AEROSPACE INDUSTRIES

EXPRESSION OF INTEREST FOR
# Table of Contents

1. **Introduction & Background**
   DICDL Board of Directors
   National Industrial Corridor Development & Implementation Trust
   Delhi Mumbai Industrial Corridor Development Corporation

2. **Aerospace sector**
   India: Aerospace sector
   Gujarat - The Ideal Investment Destination
   Measures supporting Growth of Aerospace Industries
   Incentives

3. **Dholera**
   Advantage Dholera
   Utilities
   Housing provision
   External Connectivity
   Development Scenario
   Activation Area
   Smart Governance
   Land Allotment & Pricing
   Ease of Doing Business

4. **Project Timeline**
   Timeline
Dholera Industrial City

For development of Dholera, The Government of India through Delhi Mumbai Industrial Corridor (DMIC Trust) and the Government of Gujarat through Dholera Special Investment Regional Development Authority (DSIRDA) have formed a Special Purpose Vehicle (SPV), ‘Dholera Industrial City Development Ltd’ (DICDL) on Jan 28, 2016. The SPV comprises of 51% stake of Government of Gujarat through DSIRDA and 49% stake of Government of India through DMIC Trust.

DICDL has been formed with an initial capital of Rs. 6000 crore out of which Rs. 900 crore has already been released by the DMIC Trust against equity contribution for the Activation Area work. The equity on part of GoG through DSIRDA is in the form of land, which is allocated to DICDL. The DMIC trust has approved INR 4400 Crores for the Activation trunk infrastructure projects

The Indian Green Building Council (IGBC) has awarded the prestigious “Platinum Rating” for Green Cities to Dholera Special Investment Region (DSIR). Dholera is the first city in India and probably the world having achieved a Platinum rating.

“Dholera has truly surpassed all expectations in green design and is the role model for future India”
Dr Prem Jain, IGBC Chairman
DICDL Board of Directors

M K Das, IAS,
Chairman
Principal Secretary, IMD, Gujarat

Jai Prakash Shivahare, IAS
Managing Director
Chief Executive Officer, DSIRDA

Alkesh Kumar Sharma, IAS
Director
Chief Executive Officer & Managing Director, DMICDC

Sanjiv Kumar, IAS
Director
Secretary (Economic Affairs), Finance Department, Gujarat

Pradeep Kumar Agarwal
Director
Chief Finance Officer, DMICDC

Abhishek Chaudhary
Director
Vice President & Company Secretary, DMICDC

V C Pisipati Prasad
Director
Chief Town Planner, GIDB
NICDIT is an apex body under the administrative control of DIPP for coordinated and unified development of all the industrial corridors in the country. It will channelize the Government of India (GoI) funds as well as institutional funds while ensuring that the various corridors are properly planned and implemented keeping in view the broad national perspectives regarding industrial and city development and will appraise and approve projects and support project development activities. It will coordinate all central efforts for the development of Industrial Corridor projects and will monitor their implementation.
1. Introduction & Background

Delhi Mumbai Industrial Corridor Development Corporation DMICDC

Delhi - Mumbai Industrial Corridor (DMIC) is India’s most ambitious infrastructure programme aiming to develop new industrial cities as “Smart Cities” and converging next generation technologies across infrastructure sectors. The objective is to expand India’s Manufacturing & Services base and develop DMIC as a “Global Manufacturing and Trading Hub”. The programme will provide a major impetus to planned urbanization in India with manufacturing as the key driver. In addition to new Industrial Cities, the programme envisages development of infrastructure linkages like power plants, assured water supply, high capacity transportation and logistic facilities as well as softer interventions like skill development programme for employment of the local populace. In the first phase eight new industrial cities are being developed. The programme has been conceptualized in partnership and collaboration with the Government of Japan.
India: Aerospace Sector

Highlights

The Indian aerospace industry is one of the fastest-growing aerospace markets in the world with an expanding consumer base comprising airlines, businesses and High Net Worth Indi-

viduals. The rapid growth of this industry has attracted major global aerospace companies to India. All segments in the aerospace industry, including civil and military aviation and space, are showing a significant level of growth.

- By 2020, passenger traffic at Indian airports is expected to increase to 421 million from 264.99 million in 2016-17.

- The passengers carried by scheduled domestic airlines has increased by 29% from 148 mn in April 2012 to 190 mn in March 2016.

- Spending on business travel is estimated to increase to US$ 39.88 bn in 2026 from US$ 10.26 bn in 2017, while on leisure travel is forecast to rise to US$ 203.5 bn in 2026 from US$ 181.65 bn in 2017.

- FDI inflows witnessed a tremendous growth of 605% (7 times), growing from USD 61.84 mn to USD 435.81 mn from Apr 2012 to Mar 2016

- MRO market of India in 2016 was 1.9 bn and only 10% of this market was catered by MROs in India. Great potential to increase this share.

- NCAP was announced by MoCA to boost the regional air connectivity establish an integrated ecosystem to promote tourism and generate employ.

- India’s focus on indigenous manufacturing paid off as several products were manufactured in India such as HAL Tejas Light Combat aircraft, Sonar dome, Portable Telemedicine System, PCB and TB ammunition for Arjun Tanks, etc.

Notes: CAGR - Compound Annual Growth Rate; F=Forecasted; PCB - Penetration-Cum-Blast; TB - Thermobaric

Source: World Travel and Tourism Council - Airport Authority of India; Make in India Achievement Report, GoI
Passenger Traffic has experienced Healthy Growth

- Growth in passenger traffic has been strong since the new millennium, especially with rising incomes and low-cost aviation; during FY06-17, passenger traffic grew at a CAGR of 12.39 per cent in the country.
- Domestic passenger traffic expanded at a CAGR of 13.52 per cent over FY06–17.
- International passenger traffic registered growth at a CAGR of 9.27 per cent over FY06-17.
- By 2036, India is estimated to have 48 crore flyers, which will be more than that of Japan (just under 22.5 crore) and Germany (just over 20 crore) combined.

Freight Traffic is poised for Higher Growth

- Total freight traffic registered a CAGR of 7.08 per cent over FY06-17
- During FY06-17, domestic freight traffic increased at a CAGR of 7.95 per cent, while international freight traffic grew at a CAGR of 6.58 per cent during the same period.
- In FY17, domestic freight traffic stood at 1,123.18 million tonnes, while international freight traffic was at 1,855.06 million tonnes.
- During FY17, domestic freight traffic increased at 7.39 per cent while international freight traffic increased at 11.86 per cent in comparison with FY16.
- By 2023, total freight traffic is expected to touch 4.14 million tonnes exhibiting growth at a CAGR of 7.27 per cent between FY2016 and FY23. In addition, international freight traffic is expected to grow at a CAGR of 7.13 per cent while domestic freight traffic is expected to grow at a CAGR 7.50 per cent between FY2016 and FY23.

CAGR - Compound Annual Growth Rate;
Source: Association of Private Airport Operator, Airports Authority of India
More Passengers and Rising Trade Aiding Higher Aircraft Movement

- Over FY09-17
- India’s exports expanded at a CAGR of 4.47 per cent to US$ 276.28 billion in FY17.
- Imports registered a CAGR of 2.53 per cent which reached to US$ 75.9 billion in FY17.
- Growing trade augurs well for airports as they handle about 30 per cent of India’s total trade (by value)

Notes: CAGR = Compound Annual Growth Rate
Source: Ministry of Commerce and Industry, Government of India
Advantage India

- Rising working group and middle class demography is expected to boost demand
- India plans to increase the Airports to 250 by 2030 to cater to growing leisure and business travel
- Third largest aviation market in terms of passengers by 2026
- Freight traffic also likely to go up as trade increases

- Growth in aviation accentuating demand for MRO facilities
- Expenditure in MRO accounts for 13-15% of total revenues, it is the second highest expense after fuel cost. By 2020, the MRO industry is likely to grow over US$ 1.5 billion from US$ 0.5 billion currently

- Investments totalling US$ 12.1 billion in the airport sector are to be made during the 12th Five Year Plan (2012-17), of these, private investments are expected to total US$ 9.3 billion
- Growing private sector participation through the Public - Private Partnership (PPP) route

- The government has been encouraging private sector participation
  - Foreign investment up to 49% is allowed under automatic route in scheduled air transport service, regional air transport service and domestic scheduled passenger airline

Notes: FDI – Foreign Direct Investment; FY – Indian Financial Year (April–March); US$ – US dollar; CAGR – Compound Annual Growth Rate; MRO - Maintenance Repair and Overhaul
Source: Ministry of Civil Aviation, MRO India
Gujarat - The Ideal Investment Destination

Highlights

» Ranked amongst top 3 in Ease of Doing Business in 2016 amongst all states of India by Government of India and World Bank
» Adjudged the Best State of India by India Today in its annual “State of the States” survey 2015
» Ranked as the Top State for investment in India by the National Council of Applied Economic Research
» Contributes 19% to India’s industrial output with 5% of India’s total population and with 78.03% of literacy rate
» The FDI Inflow totaled to USD 13.28 billion during April 2000-2016. This accounts for 4.6% share in the overall FDI inflows in India
» Gujarat Gross State Domestic Product (GSDP) growth rate is 15.7% for the year 2015-16
» State contribution to Manufacturing sector to GSDP is 31.10%

Market Opportunity

The state has formulated the Aerospace and Defence Policy (2016 - 2025) to attract investments with following objectives:
- Attract 10% by value of orders of the defence sector in India over the next 10 years
- Attract five mega A&D enterprises to the State in the next 5 years
- Develop A&D ecosystem in the State
- Create 20,000 direct / indirect jobs in the A&D sector over the next 10 years

Proximity to Sea Ports

The coastline of Gujarat has gives access to 45 major and minor ports. The import of raw materials is cheap and the State has fantastic last mile connectivity through road and rail.

Proximity to Airports

Air cargo facilities are extremely essential for aerospace components manufacturing industries. Dholera with its own international airport is a unique advantage in addition to three existing airports at Bhavnagar, Ahmedabad & Vadodara.
The other advantages which gives competitive edge to Gujarat are mentioned below.

**Other Advantages**

**Flourishing economy**
Gujarat contributes 7.2% of the nation's GDP and shows leadership in many areas of manufacturing and infrastructure sectors. Gujarat’s SDP (State Domestic Product) at current price registered a growth of 11% during the FY 2014-15

**Strategic location and excellent infrastructure**
Located on the west coast of India, Gujarat is well connected to the major cities of the world by air and sea routes. The state has 45 ports, 12 domestic airports and 1 international airport in addition to an extensive rail and road network.

**Easy availability of raw materials**
MSMEs play an important role in the aerospace components manufacturing supply chain as most large companies use MSMEs to deliver significant parts of their projects. Many key industrial clusters such as foundry & forgings, steel pipes and tubes, steel re-rolled products and fabricated metal products are located in close vicinity of industrial hubs such as Dholera Special Investment Region.

**Skill development**
Gujarat has good infrastructure for education with premier institutes in engineering, management, design and infrastructure planning. There are industrial training institutes in each district to train manpower for the shop floor level. The government has encouraged skill development programmes. The skill development budget has increased from INR 107 crores in FY 2001-02 to INR 1000 crores in FY 2013-14.

**Better social infrastructure**
Gujarat has one of the lowest cost of living amongst the Indian states, is safer and relatively less congested & polluted, offering better living standards to inhabitants and providing a better environment to work.

Source: Vibrant Gujarat Summit 2017 - Government of Gujarat
Measures Supporting Growth of Aerospace Industries

**Government of India**

**Encouragement to FDI**
- GOI has allowed 100% FDI under automatic route for greenfield projects, whereas, 74% FDI is allowed under automatic route for brownfield projects.
- 100% FDI is allowed under automatic route in scheduled air transport service, regional air transport service and domestic scheduled passenger airline. FDI over 49% would require government approval.
- Approval of 49% FDI in aviation for foreign carriers.

**Liberalization, Open Sky Policy**
- With the opening of the airport sector to private participation, 6 airports across major cities are being developed under the PPP model.
- Currently 60% of airport traffic is handled under the PPP mode, while remaining 40% is managed by the AAI.
- Increased traffic rights under bilateral agreements with foreign countries.
- India signed its 1st open skies agreement with Greece.
- In May 2017, India and Spain signed an MoU for cooperation in civil aviation industry. MoU would spur greater trade, investment, tourism and cultural exchanges between both the countries.
- In April 2017, Brussels Airlines launched its service from Brussels to Mumbai, its 1st flight to Asia.

**Budgetary Support**
- Government has allocated a sum of US$ 32.44 mn to Directorate General of Civil Aviation to implement various schemes.
- Government has also supported the Bureau of Civil Aviation Security with US$ 10.81 million to meet their expenditure.
- Allocation to Civil Aviation ministry has been tripled to Rs 6,602.86 crore (US$ 1,019.9 million) under Union Budget 2018-19.

**National Civil Aviation Policy 2016**
- Regional Connectivity Scheme (RCS) has been launched under the policy.
- Airlines can commence international operations and have to deploy 20 aircrafts or 20 per cent of total capacity (whichever is higher) for domestic operations.

Notes: India currently has bilateral air service agreements with 104 countries. These include Brazil, 27 members of the EU, and China. In 2008 traffic rights were been enhanced with Mexico, Saudi Arabia, Netherlands, Qatar, Iran, Japan and Turkey, FDI – Foreign Direct Investment, GOI – Government of India; FY - Indian Financial Year (April - March)
Source: Ministry of Civil Aviation, Government of India
## Government of Gujarat

### Large Air traffic planned with New Airports
- Gujarat has planned to establish 11 new airports including an international airport at Dholera.

### Excellent Technical Educational for Aerospace industry
- Gujarat has seven institutes which offers engineering courses for Aeronautics

### Potential of MRO activities, flight schools
- Gujarat is strategically located for MRO activities as it is in proximity to the Mumbai and Delhi international airports. Also geographically well located for flight schools and other institutes.

### Industry Infrastructure
- Establishment of Gujarat State Aviation Infrastructure Company Limited (GUJSAIL) to enable the growth of the air hub and aviation industry, oversee and promote safety, provide air navigation services, and develop Gujarat as a centre of excellence for aviation knowledge

### Policies and Incentives
- Incentives provided by Government of Gujarat to boost Aerospace sector through Aerospace and Defence Policy (2016-25). Incentives are mentioned in next section

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Notes: MRO - Maintenance Repair and Overhaul; 
Source: Vibrant Gujarat Investor Summit 2017, Government of Gujarat

April, 2018
## Incentives

### Government of India

#### Export linked

<table>
<thead>
<tr>
<th>Scheme</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Export Oriented Unit scheme</td>
<td>Exemption/Refund of various indirect taxes such as customs duty, excise duty on the procurement of capital goods and inputs (as the case be) for permitted operations</td>
</tr>
<tr>
<td>Export promotion capital goods</td>
<td>Allows duty-free procurement of capital goods by exporters, subject to the fulfillment of export obligation and other specified conditions</td>
</tr>
<tr>
<td>Duty Free Import Authorization Scheme</td>
<td>Permit the import of inputs without customs duty, subject to the fulfillment of value-added norms and export obligation</td>
</tr>
<tr>
<td>Served from India Scheme</td>
<td>Available to specified service providers having service exports of ₹ 1 million or more – for import/procurement of spares, office equipment, furniture and consumables Post export benefit allowed by way of duty credit scrip equivalent to 10% of the net foreign exchange earned in the current financial year</td>
</tr>
<tr>
<td>Duty drawback</td>
<td>Post export benefit to allows rebate of taxes and duty paid on inputs and input services used in the manufacture of exported goods at prescribed rates</td>
</tr>
<tr>
<td>Focus Product Scheme</td>
<td>Post export benefit allowed by way of duty credit scrip equivalent to a specified percentage of the FOB value of exports of specified products to any country/all products to notified countries</td>
</tr>
</tbody>
</table>

#### Activity based

<table>
<thead>
<tr>
<th>Scheme</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weighted Deduction for R&amp;D facilities</td>
<td>In-house R&amp;D facility eligible for deduction @ 200% under the Act</td>
</tr>
<tr>
<td>Employment of New Workmen</td>
<td>Deduction equivalent to 30% of additional wages/salary (over and above expenditure on wages/salary) available for three years in respect of new workmen employed</td>
</tr>
</tbody>
</table>

Source: Tax Incentives in India, Ernst & Young
## National Civil Aviation Policy 2016

### Regional Connectivity Scheme (RCS)
- RCS will offer a flexible menu of options to the interested scheduled airline operators.
- VGF for operators at 80:20 split between Centre and State.
- There will be no airport charges levied for operations under RCS.
- Landing, parking and Terminal Navigation Landing charges (TNLC) shall be waived and Route Navigation and Facilitation charges (RNFC) will be levied on a nominal basis.

### Air Transport Operations: Commercial
1. Scheduled Air Transport Operator (Domestic and International) - same existing provisions.
2. Scheduled Commuter Operator - Operator will operate with aircraft having a max. AUW not exceeding 40 Tons. The min. equity capital requirements would be on the basis of number and size of aircraft in the fleet.
3. Non-Scheduled Operator - Operator will provide charter services on domestic and international routes.

### Replacement of 5/20 rule
- 0/20 replaces 5/20 rule for starting foreign operations, which means airlines can commence international operations provided that they deploy 20 aircraft or 20% of total capacity (in term of average number of seats on all departures put together), whichever is higher for domestic operations.

### Incentives to MRO
- Customs and excise duty exemption for tools and tool-kits used in MRO works.
- Restriction of one year for utilisation of duty free parts had been removed.
- Notification on Standard Exchange Scheme had been revised to allow import of unserviceable parts by MROs for providing exchange/advance exchange.
- Foreign aircraft brought to India for MRO work allowed to stay up to 6 months or as extended by the DGCA.
- Airport royalty and additional charges not be levied on MRO service providers for a period of five years from the date of approval.

### Development of Airports in PPP mode
- Airports are being developed in PPP mode with Government actively involving private sector participation.

Note: VGF - Viability Gap Funding; AUW - All Up Weight; MRO - Maintenance Repair and Overhaul; PPP - Public Private Partnership; DGCA - Directorate General of Civil Aviation

Source: National Civil Aviation Policy 2016 - Government of India
# Incentives

**Government of Gujarat**

## Aerospace and Defence

### CATEGORY OF INDUSTRY AS PER POLICY

<table>
<thead>
<tr>
<th>Type of Industry</th>
<th>Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mega A&amp;D Enterprise</td>
<td>Global/Indian OEM which makes investment of ₹ 500 Crores or above at the time of commencement of production. Has on hand A&amp;D orders of ₹ 50 Crores or ore at the time of commencement of production.</td>
</tr>
<tr>
<td>Large A&amp;D Enterprise</td>
<td>Investment lower than 500 Crores and above than prescribed for medium enterprise as per MSME Development Act, 2006 of GOI</td>
</tr>
<tr>
<td>MSME A&amp;D Enterprise</td>
<td>As per the conditions mentioned in MSME Development Act, 2006</td>
</tr>
</tbody>
</table>

Source: Industrial Policy 2015, Government of Gujarat

## Incentives offered as per policy

### Capital Investment Subsidy to MSME A&D enterprises

1) Micro units: 25% of eligible fixed capital investment with ceiling of ₹12.5 lakh.  
2) Small units: 25% of eligible fixed capital investment with ceiling of ₹1.25 crores.  
3) Medium units: 25% of eligible fixed capital investment with ceiling of ₹2.5 crores

### Land

100% reimbursement of the stamp duty as well as registration fee paid to the Government towards lease/sale/transfer of land. Government will support A&D testing ranges/sites in State for testing of products.

### Interest Subsidy

1) Mega A&D - ECB or DB - maximum of 2-5% or 50% of interest rate whichever is lower; up to ₹ 10 Crores per annum for 5 years  
2) Large A&D - ECB or DB - maximum of 2-5% or 50% of interest rate whichever is lower; up to ₹ 5 Crores per annum for 5 years  
3) MSME - ECB or DB - maximum of 2-7% or 50% of interest rate whichever is lower; up to ₹ 1 Crore per annum for 5 years

Note: ECB - External Commercial Borrowing; DB - Domestic Borrowing

Source: Aerospace and Defence Policy (2016-25), Government of Gujarat
## Incentives offered as per policy

<table>
<thead>
<tr>
<th>Category</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GST Reimbursement</strong></td>
<td>SGST will be reimbursed subject to overall ceiling of 90% of GFCI as maximum eligibility for reimbursement. It will be allowed for 10 years from the date of production. Quantum of incentive is under examination</td>
</tr>
</tbody>
</table>
| **Power Tariff and Electricity Duty** | 1) Power tariff subsidy at ₹ 1 per unit in the billed amount for period of 5 years  
2) 100% reimbursement for electricity duty paid by it for period of 5 years from the date of commencement of production |
| **Skill Development**     | 1) Mega A&D - 50% of cost of training up to maximum of ₹ 1 lakh per employee per annum for 25 employees  
2) Large A&D - 50% of cost of training up to maximum of ₹ 1 lakh per employee per annum for 20 employees  
3) Large A&D - 70% of cost of training up to maximum of ₹ 10000 per employee per annum for 10 employees |
| **R&D Support**           | 50% capital subsidy to maximum of ₹ 5 Crores |
| **Equity Support**        | Government may participate in the equity share capital of Mega or Large A&D enterprise directly or through State PSU |
| **Patent Assistance**     | Assist MSMEs in patent and copyrights |
| **Quality Certification** | Assistance in obtaining quality certification |

## Single Window Clearance

**Single Window Clearance Act, 2017** is in force to provide speedy process of various licenses, clearances and certificates for setting up industrial units and also to provide investor friendly environment in the state.

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Note: GST - Goods and Service Tax; GFCI - Gross Fixed Capital Investment; R&D - Research and Development; MSME - Micro, Small and Medium Enterprise; PSU - Public Sector Undertaking  
Source: Aerospace and Defence Policy (2016-25), Government of Gujarat
Advantage Dholera

Dholera in the state of Gujarat is the largest Greenfield Smart city being built under the DMIC. It is planned for 920 square kilometres over 30 years. An Activation Area, the first phase of 22.54 square kilometres (5600 acre) is under construction and will be ready for operation in 2019.

Activation Area majorly consist of industrial land use and residential land use with 50% and 28% respectively. Along with it, Activation area also includes Mixed land use (High Access Corridor), Recreational & Sports and Tourism land uses.

Large and Contiguous Land Parcels

Dholera offers the largest land parcels in any city in India and perhaps South Asia. Land parcels range from 5 hectares to 140 hectares and can be combined to produce parcel size up to 750 hectares.

The plot size requirement of Electronic industries vary from 40 hectares to 80 hectares. Dholera has large land parcels which can be utilized to form Aerospace Manufacturing Cluster for manufacturing industries.
Advantage Dholera

Defence and Aero Manufacturing Clusters
- Provision of Helipad
- Adequate space for Testing Airstrip / Runway
- Strategic location of Ancillary Industries
- Future expansion of industries possible

Proximity of Dholera International Airport
- Proposed International Passenger and Cargo Terminal
- Two runways for smooth operation
- Great potential to setup MRO

Development of R&D Facilities
World Class Infrastructure

Exceeds world class standards for performance and sustainability. Dholera will use ICT as an underlying enabler in all spheres of the city and will integrate multiple essential disciplines, facilitate ease of doing business and ease of living along with a platform for efficient operations and administration. Dholera’s Command and Control Centre is designed to oversee safety & security and will provide collaboration among city departments e.g. utilities, traffic management, emergency response for orchestrated functioning thus enhancing city livability.

Sustainability

Zero waste discharge by treating, recycling & reusing 100% of the wastewater generated to tertiary standards for non-potable and industrial use while implementing best practices such as smart metering and SCADA to minimize losses

Capture storm water runoff to minimize flooding and property damage. Implement a rain water harvesting system through an open earthen canal which will allow aquifer recharge and reuse of water for irrigation

100% collection of solid waste with no sights of public dumping and foul odour. Biodegradable solid waste will be treated for use as compost and to generate energy
### Plug & Play

Building this city from the ground up, the vision is to have a ‘Plug & Play’ approach wherein all land parcels are fully ICT enabled and completely built up infrastructure is offered right at the plot level. Dholera is unique in, that, it is the first city in India where all underground utilities Gas, Power, Potable water, Recycled water, Sewage pipes and Storm water are pre-planned for implementation, with the capability of handling the growing demands of the city.

### Live Work Play

True to its name, Dholera Industrial City focuses on catering to the needs of businesses and industries. While the businesses and industries will create jobs for people to come to Dholera for work, the residential zones will ensure that the employees and their families can walk to work & improve their quality of life in a pre-planned city ensuring the requirement of its citizens to fulfill their aspirations.

There is a paradigm shift in the manner in which cities are being planned and designed; the problems our existing cities face in terms of safety, traffic congestion, lack of open green spaces or social/cultural facilities directly informs what all we need to address or incorporate in our future cities. Research has consistently shown that cities where people walk more and drive less are healthier cities. The automobile is losing out to the transit and pedestrians, and people (resident, visitors and workers) are the main focus of city-building. In Dholera planning, the distribution of open green spaces and social infrastructure builds upon the core strategy of creating a city for the people. Based upon this strategy, the guiding principle of Live-Work-Play was adopted. The guiding principle emphasizes creating a People Centric City; creating a Smart City with smart social and physical infrastructure with more pedestrians and cycle tracks and creating a city that integrates arts, culture, and education for socio-economic growth of its inhabitants.
Walkability Index

Neighbourhood park - 400 meter
Community park - 800 meter
Linear park - 1500 meter
Regional park - 4000 meter

5% of total area earmarked for parks and open green spaces

Provision of walkways and cycle track in Row
Shaded pathways and large green public activity spaces
Open space framework

Neighbourhood park

Community park

Linear park

Regional park

3. Advantage Dholera
Utilities (Water & Waste Water)

24 X 7 Potable water supply
Permanent source of 100 MLD Raw water
Smart metering with 100% coverage
50 MLD Water Treatment Plant (WTP) is under construction
Potable water quality parameters are as below:

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color, Hazen units, Max.</td>
<td>Not more than 5</td>
</tr>
<tr>
<td>pH</td>
<td>6.5 - 8.5</td>
</tr>
<tr>
<td>Turbidity (NTU)</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Total suspended solids (mg/l)</td>
<td>Not more than 1</td>
</tr>
<tr>
<td>Taste</td>
<td>Unobjectionable</td>
</tr>
<tr>
<td>Odour</td>
<td>Unobjectionable</td>
</tr>
</tbody>
</table>

24 X 7 Recycled water supply
Dual plumbing system for residential areas
Smart metering with 100% coverage
Aerospace Industries are allowed to dispose effluent in city network after treating to following effluent parameters:

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>5.5 - 9</td>
</tr>
<tr>
<td>Colour (Hazem)</td>
<td>&lt;100</td>
</tr>
<tr>
<td>Oil &amp; Grease (mg/l)</td>
<td>&lt;100</td>
</tr>
<tr>
<td>Liquid Temperature (max.)</td>
<td>450 C</td>
</tr>
<tr>
<td>BOD5 (mg/l)</td>
<td>500 - 600</td>
</tr>
<tr>
<td>COD (mg/l)</td>
<td>1200 - 1500</td>
</tr>
<tr>
<td>Total suspended solids (mg/l)</td>
<td>&lt; 500</td>
</tr>
<tr>
<td>Chlorides (mg/l)</td>
<td>500 - 600</td>
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<td>&lt;100</td>
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<td>Liquid Temperature (max.)</td>
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</tr>
<tr>
<td>BOD5 (mg/l)</td>
<td>500 - 600</td>
</tr>
<tr>
<td>COD (mg/l)</td>
<td>1200 - 1500</td>
</tr>
<tr>
<td>Total suspended solids (mg/l)</td>
<td>&lt; 500</td>
</tr>
<tr>
<td>Chlorides (mg/l)</td>
<td>500 - 600</td>
</tr>
</tbody>
</table>

100% collection of domestic waste water and Industrial effluent
100% recycling and reuse
10 MLD Sewage treatment Plant (STP) is under construction
20 MLD Common Effluent treatment Plant (CETP) is under construction
Utilities (Solid waste, Power & ICT)

100% waste collection
City Integrated waste management system for domestic, Industrial and hazardous waste

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Organic waste treatment through Bio-methanation Plant</td>
<td>Treatment of recyclable material such as Glass, metal, plastic, paper etc through registered vendors</td>
<td>Landfill site for disposal of inert waste</td>
<td>Incineration Plant for Treating industrial waste</td>
<td>Dedicated E-waste recycling in Integrated SWM Facility</td>
</tr>
</tbody>
</table>

24 X 7 Power supply
Dual circuit network with redundant power source for backup
100% underground power distribution network
Power quality parameters are as below:

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Value</th>
<th>Type of System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical Loss</td>
<td>Less than 5%</td>
<td>Energy Management System (EMS)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gas Insulated Switchgears and SVCs</td>
</tr>
<tr>
<td>Commercial Loss</td>
<td>Less than 5%</td>
<td>Distribution Management System (DMS)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Advanced Metering Infrastructure (AMI)</td>
</tr>
<tr>
<td>Scalability</td>
<td>-</td>
<td>SCADA</td>
</tr>
<tr>
<td>Voltage Variation</td>
<td>+5</td>
<td>Static Var Compensator (SVC) are part of the AC transmission system device regulating voltage and harmonics</td>
</tr>
<tr>
<td>Total Harmonic Distortion</td>
<td>+5</td>
<td></td>
</tr>
<tr>
<td>Power Factor Correction</td>
<td>Less than 15%</td>
<td>Automatic Power Factor Controller Panels (APFC)</td>
</tr>
<tr>
<td>Zero Outage</td>
<td></td>
<td>Smart grid with Fault passage indicators</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Outage Management System (OMS)</td>
</tr>
</tbody>
</table>

100% Coverage with Fiber Optical cables
ICT enabled city infrastructure
Integrated City Operation Centre (CIOC) to control and manage city operations
City wide WiFi and networking
Housing Provision

As per the report of National Skill Development Corporation (NSDC) in 2014, the manpower from the different sectors of industry consists of the following:

**Experts** 4-5%

**Supervisory staff / Technical** 49-50%

**Non-Technical Staff** 25-27%

**Field staff** 19-21%

Approximately more than two-thirds of the manpower consists of Supervisory staff, Non-Technical and field staff, the Aerospace industry requires housing provision for Economic Weaker section (EWS) or Middle Income Housing (MIG).

Activation Area consist of almost 650 hectares of land dedicated for residential development which accommodate High, Medium and Low density development. During the planning phase, housing provision for Economic Weaker Section (EWS) has been considered and land is reserved. The map below shows the identified EWS housing clusters within Activation Area:
External Connectivity

Ahmedabad to Dholera 6 lane expressway 100km
Ahmedabad to Dholera Mass Rapid Transit System (MRTS) line 87km
Dedicated Freight Rail line connecting to DFC 35km
Dholera International Airport

Mundra Port - 6 hours
Pipava Port - 2 hours
Ahmedabad Airport - 2 hours
Dedicated Freight Corridor (DFC) - 1.5 hours
Dholera Airport - 15 mins

Proposed Infrastructure

Ahmedabad to Dholera 6 lane expressway 100km
Ahmedabad to Dholera Mass Rapid Transit System (MRTS) line 87km
Dedicated Freight Rail line connecting to DFC 35km
Dholera International Airport
Development Scenario

Dholera will be a sustainable Greenfield Industrial City planned and located approximately 100km south of Ahmedabad. The project as envisaged will be the first initiative from DMIC-DC to create a linear zone of industrial clusters and the nodes will be developed in the influence area of Western Dedicated Freight Corridor (DFC). As a new city by 2040, Dholera will cater to a population of 2 million and an employment base of over 8,00,000

The Development Plan for Dholera has been prepared and sanctioned. It is divided into three phases with phase-I constituting an area covering 158sqkm

To trigger the development of Dholera, an Activation Area is identified which acts as a catalyst for further investments and attracts local and global investors. The Activation Area is spread across an area of approximately 22.5sqkm. The area has approximately 72kms of roads and an optimum mix of land use comprising of industrial, residential, mixed use, recreation and tourism. The area selected is based on immediate availability of land and its future status after implementation of TP schemes (area with the highest opportunity of commencement of site work)

Development at a glance

- Total area of Dholera: 920 square kilometers
- Developable area: 422 square kilometers
- Area to be developed in Phase I: 158 square kilometers
- Activation area(Part of Phase I): 22.54 square kilometers
Activation Area

The Activation Area is approximately 4.25% of the total developable area of Dholera. It can cater to a residential population of 1.2 lakhs with an employment of approximately 80,000 people by 2020. The Activation Area has a major portion of Government land (approx. 80%) which will provide ready to move plots with all the major trunk infrastructure at the door steps of each plot.
Smart Governance

Unified agency for all city operations:
DICDL is the unified company to maintain and operate the city

Environment Clearance:
City wide environment clearance obtained from the Ministry of Environment, Forest and Climate Change

Dholera Integrated Operation Centre (DIOC):
Centralized city wide operation centre to operate and manage the entire city

Land Allotment & Pricing

- As per the approved Land Allotment Policy of DICDL, appropriate discount up to 50% on land price is provided to Anchor tenants
- Discount on 50% land price is provided for developing social infrastructure (health facility, educational facility and other public amenities) as per policy
- Transparent process of land allotment for different land uses

Highlights

Land allotment within 17 days
Land possession within 90 Days

Land Pricing

<table>
<thead>
<tr>
<th>Land use</th>
<th>Rate (per sq m)</th>
<th>Rate (per acre)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>INR</td>
<td>USD</td>
</tr>
<tr>
<td></td>
<td>(in million)</td>
<td>(in million)</td>
</tr>
<tr>
<td>Industrial</td>
<td>2750</td>
<td>42.79</td>
</tr>
<tr>
<td>Residential</td>
<td>4125</td>
<td>64.19</td>
</tr>
<tr>
<td>High Access Corridor</td>
<td>3438</td>
<td>53.50</td>
</tr>
<tr>
<td>Tourism and Resort</td>
<td>5500</td>
<td>85.58</td>
</tr>
<tr>
<td>Recreation &amp; Sports</td>
<td>2750</td>
<td>42.79</td>
</tr>
</tbody>
</table>

USD1 = INR65.0 on Apr 02, 2018
Land Allotment process
Shortest time frame for land allotment and land possession

Procedure of Land Allotment – FCFS Method

Online Application by Applicant

Submission of Application Form with Processing Fee

Form 1: Application Form

Presentation of Applicant’s proposal before Screening Committee

Screening of Proposal

Yes

Selection of Plot by Applicant

No

Resubmission or Cancellation of Application

No

Cancellation of Application

Yes

Allotment Letter

Form 2: Allotment Letter

Down Payment (10%)

No

Cancellation of Application

Yes

Balance Payment (90%)

Ext. of time for bal. payment

No

Down Payment Forfeited

No

Execution of Lease Agreement and possession of site

Form 3: Allotment Letter

Form 4: Form of Agreement

LA and possession

Timeline (days)

PF

Presentation

7

AL

17

DP

25

BP

82

LA and possession

90

AL = Allotment Letter

BP = Balance Payment

LA = Lease Agreement

DP = Down Payment

PF = Processing Fee

FCFS - First come first served
3. Advantage Dholera

Ease of Doing Business

Electronic Land Allotment System
- Online transparent system of Land Allotment
- Identified land bank – use of Web GIS to view parcels
- Hassle free online document submission
- Live updates on applications status

Direct link for Land Allotment: https://elas.dicdl.in

Direct link for WebGIS: http://dicdl.in/land-parcel-map/
Construction Timeline

Activation Area is scheduled to complete by September 2019.
4. Project Timeline

Timeline

It shows time required to set up of manufacturing unit overlapped on construction timeline of Activation Area.

Land allotment

Land possession

Planning & Design

EIA & other statutory approvals

Manufacturing industry setup

0 Month 3 Month 6 Month 9 Month 12 Month

Activation area

Sep 2018
Administrative & Business Centre for Dholera
4. Project Timeline

- Sep 2019: 72km Roads & Underground services
- Jun 2019: Sewage & Common Effluent Treatment Plants
- Area ready for operation
- Construction
- Operation & production
- 15 Month
- 24 Month
- 36 Month
- 48 Month
To know more and get in touch with us:

**P:** 079 – 29750500  |  **F:** 079 – 29750502

**E:** hr@dicdl.in  |  **W:** www.dicdl.in

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