



# **“Enabling Manufacturing Ecosystem” of Karnataka**

**High Level Delegation visit  
Seoul, South Korea**

Xx xxxxxx 2018



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# Karnataka's Strong Economy



# 4<sup>th</sup> largest economy in the country

## Consistent growth over the last decade

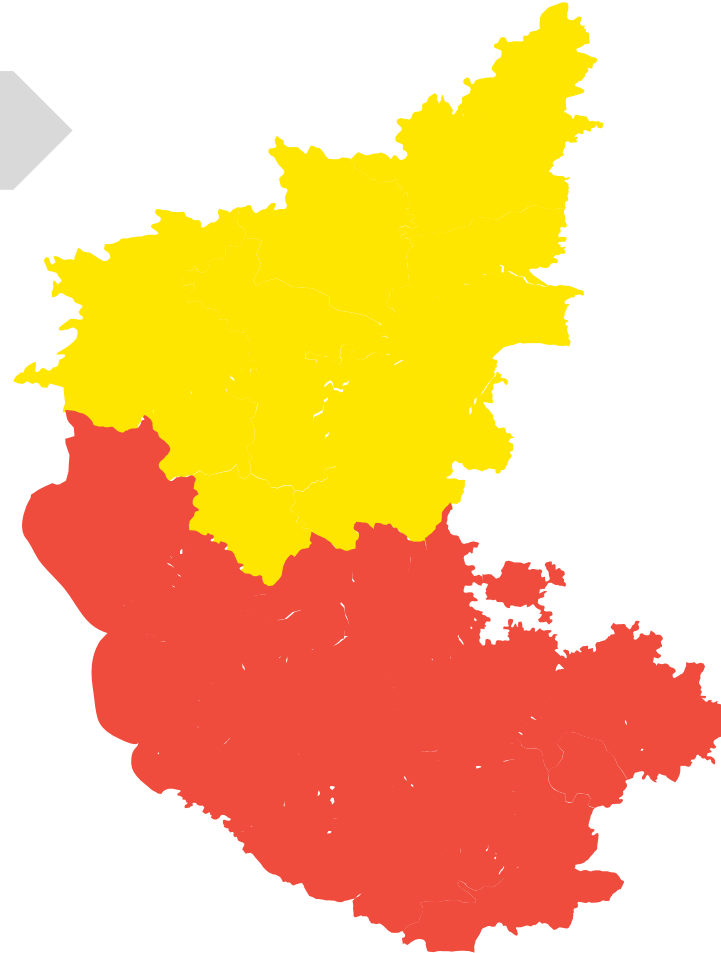
### Economic Overview

**INR 8.72 lakh crore**  
GSDP<sup>1</sup>

**2<sup>nd</sup>** highest Per Capita  
Income among bigger states<sup>1</sup>

**2<sup>nd</sup>** in terms of attracting  
FDIs<sup>2</sup>

**INR 3.25 lakh crore**  
total exports<sup>1</sup>



### Advantage KARNATAKA

**1<sup>st</sup> in attracting investment intentions  
in 2017<sup>3</sup>**

**1<sup>st</sup> in IT & ITes Exports<sup>4</sup>**

**4<sup>th</sup> largest skilled workforce<sup>4</sup>**

**More than 400 research and  
development firms<sup>4</sup>**

**Pioneer in introducing niche policies**

**Home to several premier institutions**

**Among top 15 startup ecosystems of  
the world<sup>5</sup>**

**400 out of Fortune 500 companies have  
outsourced operations in the state<sup>5</sup>**

# 32% share in India's manufacturing sector investment

## Thriving Industrial Scenario

### Ambitious National Manufacturing Policy



Achieving 25% of GDP share for the manufacturing sector in the next decade

**Karnataka's manufacturing sector contribution to GSDP in FY 17 was 14.76% while the national average is 14%<sup>1</sup>**



**Tops the Country in Manufacturing Excellence**

32% of the manufacturing sector's share in investments being attracted by Karnataka<sup>2</sup>

### GSDP contribution at Current Prices (2016-17)<sup>1</sup>



**Manufacturing**

14.76%

**Industry**

23.68%

### Karnataka MSME ( Upto Oct, 2017)<sup>3</sup>



Investment of  
INR 5,860 crores



2,27,681 persons  
employed



25,234  
Registered units

### Index of Industrial Production Growth Rates (Manufacturing) 2015-2016 (Base Year 2004-05)<sup>1</sup>



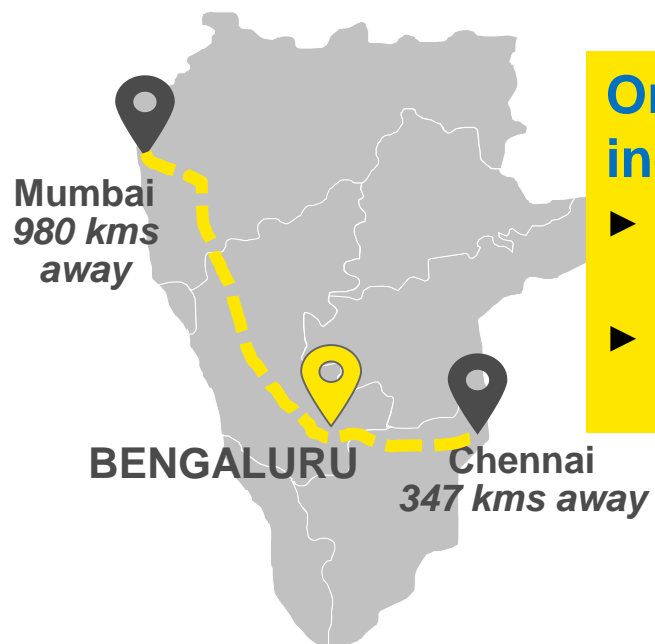
**Karnataka**

2.34

**National**

2.0

# Major Industrial Corridors and Connectivity Infrastructure



## Only State to have 2 industrial corridors

- ▶ CBIC (Chennai-Bengaluru Industrial Corridor)
- ▶ BMEC (Bengaluru- Mumbai Economic Corridor)



## CONNECTIVITY



- ▶ First phase of bidding under UDAN- Mysuru, Bidar, BIAL and Vidyanagar (Ballari)
- ▶ BIAL is the first airport in the country to have a helicopter-taxi (heli-taxi) service



- ▶ 2.4 lakh kms of continuing road length
- ▶ Presence of 13 major National Highways



- ▶ 9th major port in India- New Mangalore Port with deep inner harbour linkages in the western coast

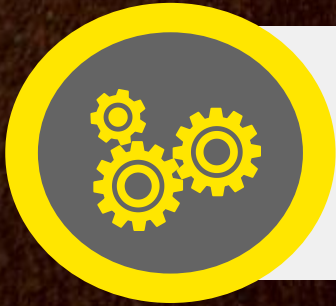
# Karnataka's Rise on Global Map



Bengaluru ranks as **No.1 Digital City in the World** as of November 2017 (The Economist Group)



State houses **80 Fortune 500 companies and over 700 MNCs**



Bengaluru is the **4th largest Technology Cluster** in the world (United Nations)



Bengaluru **only city in India ranked 19th** among world's 25 Hi-Tech cities ahead of Berlin, Hong Kong and Shenzhen (Research firm 2thinknow)



State is the **Knowledge, Research and Innovation Hub of Asia**



Bengaluru has **topped the list of 22 tech cities** across the world in **Affordable Living** (Savills Tech Cities Index)

# Focus Sectors





# Ecosystem Integrators

## Aerospace and Defence Equipment

# 1<sup>st</sup>

- ▶ **Highest R&D Centres**, such as, Indian Space Research Organization (ISRO) and the Defence Research and Development Organization (DRDO)
- ▶ **First Aerospace Policy** in the country
- ▶ BIA is the **first airport in India under PPP** model
- ▶ **Frist Centre for Excellence in Aerospace**

**India's first  
Aerospace  
SEZ  
operational at  
Belgaum**

## KEY PLAYERS



Rolls-Royce



UTC Aerospace Systems



THALES

AIRBUS



Mahindra  
AEROSPACE



GE Aviation

AEQUS<sup>®</sup>  
ecosystems of efficiency

- ▶ 65% of country's aerospace investments
- ▶ Home to quarter of India's aircraft and spacecraft
- ▶ 70% of supplier base
- ▶ 67% of country's aircraft and helicopters for Defence Services
- ▶ Aerospace Technology Center and Aerospace Common Finishing Facility being set up

Presence of more than **2,000 small and medium enterprises** focused on component manufacturing, tooling & testing equipment and assembling

# Ecosystem Integrators

## Auto, Auto components & Electrical Vehicles

- ▶ Output doubled in the last five years
- ▶ 4<sup>th</sup> largest automobile producing state in the country
- ▶ 8.5% to the national output
- ▶ 14 million registered vehicles and connectivity to 4 of the top five automobile markets in the country
- ▶ Employment to more than 55,000 workers
- ▶ 7 major OEMs and more than 50 auto component manufacturers



**AUTOMOBILE  
AND AUTO  
COMPONENTS**

- 
- ▶ Manufacturing hub for auto majors like Volvo, Toyota Kirloskar, TVS Suzuki, Telco and auto component companies like BOSCH, Delphi, Denso, Siemens, Escorts
  - ▶ World-class Auto and Auto Component Clusters
  - ▶ Karnataka Automobile Research & Innovation Centre to be setup

**1<sup>st</sup>**

**Electrical Vehicle and Energy Storage Policy 2017-**  
Vision to make Karnataka the 'EV capital of India'

# Ecosystem Integrators

## Biotech, Pharma and Medical Devices

### BIOTECHNOLOGY

- ▶ Home to over 60% of country's Biotech companies
- ▶ State accounts for 54% of India's Biotech Workforce
- ▶ 1/3<sup>rd</sup> of BT exports of the country
- ▶ Bio Innovation Clusters; **Biotech Finishing Schools**; Proposed Marine Biotech Park, Animal Biotech Park, Agri Biotech Park
- ▶ **Bio-venture Fund of INR 50 crore**
- ▶ **Bangalore Bio-innovation Centre** largest Bio-incubation centre in the country

**Biotechnology Policy 2017-2022 envisages \$100 billion market**

### PHARMA

- ▶ 5<sup>th</sup> in pharmaceutical exports
- ▶ 12% of country's exports
- ▶ Around 10% of country's pharmaceutical revenue
- ▶ 1<sup>st</sup> state to bring out Pharmaceutical Policy
- ▶ Presence of Exclusive Pharma Special Economic Zone, Pharma Industrial Areas and R&D Centres

Bengaluru and Mysuru hub for manufacturing of Medical Devices

### MEDICAL DEVICES

# Ecosystem Integrators

## Agri and Food Processing

- 1st**
- ▶ To introduce online trading in agro-markets
  - ▶ In floriculture, with 75% of India's total flower production
  - ▶ Leading Producer of Coffee, Gherkins, Silk, Green Chilli, Tamarind, Sunflower, Maize, Coarse Cereals, Sugarcane, and Pulses

- ▶ Sector growing at 20% CAGR, more than the national average
- ▶ Exports from the State have been growing at 22% CAGR



- ▶ 4 Food Parks and 2 Mega Food Parks
- ▶ Establishment of 14 exclusive Farmer Federations for Organic & Millet Products
- ▶ 20 agro and food processing clusters
- ▶ Utopia Cashew Cluster is coming up in Kumta



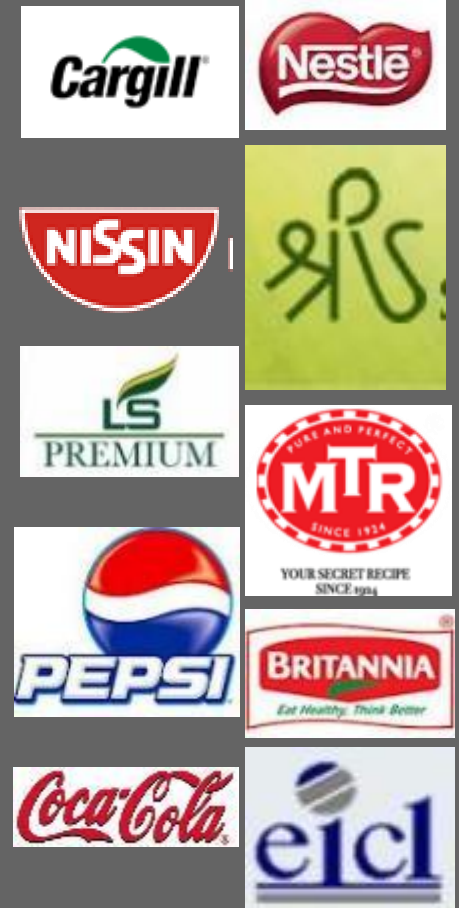
Over 65% of the state's geographical area is under agriculture, and employs 60% of state's population

Fisheries is a high-growth sector



- ▶ 24% CAGR production
- ▶ 30% CAGR exports

### KEY PLAYERS



# Ecosystem Integrators

## Textiles and Apparel

- ▶ 9 handloom clusters, Dedicated Apparel zones, 233.3 hectare Textile SEZ
- ▶ US\$10.4 million 'Silk City' proposed to be developed near Bengaluru
- ▶ First Integrated Textile Park at Dodaballapura

**Garment Capital of India** contributing almost two-thirds to the State's industry output

- ▶ 20% of the national garment production
- ▶ 15% of India's export earnings
- ▶ 14% of India's industrial production

- ▶ 65% silk, 11% wool and 6% cotton production of the country
- ▶ Leading market for technical textiles

- ▶ 144 Skill Development Centers and 168 private training centres and has trained 1,65,200 personnel

# Ecosystem Integrators

## Innovation & Manufacturing Start-up



**Biggest Start-up destination**, more than 1300+ start-ups account for more than 40% of overall funding as on 2016

First State in the country to introduce a **Startup Policy in 2015**

Dedicated Start-up Cell guided by the Start-up Policy



**ELEVATE 100**, with a corpus of INR 400 crore aims to provide a comprehensive entrepreneurship platform for start-ups



Startup Policy envisaged growth of 20,000 new start-ups, including 6,000 product start-ups by 2020.

**Existing and Upcoming Centres of Excellence for**

- ▶ Aerospace
  - ▶ Cyber-security
  - ▶ Animation and Gaming
  - ▶ Artificial Intelligence (AI) and Big Data
- 

# BENGALURU

- ▶ Startup Capital of India
- ▶ Among the top 15 Startup ecosystems in the world<sup>1</sup>

1. Eddelman- FICCI, 2017: "Towards Making Bengaluru the R&D Capital of India"

# Karnataka's Robust Ecosystem

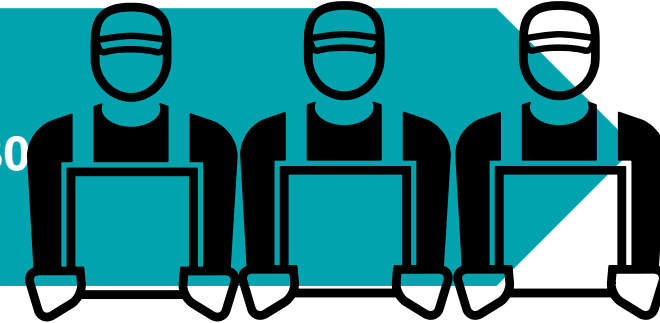


# Skilled Karnataka

## Skilling Karnataka youth to meet industry needs

### VISION

- ▶ Karnataka aspires to skill 1.88 crore youth during the period 2017-2030
- ▶ Annually to 13.4 lac existing workforce and new entrants



### DEMOGRAPHIC DIVIDEND

2.12 crore in the age group of 16-35 years

### SKILL INFRASTRUCTURE

- ▶ 1,777 public and private ITIs provide skill training to 106,000 youth
- ▶ Around 290 polytechnics, with seating capacity of 75,000
- ▶ Apprenticeship Training Scheme with over 4,200 establishments with over 39,000 seats
- ▶ Modular Employability Scheme, active 800 VTPs implementing 500 courses under 68 sectors



Source: Draft Skill Development Policy for Karnataka, 2017



# Knowledge Capital of the Country

## R&D institutes/ Scholarly institutes bolstering industrial development

More than 400 Multi-National Companies have global R&D Centres

Heart of Modern India and driving growth through its 150 Industrial Hubs

Exclusive Centre of Excellence (CoE) in Data Sciences and Artificial Intelligence (AI) in Bengaluru

Largest number of Software Technology Parks

Largest Biotechnology Hub

Knowledge Hub

Largest number of R&D centers

Karnataka ranked 2nd in the state-wise list of patent applications with 2,102 patent applications

Largest number of Medical Education Institutions

Largest number of Industrial Training Institutes

World-class Incubation Centers and have established Labs and Common Instrumentation Facilities

Bengaluru – hotbed for IoT- 536 of the 971 IoT startups in India, are registered in Bengaluru

# Fostering Quality Education

Karnataka undertook significant reforms with increased public investment to ensure Access, Equity and Quality in Education



Universalisation of secondary education to achieve the target of 85% enrolment in 14-18 age group in classes 9 to 12"



206

Engineering Colleges

44

Universities

16

International Schools

55

Medical Colleges (MBBS)



GER 103.71

NER 96.40

LOWER PRIMARY SCHOOLS

HIGHER PRIMARY SCHOOLS

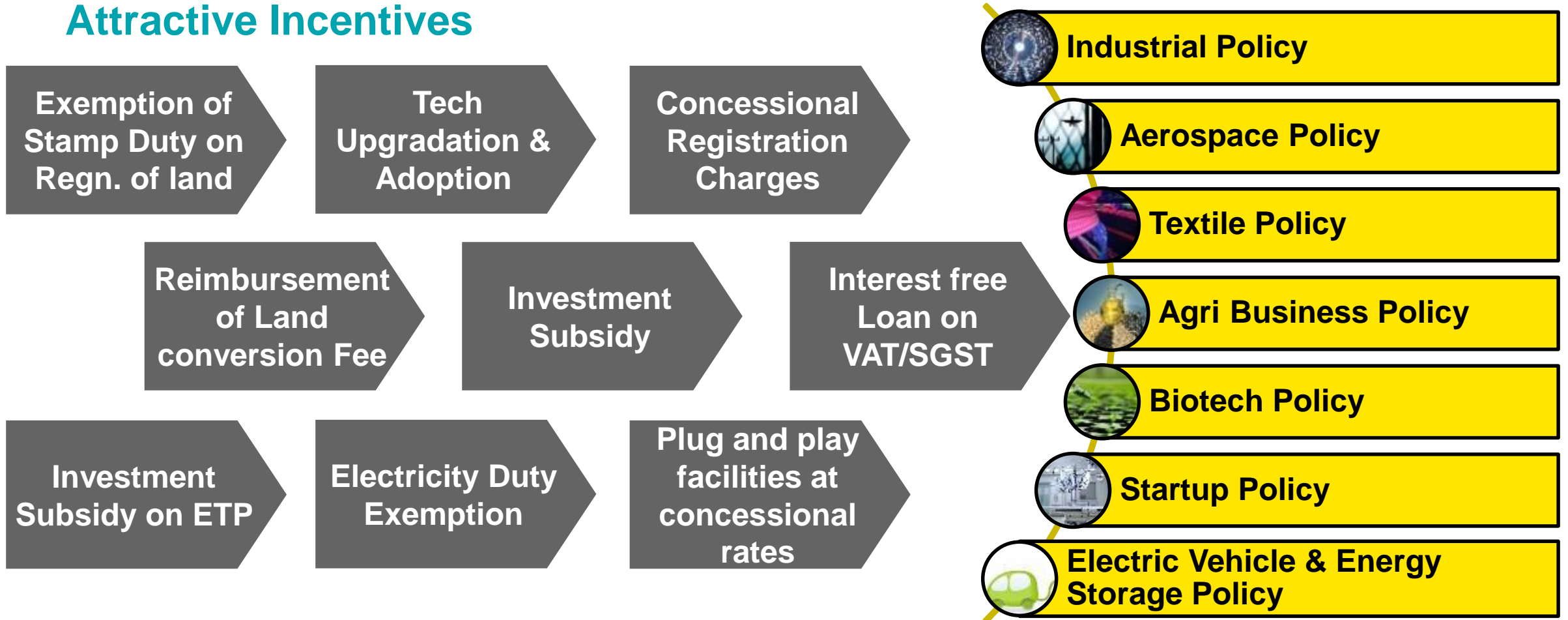
GER 92.90

NER 79.16

# Transparent Policy Initiatives

Extensive support to new industries and entrepreneurs

## Attractive Incentives



# Ease Of Doing Business

## Aimed at preparing Karnataka for the 21st century

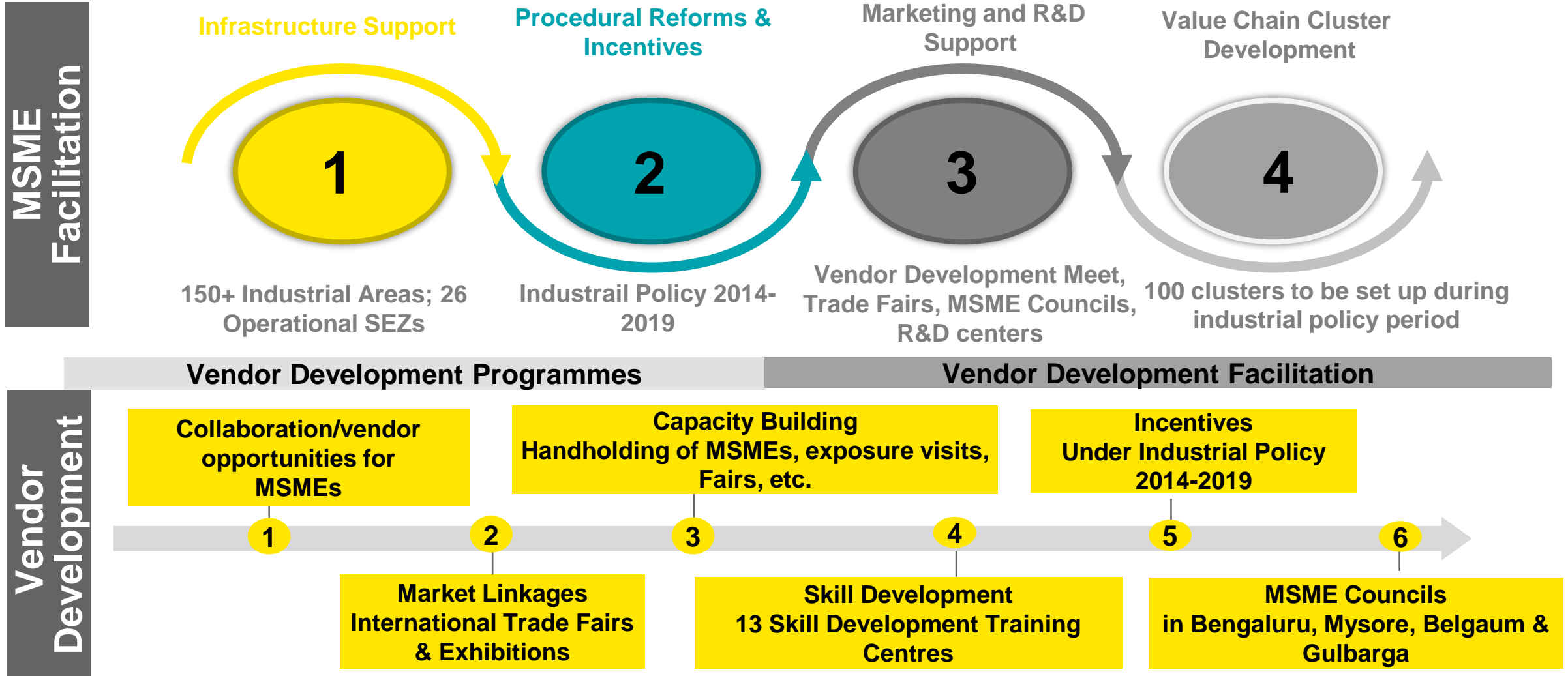


### INITIATIVES

- ▶ **Single Window Portal and Clearance**
- ▶ **Relationship Managers for handholding investors**
- ▶ **Grievances Redressal Cell**
- ▶ **Online Monitoring of Disbursal of Incentives**
- ▶ **Common Application for Different Incentives**
- ▶ **Integrated System for Approvals**

# Vendor Development to promote localization

## Enabling balanced regional development



# Lifestyle and entertainment

## Mix business with pleasure for retaining intellect



Popular tourism destination including UNESCO Heritage Sites, attracting tourists from across the world

Varied regional cuisine with specialities such as Mysore Pak, Kori Gassi which are popular worldwide

Rich culture and heritage, including Yakshagna dance form and a high theatre presence

40+ five star hotels in the state, such as Taj Group of Hotels, Hyatt, etc.

Known for excellent healthcare facilities and holistic health options

20 shopping malls in the state offering a wide variety of world renowned brands

10+ golf clubs, counties, resorts in the state, and a variety of sports and fitness clubs in towns and cities



# BENGALURU

- ▶ One of the most **developed and affordable cities** in the country
- ▶ **Handicrafts and shopping destination** with 24 silk emporiums, 6 Handicraft emporiums and 8 shopping malls in Bengaluru
- ▶ **Garden City of India**