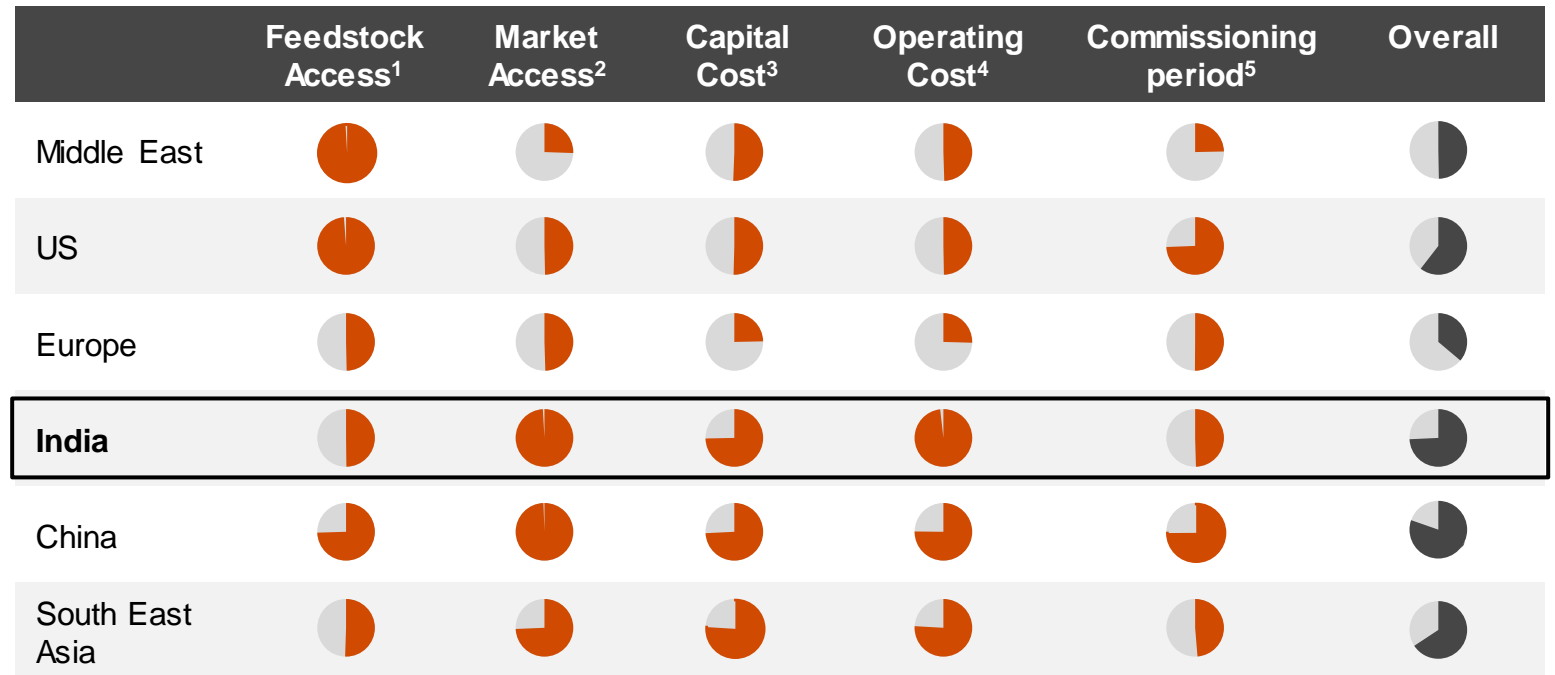
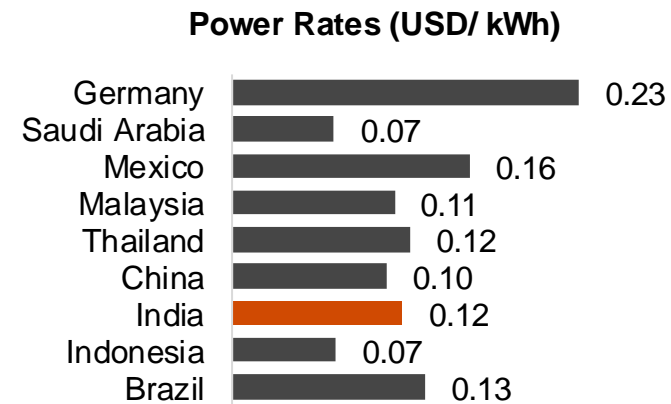
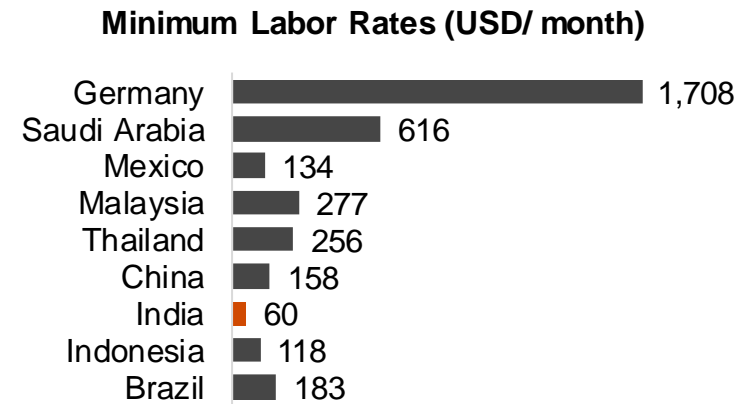


# Major petrochemical projects under consideration

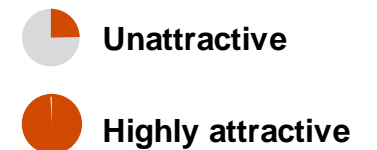


Source: CPMA, Industry Sources

# Competitiveness of India w.r.t. global petrochemicals hub









- (1) Based on the local availability of petrochemical feedstocks
- (2) Based on average demand growth rate of major petrochemicals for 2019-2030
- (3) Based on location factor, pre fabrication and construction costs
- (4) Based on average monthly salary of employee, electricity costs, etc.
- (5) Commissioning period based on examples of large petrochemical projects



Source: Data on minimum monthly wages was collected from various sources including: India (Nagaland - Dept of Labour, Delhi - Govt of NCT of Delhi State Govt), Asean Briefing, Nov 2019 (Indonesia, Central Java, DKI Jakarta), Vietnam Briefing, Nov 2019 (Vietnam, Region IV, Region I), Reuters, Dec 2019 (Mexico, Non-border, Border Zone), MOHRSS, Jun 2018 (China, Liaoning, Shanghai), Bangkok Post, Dec 2019 (Thailand, Yala, Chon Buri and Phuket), Bloomberg, Jan 2020 (Brazil, National), Asean Briefing, Feb 2020 (Malaysia, National), US Dept. of Labor, Wage Indicator Foundation, World Bank, GlobalPetrolPrices. Data on electricity charges was sourced from GlobalPetrolPrices.com as accessed on 20 Feb, 2021

# Factors promoting India's manufacturing competitiveness

Key Investor Expectations	Factors Promoting India's Manufacturing Competitiveness	
 <p><b>Good Governance</b></p>	<ul style="list-style-type: none"> <li>Politically stable with <b>good political and trade relations</b> with leading markets</li> </ul>	<ul style="list-style-type: none"> <li><b>Development Council and Advisory Forum</b>- Redressal of Public Grievances &amp; Challenges</li> </ul>
 <p><b>High Quality Infrastructure</b></p>	<ul style="list-style-type: none"> <li>Development of <b>5 industrial corridors</b> for integrated industrial development</li> <li>Commitment of <b>USD 1.5 trillion</b> as part of <b>NIP</b></li> </ul>	<ul style="list-style-type: none"> <li><b>3,382 industrial parks</b> spread across <b>0.475 million hectare land</b></li> <li>Development of <b>PCPIRs</b></li> </ul>
 <p><b>Robust Investment Policy</b></p>	<ul style="list-style-type: none"> <li>Make in India: <b>USD 357 billion</b> in <b>FDI</b> till FY 20 since launch in FY 14</li> <li><b>100% FDI</b> permitted through <b>Automatic Route</b></li> </ul>	<ul style="list-style-type: none"> <li><b>PLI scheme</b> for total 12 sectors – attractive incentives and cash back benefits</li> </ul>
 <p><b>Strong Regulatory &amp; Tax Framework</b></p>	<ul style="list-style-type: none"> <li><b>Industrial licensing</b> has been <b>abolished</b> for most sub-sectors except in hazardous chemicals</li> </ul>	<ul style="list-style-type: none"> <li>Corporate tax rate: <b>22% for existing companies</b> and <b>15% for new manufacturing companies</b></li> </ul>
 <p><b>Quality Labor at Competitive Cost</b></p>	<ul style="list-style-type: none"> <li>Sector-specific <b>Skills Development programme</b> supported by NSDC schemes</li> <li>Competitive <b>labor wages 60-258 USD/ month</b></li> </ul>	<ul style="list-style-type: none"> <li><b>Standardized wages, bonus, trainings, social security benefits</b> for workers</li> </ul>
 <p><b>Robust Domestic demand</b></p>	<ul style="list-style-type: none"> <li>The <b>large and aspirational Indian middle class</b> provides a readily available market</li> <li>India to become <b>3<sup>rd</sup> largest consumer market</b> by FY 25</li> </ul>	<ul style="list-style-type: none"> <li><b>25 cities</b> in India are among the world's top <b>100 fastest growing cities</b></li> </ul>

Source: PwC Worldwide Tax Summaries Corporate Taxes 2018/19, MOSPI, Centre for Economics and Business Research, UK, Department of Economic Affairs, Invest India, Note: NIP- National Infrastructure Pipeline, FTA- Free Trade Agreement, PTA- Preferential Trade Agreement, FDI- Foreign Direct Investment, NSDC- National Skill Development Corporation

# Policy initiatives acting as “Game Changers” for Indian Chemical Industry

Local Manufacturing, Exports & Innovation	Skilled Man Power & Labor Laws	Industrial Infrastructure	Governance and Clearances	Availability of Feedstock	Regulations and Quality Standards
<p><b>Revised custom duties</b> on chemicals &amp; petrochemicals, (Budget 2021-22)</p>	<p>Sector-specific <b>Skills Development Programme</b> (NSDC Scheme)</p>	<p>Scheme for <b>Setting up Plastic Parks</b> (funding up to 50% of cost of project*)</p>	<p><b>Reduced paper work &amp; faster clearance</b> for project proposals, IP applications, port jobs</p>	<p>Reduction in <b>Basic Custom Duty</b> on <b>naphtha</b> (Budget 2021-22)</p>	<p><b>BIS Standards</b> for imported &amp; locally produced chemicals &amp; petrochemicals</p>
<p><b>Public procurement policy</b> for a total 28 Chemicals and Petrochemicals</p>	<p>New Codes on <b>Wages, Occupational Safety, Health &amp; Working Conditions, Social Security, Industrial Relations</b></p>	<p>National <b>Infrastructure Pipeline (NIP)- Proposed PCPIR Projects (Odisha &amp; Gujarat)</b></p>	<p>Development Council and Advisory Forum for <b>redressal of public grievances &amp; challenges</b></p>	<p>New addition- <b>Barmer Petrochemical Cluster</b></p>	
<p><b>Export Promotion Schemes and FTAs</b></p>		<p>Scheme for <b>Setting up Mega Textile Parks</b></p>	<p>Better <b>Trade Intelligence (New 8 digit HS Codes)</b></p>		
<p><b>Global Intellectual Property Treaties</b></p>	<p><b>Compensation</b> on Accidents</p>				
<p><b>Centers of Excellence</b> and <b>National Awards</b></p>					

Note: NIP- National Infrastructure Pipeline, BIS- Bureau of Indian Standards, NSDC- National Skill Development Corporation, IP- Intellectual Property, \*Ceiling at USD 5.6 mil

Source: DCPC, Ministry of Labor & Employment, Union Budget 2021-22, Industry Sources, WIPO, Chemexcil, PwC Analysis

Note: NIP- National Infrastructure Pipeline, BIS- Bureau of Indian Standards, NSDC- National Skill Development Corporation, IP- Intellectual Property, FTA- Free Trade Agreement, \*Scheme criteria

# Production Linked Incentive Scheme for manufacturing sector

## Objective of the PLI scheme



## Impact and benefits of scheme

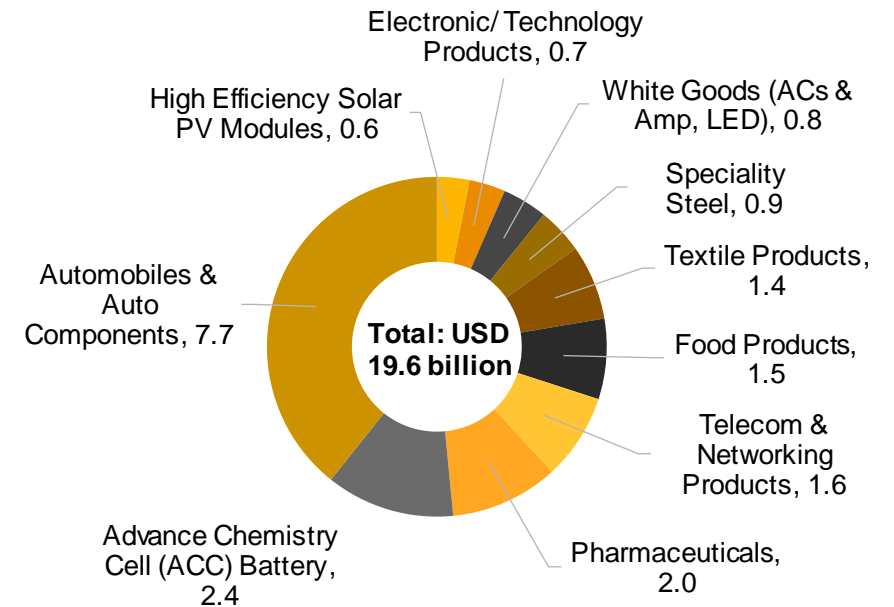


## Increase in demand for Chemicals & Petrochemicals



Source: Government of India, PwC Analysis

## PLI Scheme Outlay for 10 Sectors (USD billion)



PLI Scheme previously announced for Domestic manufacturing of Key Starting Materials (KSMs), Drug Intermediates (DIs) and Active Pharmaceutical Ingredients (APIs) and Medical Devices

# India's Ease of Doing Business ranking

## Key initiatives which helped achieve 63 rank:



### Process

Single form for company formation



### Time

Fast track approval for construction permits



### Trade

Indian Customs Single Window Project implemented



### Legal

Commercial Courts and Appellate Division of High Courts established



### Exit

Insolvency and Bankruptcy Code 2016 for resolving insolvency

Source: World Bank, Industry Sources, PwC Analysis

## Ease of Doing Business: Top parameter-wise rankings\*

For India #, 2019; (#), 2014

	Overall rank	Getting credit	Trading across borders	Resolving insolvency	Getting electricity
India	63 (142)	25 (36)	68 (126)	52 (137)	22 (186)
Vietnam	70	25	104	122	27
Brazil	124	104	108	77	98
Mexico	60	11	69	33	106
Indonesia	73	48	116	38	33

\* Lower rank in a given parameter represents better positioning of the respective country



# It is the right time to invest in INDIA

## Vision of Department of Chemicals and Petrochemicals

**To seize the opportunity to establish India as a leading chemicals & petrochemicals manufacturing hub,**

- with a thrust on reduction in import dependency
- by attracting investments for manufacturing quality products
- using cutting-edge technologies
- in specified clusters
- with focus on sustainability

...contribute to manufacturing sector of USD 5 Trillion Indian Economy