



# Gujarat: Growth Engine of India

---

## India-Taiwan Country Roundtable

---

# Gujarat State Electronics Mission



## Gujarat State Electronics Mission (GSEM)



The **Gujarat State Electronics Mission (GSEM)** is a government body established under the Department of Science and Technology, Government of Gujarat. Its primary purpose is to act as a facilitator and catalyst for the growth of the electronics, semiconductor, and space technology industries within the state.

### Vision & Mandate

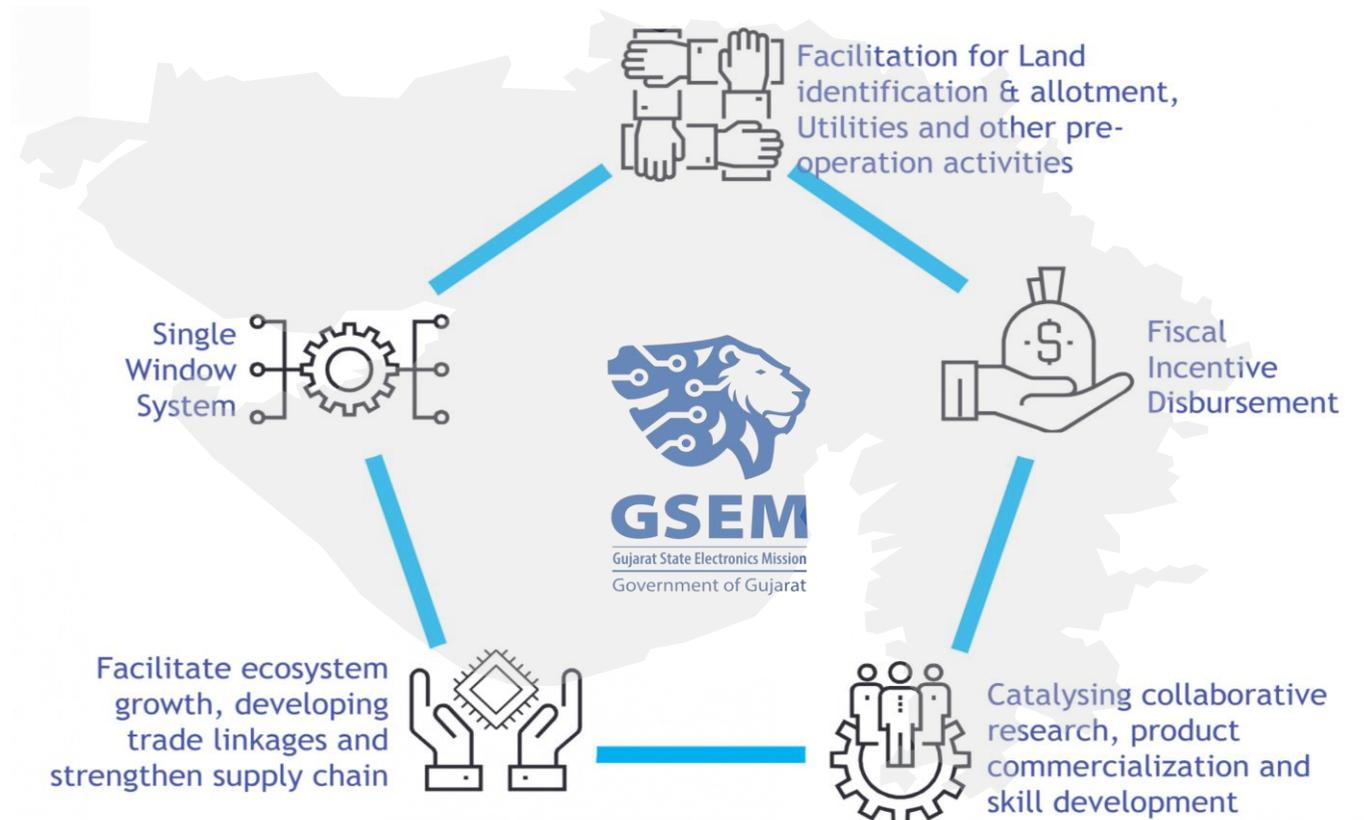
**GSEM vision** is to make Gujarat a top national and global destination for Electronic System Design and Manufacturing (ESDM). To achieve this, it aims to:

- Create a robust ecosystem for electronics, semiconductors, and display manufacturing.
- Attract investment and create jobs.
- Develop key policies, like the Gujarat Electronics Policy (2022-28) and the Gujarat Semiconductor Policy (2022-27).
- Build world-class infrastructure, such as the Dholera Semicon City.

Gujarat is the first in India to introduce a dedicated Semiconductor Policy (2022-27).



The Gujarat Electronics Policy (2022-28) aims to create USD 30 billion in electronics manufacturing and generate 1 million jobs by 2028.



# Semiconductor Projects- Status Summary



 US\$ 10.41 Bn  
(INR 91,000 crores)

 20,000

 50,000 wafers  
starts month

**Foundry**  
Dholera SIR



 US\$ 2.57 Bn  
(INR 22,516 crores)

 20,000

 >110 Mn chips  
per month

**Memory ATMP**  
GIDC Sanand



 US\$ 0.87 Bn  
(INR 7,600 crores)

 5,000

 15 Mn chips per  
day

**OSAT**  
GIDC Sanand



 US\$ 0.38 Bn  
(INR 3,300 crores)

 2,000

 60 Lakh chips  
per day

**OSAT**  
GIDC Sanand

**Approx. ₹ 1,24,000 +**  
crores investment

\*1 USD=₹87.47

# Unmatched Speed in Investor Support



	Project Approval by ISM/MeitY	Project Approval by GSEM	Ground-breaking	Incentive Disbursement
	15-Jun-23	16-Jun-23	23-Sep-23	Commenced
	7-March-24	13-Mar-24	13-Mar-24	Commenced
	7-Mar-24	13-Mar-24	13-Mar-24	Commenced

# Gujarat Leadership



Best Performing State in All Major Rankings

US\$ 309 Bn GSDP (FY 2023-24)

8.6% of India's GDP

12% Avg Growth Rate in last 7 yrs

\$43 Bn FDI 17% of India's FDI (2019-24)

30.7% of India's Total export (2023-24)

2.1 Mn MSME units

38.5% India's Port Cargo Handled



Longest coastline of 1,600 km  
48 seaports



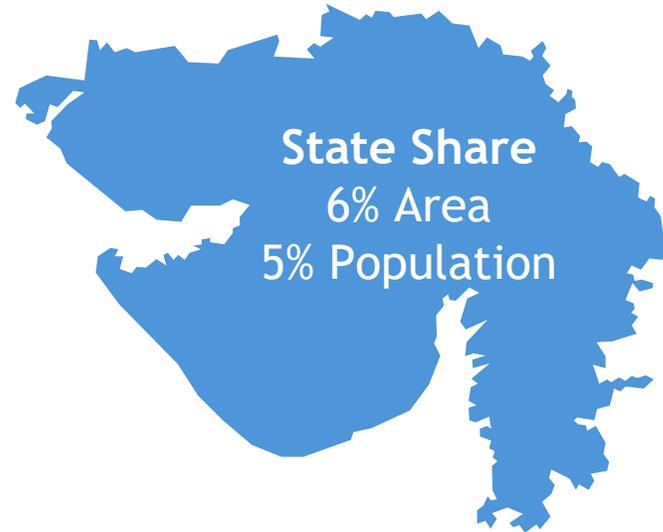
38% of Delhi-Mumbai Industrial Corridor (DMIC) passes through Gujarat



19 Airports (including 3 international airports)



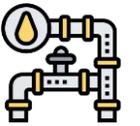
81,565+ kms of well-surfaced roads  
- 22,460 km of Highways



4,842+ kms railway route length & India's first Bullet train (*upcoming*)



1st state-wide extensive piped natural gas grid 2,700 km network



55 GW total capacity  
54% Renewable sources



State-wide water network  
63,904 km Narmada Canal



239 GIDC Industrial estates with Plug & play facility

India's 1st Platinum rated Green Industrial City - Dholera Semicon City

India's first International Financial Services Centre (IFSC) - GIFT City

# Competitive Advantage



**Business-friendly  
& Investment-supportive  
state**



**Ease of Doing Business**  
‘Top Achiever’ in  
‘Ease of Doing Business’ Ranking  
2024



**Export Preparedness Index**  
Export Preparedness Index (EPI)  
2022, 2021 & 2020



**Logistics Performance Index**  
Logistics Performance Index (LEADS Index)  
2022, 2021, 2019 & 2018



**Peaceful Industry Labour relation**  
Peaceful Industry-labour relation  
One of the top states



**Good Governance Index**  
Good Governance Index (GGI)  
2021

# Gujarat- a Manufacturing Powerhouse



## Gujarat is a National Leader in:

### Semiconductors

- US\$14 bn investment commitment
- 4 out of 5 projects approved by ISM based in Gujarat



Chemicals & Petrochemicals



Dairy



Drugs & Pharmaceuticals



Cement



Textiles



Engineering



Gems & Jewelry



Ceramics

### Petrochemical

- 62% share in Petrochem
- 53% share in other chemicals
- 31% of chemical export to State's total export

### Renewable Energy

- 46% of Solar module manufacturing
- 2<sup>nd</sup> in Solar power Capacity
- 1<sup>st</sup> in wind power potential

### Gems & Jewellery

- 85% of silver jewellery production
- 80% of world's processed diamonds & 95% of India's diamond exports.

### Textile

- ~50% of man-made fibre manufacturing & ~29% exports
- ~37% of India's cotton produce with ~28.% export

### Pharmaceuticals

- 28% of drug exports
- 45% of pharma machinery manufacturing

### Engineering

- 70% of Brass Parts
- 16% in Metal Products Fabrication
- ~25% Export of Engineering Goods
- Rajkot ranks 1<sup>st</sup> in machine tool production

### Automobiles

- One of the leading States in Automobile manufacturing with companies like - Maruti Suzuki, TATA Motors, MG, JCB, Hero, Honda, etc.

### Global Capability Centre

- New GCC Policy launched by Gujarat
- Ahmedabad and Vadodara emerging as key hubs in Tier I & II cities

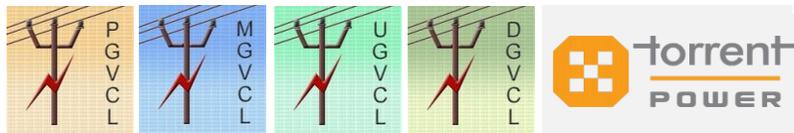


# Infrastructure Overview : Gujarat Sustainable Power



## Power

Gujarat is **First Power Surplus State**, DISCOMs of Gujarat have ranked as the top 4 on key operational and financial performance indicator

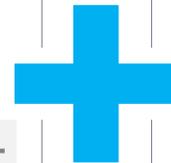


## Renewable Energy

**55%** energy from renewable (Hydro+RES) sources

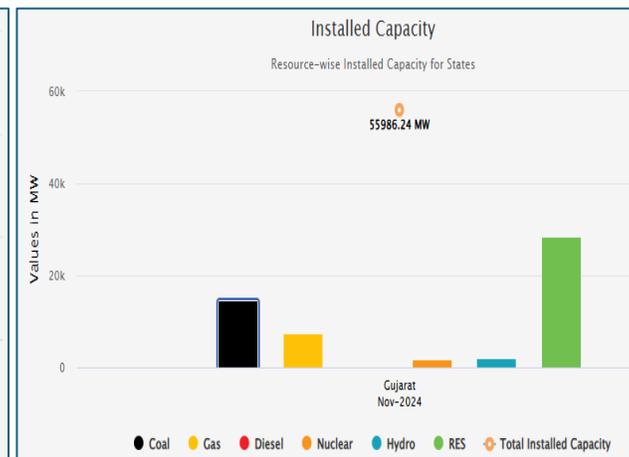
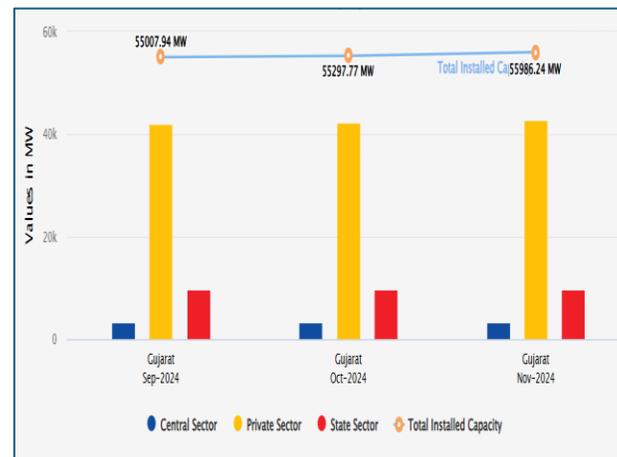
**18%** share of Country's total RES capacity

Enabling ESG goals of investors



**Total Installed Capacity : 55298.77 MW**

Installed Capacity\*



Gujarat Renewable Energy Policy-2023

Gujarat Solar Power Policy-2021

Policy for leasing the Government land for green hydrogen production using non-conventional energy-2023

# Availability of Human Resources



- **10** Institutes of National Importance
- **215** Engineering colleges including **7** in top 100 colleges
- **116** Graduate Colleges
- **60** Post-graduate colleges
- **50,000+** Trained Engineering & Technology Professionals yearly
- **149** Diploma Courses
- **1,15,000+** Trained Diploma Professionals yearly
- **16** State Universities & **2** Central Universities

## Major Educational Institutes in Gujarat



IIT Gandhinagar



IIM Ahmedabad



SVNIT Surat



IIIT Vadodara



IIIT Surat



DA-IICT, Gandhinagar



GTU



MSU Baroda



PDEU Gandhinagar

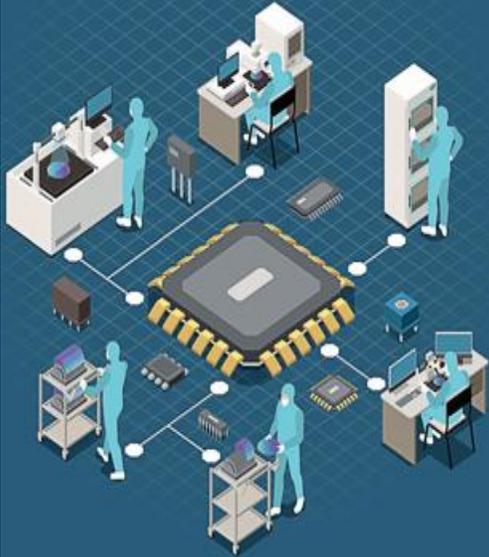
## Additional initiatives by DST

- STEM Innovation clubs in every district
- Professional training to **25,000** STEM undergraduate students in deep-tech

# PDEU - Center for Excellence in Semiconductor



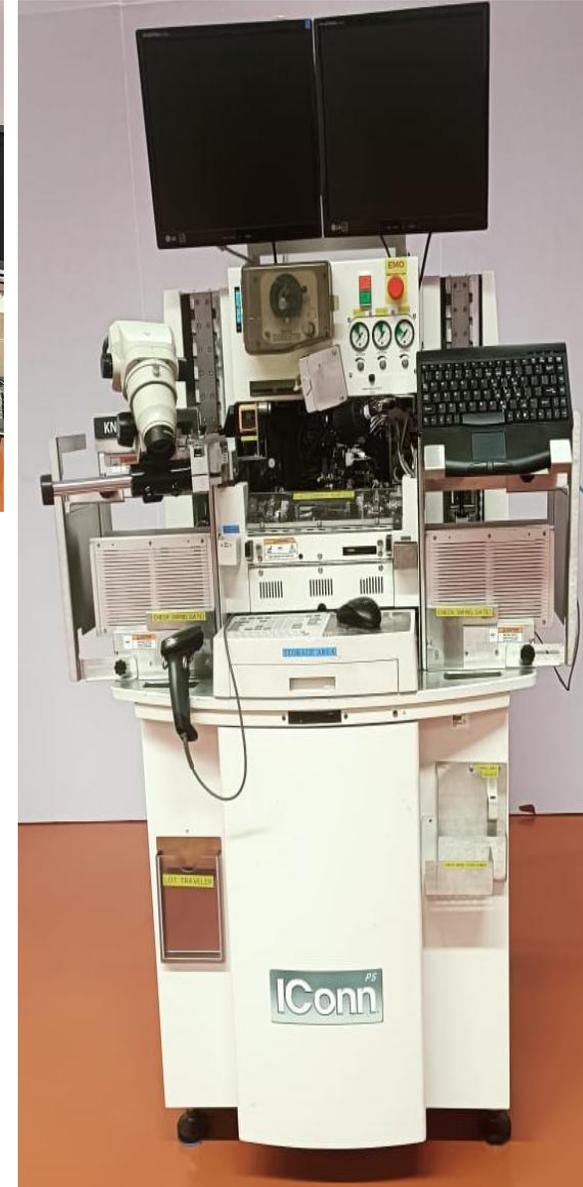
## SEMICONDUCTOR CHIPS PRODUCTION



- Semiconductor chip design and fabrication
- Fabrication of Silicon photo-voltaic
- Fabrication of flexible organic solar cells
- Fabrication of Silicon and organic display devices



- Micron Trainees completed Mandated Skill Training at PDEU for 90 days and certified by PDEU & NSDC
- Micron Skill Training - Batch 2 commenced on 26th May 2025 and will continue until 6th August 2025. (30 trainees)



IN PARTNERSHIP WITH  
NATIONAL  
SKILL DEVELOPMENT  
CORPORATION



## Gujarat Builds First – So You Can Invest Faster

### Advanced Effluent & Utility Infrastructure

- 20 MLD CETP (~₹100 Cr.) operational; additional 20 MLD in progress
- Road network, utility corridor, WTP, CETP, STP, raw water transmission, master planning completed (~₹3,000 Cr.)

1



### Dedicated International Airport (15 km from Dholera SIR)

- Operational for cargo: Dec 2025
- Operational for passengers: June 2026
- Reduces logistics cost and transit time for materials & workforce

2

### Port Connectivity

- Pipavav Port – 200 km via NH-51
- Bhavnagar Port – 65 km

3



### High-Speed Road Connectivity

- Dholera–Ahmedabad Expressway (~₹5,000 Cr.) completed — 45 mins travel time
- Delhi–Mumbai Expressway – 120 km

4

### Strategic Rail Corridors

- Bhimnath–Dholera freight rail line under construction (~₹446 Cr.)
- Semi-High Speed Rail: Ahmedabad–Dholera (~₹19,000 Cr.) proposed; connects Sabarmati, Bhavnagar & Dholera Airport

5



### Vendor Park Development

- Dedicated vendor ecosystem under development
- Enables clustering of supply-chain partners

6

# Semiconductor-Ready Ecosystem Already Under Development



7

## EMC 2.0 Plug & Play Industrial Ecosystem

- ✓ Total project cost: ₹574 Cr.
- ✓ Additional 20 MLD CETP and Common cleanroom (Class 10,000)
- ✓ Semiconductor-grade warehouse (10,000 m<sup>2</sup>, temp & humidity controlled)



8

## 200+ MLD Water availability in Dholera

- ✓ State Govt. has allotted ~2500 Cr. for water infrastructure
- ✓ Bhaskarpura tank, Narmada Canal- 100MLD & Kanewal -100MLD



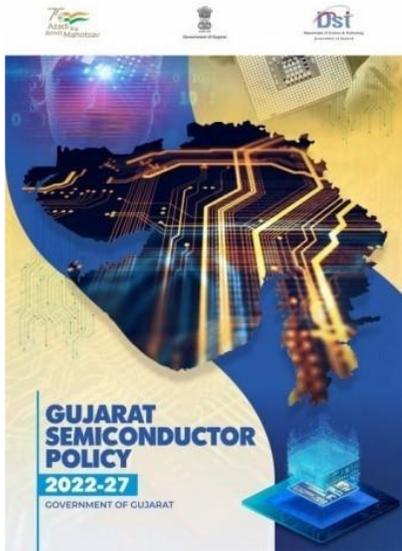
9

## Power Infrastructure

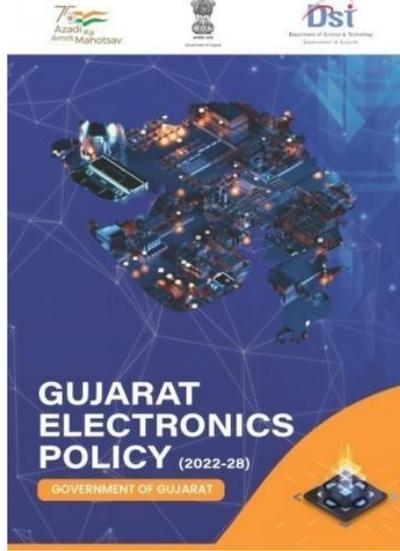
- ✓ Total project cost: ~10,000 Cr.
- ✓ Dual grid power supply is being commissioned for Dholera from national and state grid along with Solar Energy Generation park.
- ✓ 7GW capacity is available



# Policy Driven State



Gujarat Semiconductor Policy 2022-27



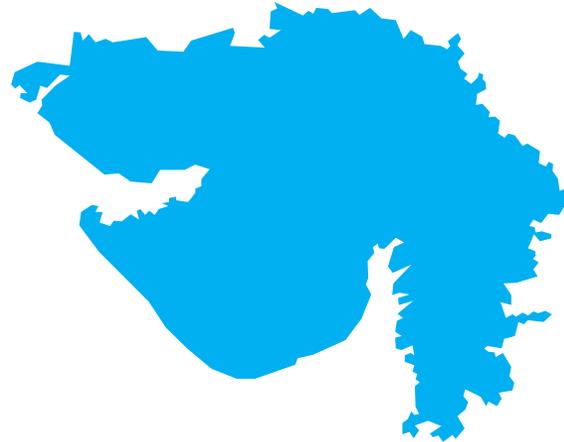
Gujarat Electronics Policy 2022-28



Electric Vehicle Policy 2021



Gujarat Renewable Energy Policy—2023



Gujarat SpaceTech Policy 2025-30



Gujarat Electronics Component Mfg. Policy

## DST's Three-Pronged Approach

Dedicated Infra. -  
Dholera & Sanand

Human Resource -  
Centre of  
Excellence

Fiscal Support

# Gujarat Semiconductor Policy 2022-27



Our Policy is in synergy with India Semiconductor Program

## CAPEX

40%

Capex assistance on approved Incentive by Gol  
(Cumulative Capital Assistance = 70%)\*

*\*includes 50% assistance by Govt of India and 20% assistance by Govt of Gujarat*

## OPEX

\$0.14  
/m<sup>3</sup>

Potable water for 5 years  
10% increase y-o-y for subsequent 5 yrs

\$0.024  
/KWHr

Subsidy on power consumption for 10 years  
+ Electricity duty exemption

## Other Support

75%

Subsidy on the  
first 200 Acres  
required for FAB  
project at Dholera

100%

Reimbursement of  
Stamp Duty and  
Registration Fee



Scan for Policy

# Gujarat Electronics Policy 2022-28



## CAPEX

20%

Support for investment  $\leq$  ₹1000 Cr  
15% on the incremental investment over ₹1000 Cr

## HR & Other Support

Up to  
100%

Reimbursement  
of Employer  
Provident Fund  
*For 5 years*

## OPEX

7%

Interest Assistance  
on term loan  
for 5 yrs  
*up to ₹10 Cr p.a.*

25%

Logistics subsidy  
on import freight  
charges  
*up to ₹5 Cr per year*

\$0.012  
/KWHr

Power  
consumption  
subsidy for 5 yrs  
+ Electricity duty  
exemption

50%

for relocating  
operations outside  
India to Gujarat  
*One-time support up  
to ₹5 Cr*

100%

Reimbursement of  
Stamp Duty and  
Registration Fee



Scan for Policy

# Gujarat Electronics Component Manufacturing Policy -Overview

## DURATION OF SUPPORT

Same as that of Government of India's Electronics Component Manufacturing Scheme.

## FISCAL INCENTIVE

Government of Gujarat will provide **matching fiscal incentives** approved and disbursed by the Government of India under the ECMS.

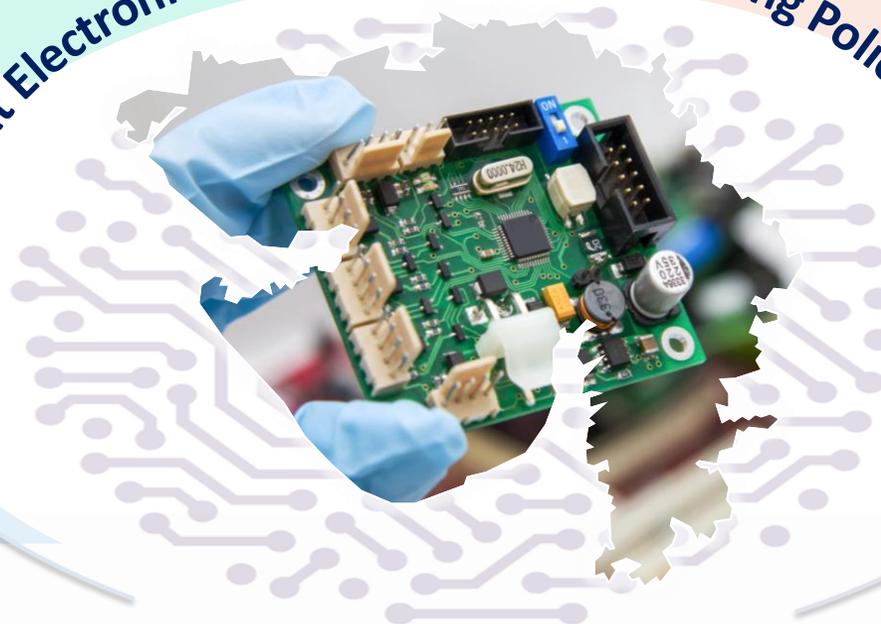
## SPEED OF DOING BUSINESS

- Disbursal within 30 days  
*(of Gol Incentive Disbursal)*
- Minimum subsequent scrutiny
- Transparent and faceless application process

## ELIGIBILITY

- ✓ Projects approved under MeitY, Gol's ECMS
- &
- ✓ Facility to be established in Gujarat

## Gujarat Electronics Component Manufacturing Policy-2025



## WORKFORCE DEVELOPMENT SUPPORT

The Government of Gujarat will contribute matching funds invested by approved Proponents to develop CoE/ finishing school/ Training Labs.  
*(maximum up to ₹12.5 Cr) (210.13 million yen)*



# Semiconductor Ecosystem in Gujarat



Front End



Back End



Chemical & Gases



Design



\* Note: This is a non-exhaustive list and contain only some of the ecosystem players



# Existing Industries in Electronics Ecosystem

## EMS, PCB manufacturing, PCBA

## Plastic Injection Moulding

## Machine Parts including Castings

## Cables & Cable Harness

## Stamping

## Sheetmetal Fabrication

## Aluminium Foundries

## Chemicals & Gases

\* Note: This is a non-exhaustive list and contain only some of the ecosystem players

# Let's Connect !



Secretary  
Department of Science and Technology,  
Government of Gujarat

Email: [secdst@gujarat.gov.in](mailto:secdst@gujarat.gov.in)  
Contact No. +91-79-23259999

 [dstGujarat](#)

Mission Director  
Gujarat State Electronics Mission, DST  
Government of Gujarat

Email: [md-gsem@gujarat.gov.in](mailto:md-gsem@gujarat.gov.in)  
Contact No. +91-79-23250463

 [GSEM\\_DST](#)