About Invest India

Invest India is the National Investment Promotion and Facilitation Agency of the Government of India mandated to facilitate investments in India. Besides investor targeting and facilitation, Invest India runs effective programs for resolving issues and grievances of existing investors through its after-care programs.

A 150+ member team provides a sector- and state-specific investment opportunities, advises investors on regulatory procedures and clearances, and hand-holds investors through the entire investment process. Invest India team comprises of highly educated and experienced professionals, with prior experience of working with foreign multinationals across areas such as investment banking, consulting, corporate strategy, taxation and law.

Headquartered at New Delhi, Invest India coordinates with all Indian stakeholders such as central ministries, state governments, Indian missions across the global, regulatory bodies, industry chambers, etc. In addition, Invest India has forged partnerships with a large number of foreign stakeholders such as foreign missions and trade offices in India, investment promotion agencies for key FDI source countries, export industry associations and bilateral chambers. The firms has a strong working relationships with all Indian states and union territories, where it works to build capacity, formulation of regional plans for investment facilitation and industrial cluster development.

Invest India, set up in 2009, is a non-profit venture under the Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Government of India. Currently, it manages key national missions and initiatives such as Make in India, Indian Mission for Investment, India INFRA, AGNi, India Investment Grid (IIG) and Industrial Information System (IIS).

India. Currently, it manages key national missions and initiatives such as Make in India, Project Monitoring Group, Accelerating Growth of New India’s Innovations (AGNi), India Investment Grid (IIG) and Industrial Information System (IIS).

The firm is one of the most awarded Investment Promotion Agencies in the world, and has won the Best Investment Promotion Agency in a row, 2016, 2017 and 2018, at the World Investment Awards, a prestigious event organized by the United Nations Conference on Trade and Development (UNCTAD). The firm has also been awarded the “Best Investment Promotion Agency” in Asia Pacific 2018-19. The firm was also recently awarded the ‘India’s Leading Investment Promotion Agency’ at the UNCTAD Investment Promotion Awards 2019.

Invest India aims to elevate the ‘Invest India’ brand and make it the number one investment promotion agency in the world.

Invest India is the National Investment Promotion and Facilitation Agency of the Government of India mandated to facilitate investments in India. Besides investor targeting and facilitation, Invest India runs effective programs for resolving issues and grievances of existing investors through its after-care programs.

A 150+ member team provides a sector- and state-specific investment opportunities, advises investors on regulatory procedures and clearances, and hand-holds investors through the entire investment process. Invest India team comprises of highly educated and experienced professionals, with prior experience of working with foreign multinationals across areas such as investment banking, consulting, corporate strategy, taxation and law.

Headquartered at New Delhi, Invest India coordinates with all Indian stakeholders such as central ministries, state governments, Indian missions across the global, regulatory bodies, industry chambers, etc. In addition, Invest India has forged partnerships with a large number of foreign stakeholders such as foreign missions and trade offices in India, investment promotion agencies for key FDI source countries, export industry associations and bilateral chambers. The firms has a strong working relationships with all Indian states and union territories, where it works to build capacity, formulation of regional plans for investment facilitation and industrial cluster development.

Invest India, set up in 2009, is a non-profit venture under the Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Government of India. Currently, it manages key national missions and initiatives such as Make in India, Indian Mission for Investment, India INFRA, AGNi, India Investment Grid (IIG) and Industrial Information System (IIS).

The firm is one of the most awarded Investment Promotion Agencies in the world, and has won the Best Investment Promotion Agency in a row, 2016, 2017 and 2018, at the World Investment Awards, a prestigious event organized by the United Nations Conference on Trade and Development (UNCTAD). The firm has also been awarded the “Best Investment Promotion Agency” in Asia Pacific 2018-19. The firm was also recently awarded the ‘India’s Leading Investment Promotion Agency’ at the UNCTAD Investment Promotion Awards 2019.

Invest India aims to elevate the ‘Invest India’ brand and make it the number one investment promotion agency in the world.

Invest India

Vadodara

Bharuch-Ankleshwar Cluster

Country’s Power Engineering and Chemicals Cluster

May 2020

About JLL

JLL (NYSE: JLL) is a leading professional services firm that specialises in real estate and investment management. Our vision is to reimagine the world of real estate, creating rewarding opportunities and amazing spaces where people can achieve their ambitions. In doing so, we will build a better tomorrow for our clients, our people and our communities. JLL is a Fortune 500 company with annual revenues of $16.3 billion, operations in over 80 countries and a global workforce of over 90,000 as of December 31, 2018. JLL is the brand name, and a registered trademark, of Jones Lang LaSalle Incorporated. For further information, visit jll.com.

About JLL India

JLL India is a premier and largest professional services firm specialising in real estate. With an audited revenue of $1.344 million for FY 2018-19, the Firm is growing from strength to strength in India for the past two decades. JLL India has an extensive presence across 15 major cities (Mumbai, Delhi NCR, Bengaluru, Pune, Chennai, Hyderabad, Kolkata, Ahmedabad, Kolkata and Coimbatore) and in over 100 tier II & III markets with a cumulative presence of 4,350+ professionals.

The Firm provides investors, developers, local corporates and multinational companies with a comprehensive range of services. These includes leasing, valuations, research & advisory, transaction management, project development, facility management and property & asset management. These services cover various asset classes such as commercial, residential, industrial, retail, warehouse and logistics, hospitality, healthcare, senior living, data centers and education.

JLL India won the Five Star Award for ‘Best Property Consultancy at the International Property Awards Asia Pacific 2018-19. The Firm was also also awarded amongst the ‘Top 100 Places to Work in India’ three years in a row (2017, 2018 and 2019) in the annual survey conducted by Great Place to Work® and The Economic Times. It has also been acknowledged as ‘Property Consultant of the Decade’ at the IBF Property Award 2019 for its unique and innovative approach to real estate development.

JLL India is a leader in the real estate industry and a trusted partner for developers, investors and local corporates.

For Business Enquiries, please contact:

Yogeesh Shevade
Head - Industrial Services
JLL India
Yogeesh.Shevade@ap.jll.com
+91 96397 11380

Charmy Shah
Executive - Industrial Services
JLL India
Charmy.Shah@ap.jll.com

Strategic Inputs

Dushyant Thakor
Vice President
Invest India
dushyant.thakor@investindia.org.in

Sanvi Padia
Senior Manager
Invest India
Sanvi.padia@investindia.org.in

Arita Das
Assistant Manager
Industrial Services, JLL India
Arita.Das@jll.com

Chandrannath Day
Head - Projects Operations, BD & Consulting, JLL India
Chandrannath.Day@ap.jll.com

Sanvi Padia
Senior Manager
Invest India
Sanvi.padia@investindia.org.in

Dushyant Thakor
Vice President
Invest India
dushyant.thakor@investindia.org.in

Arita Das
Assistant Manager
Industrial Services, JLL India
Arita.Das@jll.com

Chandrannath Day
Head - Projects Operations, BD & Consulting, JLL India
Chandrannath.Day@ap.jll.com

Acknowledgement: Mana Arvind, Sunita Rajeev, Tarun Kumar, Deepa Upadhyay & all the industry experts who shared their valuable insights on the various aspects of the sector.

This report is published for general information only and not to be relied upon as a sole source for any investment decision. Although high standards have been used in the preparation of the information, and due diligence and proper procedures have been followed in this respect, no responsibility or liability whatsoever shall be accepted by JLL/Invest India for any loss or damage resultant from any use of, reliance on or reference to the contents of this document. As a general report, this material does not necessarily represent the view of JLL/Invest India in relation to particular properties or projects. Reproduction of this report in whole or in part is not allowed without prior written approval of JLL/Invest India to the form and content within which it appears.
Laxmi Vilas Palace, Vadodara

Vadodara is Gujarat’s third largest city with an urban population of 1.8 million. The city is also an educational hub and has a vibrant manufacturing landscape spanning across sectors like Power Transmission & Machine tools, Pharmaceuticals, Chemicals, Biotechnology, Engineering, Auto and Defence.

STATE SNAPSHOT

- **GSDP Growth (FY 18):** 11.2%
- **Logistic Performance Index (2019):** 1st Rank
- **HDI Rank, 2018:** 8th Rank
- **1st Rank:** NR 16,156 Bn IEMs Implemented (Jan'14 – Dec'19)
- **No. of Factories in State (FY 18):** 26,586; 2nd Rank

GUJARAT CONTRIBUTES:

- 30% of processed food & dairy exports from India
- 35% of cotton produced in India (Largest Producer)
- 51% of licensed medical device companies in India
- 62% of India’s petrochemical production

BUSINESS OPPORTUNITIES:

- 36% of 1,500 km Western Dedicated Freight Corridor (WDFC) is through Gujarat (565 km) with 6 nodes including Vadodara - Ankleshwar node
Vadodara contributes

- 35% of India’s power transmission & distribution equipment manufacturers
- 28% of state’s manufacturing sector

Home to Indian Oil Corporation’s second largest refinery in India: presently undergoing expansion to increase capacity to 16 MMTPA to become India’s largest refinery (by 2023)

Home to large scale public sector enterprises such as Gujarat Alkalies & Chemicals Limited (GACL), Gujarat State Fertilizers and Chemicals (GSFC), Gujarat Industries Power Company Ltd. (GIPCL), Indian Oil Corporation (IOCL), Oil and Natural Gas Corporation (ONGC).

Potential Sectors:
- Engineering, Auto & Ancillary, Engineering Plastics and Electrical & Electronics Industries
- Existing major units in the region: CEAT, HNG, Kamrock, Sun Pharma, DuPont, Bombardier

Halol-Savli SIR
- Halol-Savli Special Investment Region (SIR) with an area of 123 sq.km.
- Potential Sectors: Engineering, Auto & Ancillary, Engineering Plastics and Electrical & Electronics Industries
- Existing major units in the region: CEAT, HNG, Kamrock, Sun Pharma, DuPont, Bombardier

Dahej - Petroleum, Chemicals and Petrochemicals Investment Region (PCPIR)
- India’s most active and successful PCPIR zone
- Specifically delineated investment region of 450 sq km, area focusing on Petroleum, Chemicals & Petrochemical Industries
- Dahej Port is connected to Vadodara (108 km) via 4-lane expressway & includes a liquid chemical, LNG, a Dry Bulk Cargo Terminal and a Ro-Ro service
- OPaL’s unit at Dahej is the largest petrochemical plant in India, developed at an investment of USD 4.6 Billion

**SECTOR SNAPSHOT**

<table>
<thead>
<tr>
<th>Industrial Park</th>
<th>Total Area (Acres)</th>
<th>Major Occupiers</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saylshah Industrial Estate</td>
<td>5,078</td>
<td>Upcoming</td>
<td>Focus sectors are: Chemicals, engineering &amp; textiles.</td>
</tr>
<tr>
<td>Dahej Industrial Estate – Phase 1, 2 &amp; 3</td>
<td>22,500 (9,410 + 9,440 + 3,650)</td>
<td>Reliance, Petronet LNG, Thermax, OPaL, Sterling, Hitachi Zosen, BASF</td>
<td>Major concentration of chemical &amp; petrochemical companies as it is part of Dahej PCPIR.</td>
</tr>
<tr>
<td>Payal Industrial Park (Ane)</td>
<td>5,000</td>
<td>Upcoming</td>
<td>Part of Dahej PCPIR near Bharuch, and is the largest privately held business park in India.</td>
</tr>
<tr>
<td>Savli Industrial Estate</td>
<td>770</td>
<td>Bombardier Transportation, Sheffield Technoplant, Schaeffler India</td>
<td>Focus sectors are: biotechnology, agri-biotech, engineering, plastics, export-oriented unit.</td>
</tr>
<tr>
<td>Savli Biotech Park (SEZ)</td>
<td>700</td>
<td>Zytex Biotech, Aristo Biotech &amp; Lifesciences, Centurion Laboratories</td>
<td>Endeavour to address the biotech industry’s need for specialized infrastructure and encourage new biotech enterprises.</td>
</tr>
<tr>
<td>Halol Industrial Estate</td>
<td>1463</td>
<td>MG Motors, Siemens Gamesa, CEAT, Windor Renewables</td>
<td>Focus sectors: Engineering, Automobiles &amp; ancillary units, Electronics.</td>
</tr>
<tr>
<td>Maskarpura Industrial Estate</td>
<td>1,200</td>
<td>GE Renewable, Bombardier Transportation</td>
<td>One of the oldest industrial area in the city and located along NH 48.</td>
</tr>
<tr>
<td>Bharuch Industrial Estate</td>
<td>211</td>
<td>GNFC, Reliance Chemicals, Pepsico</td>
<td>Formidable industrial base in sectors like chemicals &amp; petrochemicals, textiles, drugs &amp; pharmaceuticals.</td>
</tr>
<tr>
<td>Ankleshwar Industrial Estate</td>
<td>3985</td>
<td>BASF, Rallis India, Zydus Cadilla, Apex Health Care, Wockhardt, GIPCL</td>
<td>Largest GIDC estate with presence of 2000+ industries including ~1500 chemical industries.</td>
</tr>
</tbody>
</table>

Prominent industrial areas for greenfield and secondary transactions

The major industrial clusters can be identified as Savli, Maskarpura, Halol, Dahej, Bharuch and Ankleshwar. The land rents in these corridors range between INR 1,600 to INR 6,400 per annum. The rates mentioned are indicative and may vary on other parameters as well.

WHY VADODARA

Vadodara is India’s first railway university - National Rail & Transportation Institute (NRTI) with multi-disciplinary techno-commercial curriculum

Home to large scale public sector enterprises such as Gujarat Alkalies & Chemicals Limited (GACL), Gujarat State Fertilizers and Chemicals (GSFC), Gujarat Industries Power Company Ltd. (GIPCL), Indian Oil Corporation (IOCL), Oil and Natural Gas Corporation (ONGC).

OPaL’s unit at Dahej is the largest petrochemical plant in India, developed at an investment of USD 4.6 Billion.

Vadodara contributes

- 35% of India’s power transmission & distribution equipment manufacturers
- 28% of state’s manufacturing sector

Home to Indian Oil Corporation’s second largest refinery in India: presently undergoing expansion to increase capacity to 16 MMTPA to become India’s largest refinery (by 2023)

Home to large scale public sector enterprises such as Gujarat Alkalies & Chemicals Limited (GACL), Gujarat State Fertilizers and Chemicals (GSFC), Gujarat Industries Power Company Ltd. (GIPCL), Indian Oil Corporation (IOCL), Oil and Natural Gas Corporation (ONGC).

Potential Sectors:
- Engineering, Auto & Ancillary, Engineering Plastics and Electrical & Electronics Industries
- Existing major units in the region: CEAT, HNG, Kamrock, Sun Pharma, DuPont, Bombardier

Halol-Savli SIR
- Halol-Savli Special Investment Region (SIR) with an area of 123 sq.km.
- Potential Sectors: Engineering, Auto & Ancillary, Engineering Plastics and Electrical & Electronics Industries
- Existing major units in the region: CEAT, HNG, Kamrock, Sun Pharma, DuPont, Bombardier

Dahej - Petroleum, Chemicals and Petrochemicals Investment Region (PCPIR)
- India’s most active and successful PCPIR zone
- Specifically delineated investment region of 450 sq km, area focusing on Petroleum, Chemicals & Petrochemical Industries
- Dahej Port is connected to Vadodara (108 km) via 4-lane expressway & includes a liquid chemical, LNG, a Dry Bulk Cargo Terminal and a Ro-Ro service
- OPaL’s unit at Dahej is the largest petrochemical plant in India, developed at an investment of USD 4.6 Billion

**SECTOR SNAPSHOT**

<table>
<thead>
<tr>
<th>Industrial Park</th>
<th>Total Area (Acres)</th>
<th>Major Occupiers</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saylshah Industrial Estate</td>
<td>5,078</td>
<td>Upcoming</td>
<td>Focus sectors are: Chemicals, engineering &amp; textiles.</td>
</tr>
<tr>
<td>Dahej Industrial Estate – Phase 1, 2 &amp; 3</td>
<td>22,500 (9,410 + 9,440 + 3,650)</td>
<td>Reliance, Petronet LNG, Thermax, OPaL, Sterling, Hitachi Zosen, BASF</td>
<td>Major concentration of chemical &amp; petrochemical companies as it is part of Dahej PCPIR.</td>
</tr>
<tr>
<td>Payal Industrial Park (Ane)</td>
<td>5,000</td>
<td>Upcoming</td>
<td>Part of Dahej PCPIR near Bharuch, and is the largest privately held business park in India.</td>
</tr>
<tr>
<td>Savli Industrial Estate</td>
<td>770</td>
<td>Bombardier Transportation, Sheffield Technoplant, Schaeffler India</td>
<td>Focus sectors are: biotechnology, agri-biotech, engineering, plastics, export-oriented unit.</td>
</tr>
<tr>
<td>Savli Biotech Park (SEZ)</td>
<td>700</td>
<td>Zytex Biotech, Aristo Biotech &amp; Lifesciences, Centurion Laboratories</td>
<td>Endeavour to address the biotech industry’s need for specialized infrastructure and encourage new biotech enterprises.</td>
</tr>
<tr>
<td>Halol Industrial Estate</td>
<td>1463</td>
<td>MG Motors, Siemens Gamesa, CEAT, Windor Renewables</td>
<td>Focus sectors: Engineering, Automobiles &amp; ancillary units, Electronics.</td>
</tr>
<tr>
<td>Maskarpura Industrial Estate</td>
<td>1,200</td>
<td>GE Renewable, Bombardier Transportation</td>
<td>One of the oldest industrial area in the city and located along NH 48.</td>
</tr>
<tr>
<td>Bharuch Industrial Estate</td>
<td>211</td>
<td>GNFC, Reliance Chemicals, Pepsico</td>
<td>Formidable industrial base in sectors like chemicals &amp; petrochemicals, textiles, drugs &amp; pharmaceuticals.</td>
</tr>
<tr>
<td>Ankleshwar Industrial Estate</td>
<td>3985</td>
<td>BASF, Rallis India, Zydus Cadilla, Apex Health Care, Wockhardt, GIPCL</td>
<td>Largest GIDC estate with presence of 2000+ industries including ~1500 chemical industries.</td>
</tr>
</tbody>
</table>

Prominent industrial areas for greenfield and secondary transactions

The major industrial clusters can be identified as Savli, Maskarpura, Halol, Dahej, Bharuch and Ankleshwar. The land rents in these corridors range between INR 1,600 to INR 6,400 per annum. The rates mentioned are indicative and may vary on other parameters as well.