



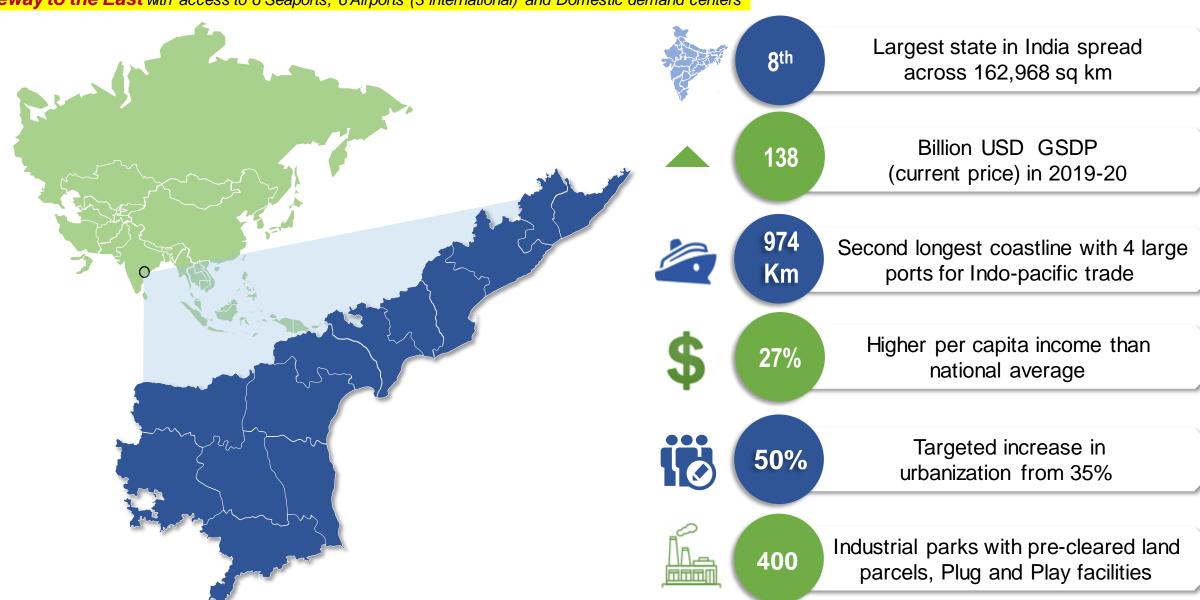
# **Govt of Andhra Pradesh**

Overview of Chemicals & Petrochemicals Ecosystem, Ease of Doing Business and Opportunities

# Andhra Pradesh – Driving India's Transformation



Gateway to the East with access to 6 Seaports, 6 Airports (3 international) and Domestic demand centers



## Overview of Chemicals and Petrochemicals Sector in Andhra Pradesh



Ideal destination to tap the USD 11 Bn worth India Opportunity in Petrochemicals and drive exports in Chemicals sectors

India's production value as on FY 2019-20 i.e., USD 11.9 bn

**USD 2.4 Billion** 

Worth investments in Chemicals & Petrochemicals in AP



Growth in AP Exports with USD 2.1 bn as on

FY 2019-20



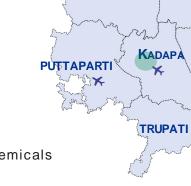
1,130 MMTPA

Home to maximum oil and gas reserves



640 Sq.km
Largest Petroleum, Chemicals and Petrochemicals

Investment Region in India



in the nation spread across 640 sq.km between Vishakapatnam and Kakinada

Companies covering Pharma, Organic and Inorganic chemicals, Specialty Chemicals, Industrial Gases, Agro-chemicals and Fertilisers

#### Oil & Gas Exploration and Refinery Companies



**VISHAKAPATNAN** 

RAJAHMUNDRY

VIJAYAWADA























**Major Chemical Companies** 



















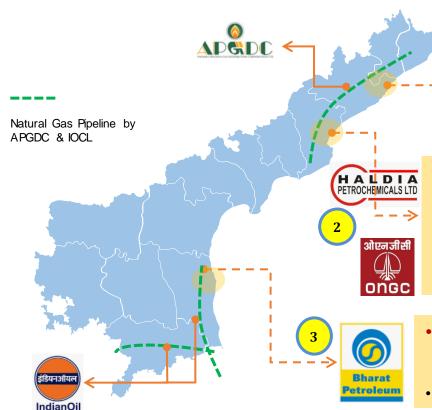


Mega and MSMEs employing 1.2 lakh workforce

# Presence of Refineries and Availability of Feedstock



Opportunity to build **Self-sufficiency** in Petrochemical Intermediates and drive downstream industries



- Brownfield expansion of HPCL refinery from current 8.33 MMTPA to 15 MMTPA
- Hydrocracker unit (FCHCU) with a capacity of 3.053 MMTPA as part of Visakh Refinery Modernization Project (VRMP)
- JV of HPCL & Total of France LPG cavern at Visakhapatnam Port for 60,000 MT and Crude Storage of 1.2 MMT
- Integrated "Crude to Chemicals" Complex by Haldia Petrochemicals Ltd with capacities of Refining capacity 9.5 mmTPA, Ethylene Cracker Complex 1.5 mmTPA and Aromatics (PX) 1.6 mmTPA
- Petrochemical production of Polymers (HDPE, LLDPE, PP), Chemicals (MEG, Paraxylene, Benzene, Butadiene etc)
- ONGC Refinery of 0.1 MMTPA crude oil at Tatipaka, producing Naptha, High Speed Diesel, Superior Kerosene Oil, Reduced Crude Oil
- BPCL is setting up new Petroleum Oil (POL) Terminal with capacity of 1.61 lakh cubic meter for Receipt, Storage and Dispatch of Petroleum Products Motor Spirit, Ethanol, High Speed Diesel and Bio-Diesel
- Receipt would come from BPCL Cochin crude oil refinery of 9.5 MMTPA

#### Opportunities across end-user industries in Andhra Pradesh

12.4% Growth in Specialty Chemicals segment

Growth in Agro Chemicals & Fertilizers

7.5% Growth in Petrochemical products

- 2400+ units invested in Plastics, Polymers and Allied
- 4700+ Textiles unit invested within Artificial, Synthetic, Man Made Fiber, Grey Fabric, Polyester fabric, Agro-textiles
- Ranked #1 in Horticulture Chillies, Cocoa, Lime, Papaya, and Tomato, Banana, Mango
- Ranked #2 in Agriculture in India, with16000 FPUs
- 3 MTPA Integrated steel plant, downstream industries
- Sector-specific parks Pharma, Electronics, Furniture
- 10,641 RBKs planned to supply seed, fertilizers & seedling to agriculture, Aquaculture and Horticulture

# Strong Port Infrastructure and Port-led Development

With direct shipping calls from South East Asian economies to ports in Andhra Pradesh vis-à-vis ports on West coast, the transit time of around **2-3 days** is saved





- Machilipatnam
- Ramayapatnam
- Bhavanapadu
- Kakinada SEZ





AP Maritime Board for Rapid Development





- **Port Based Clusters**
- **Desalination Plants** for **Assured Water Supply**



#2 in Cargo handling capacity 150 MMT of Cargo per annum as on FY 2018-19, targeted to 326 MMT

#### VISAKHAPATNAM PORT



Capacity: 125 MMT PA

Cargoes handled: Iron ore, Coal, Crude oil, Petroleum products, LPG, Fertilizers, Liquid cargoes

Connectivity: 4 lane 12 Km corridor between Visakhapatnam port to NH16 (golden quadrilateral)

## KAKINADA PORT

BHAVANAPADU

PORT

VISAKHAPATNAM

PORT

KAKINADA DEEPWATER

KAKINADA SEZ

RAWA

KAKINADA ANCHORAGE



Capacity: 14 MMT PA, upgradation to 27 MMT PA

Dedicated berths for Petrochemical complex and Crude Oil refinery, Naphtha / Ethane, etc

Liquid terminals to handle Very Large Crude & Ethane Carriers

#### KRISHNAPATNAM PORT



Capacity: 54 MMTPA

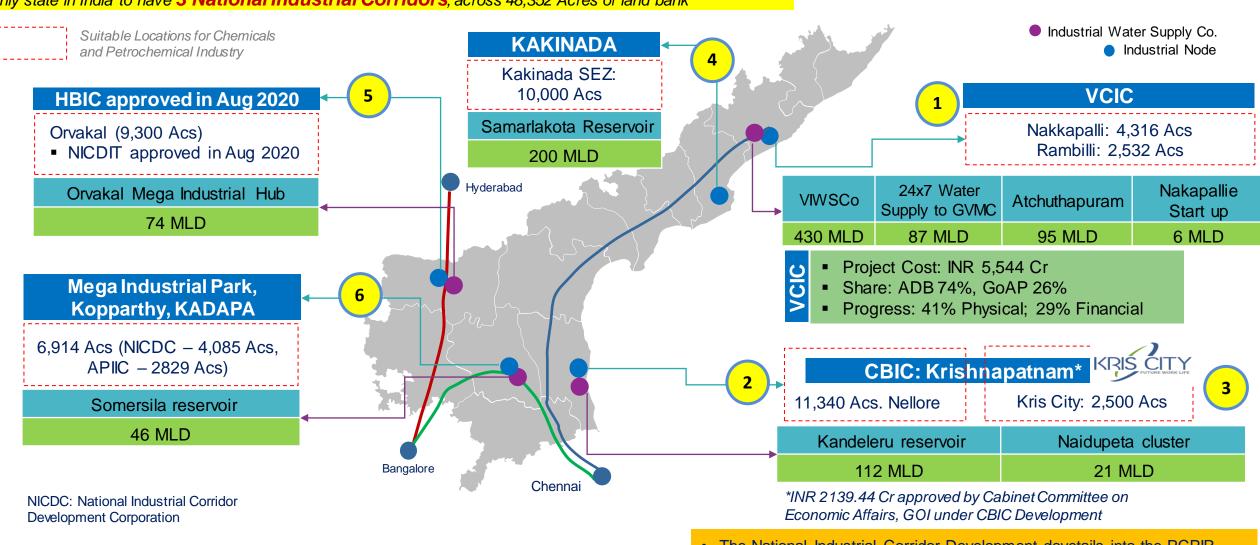
Two Dedicated Liquid Cargo Handling Berths of 17.5 meters for LPG/LNG Ships, POL, Chemicals, Speciality Chemical Ships

Dedicated Liquid Storage for LPG, LNG, POL Products, Petrochemical Products, Speciality Chemicals, Chemicals And Edible Oil

# Industrial Corridors and Industrial Water Supply Projects



Only state in India to have **3 National Industrial Corridors**, across 48,352 Acres of land bank

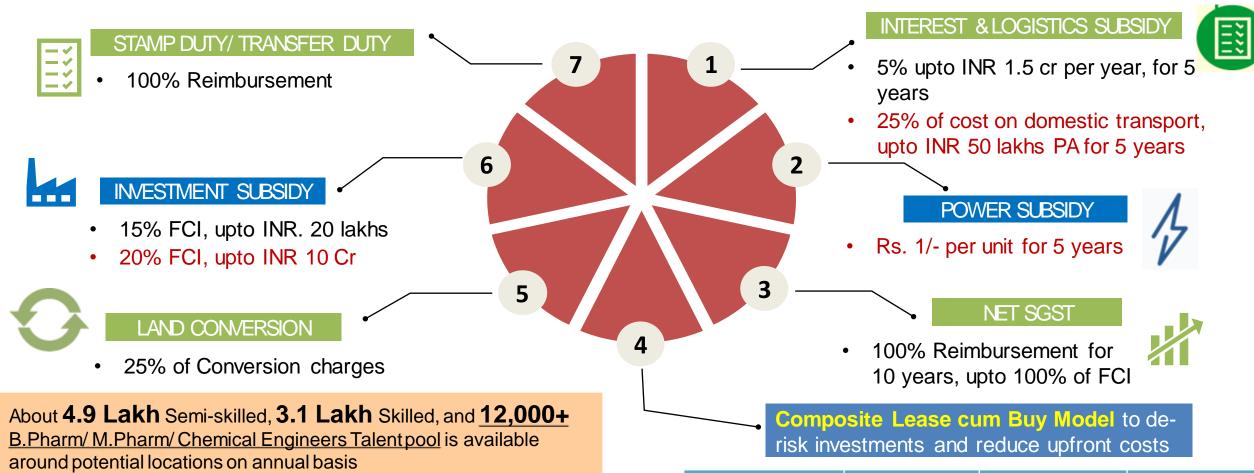


- Vizag-Chennai Industrial Corridor (VCIC)
  - Chennai-Bangalore Industrial Corridor (CBIC)
  - Hyderabad-Bengaluru Industrial Corridor (HBIC)

- The National Industrial Corridor Development dovetails into the PCPIR development, improving the connectivity further
- Presence of CETP, Access for marine outfall, Well connected and established logistics, Proximity to ports offers distinct advantage

# AP Industrial Policy 2020-23 & Special package of Incentives for Mega Industrial Hub at Kopparthy, YSR Kadapa District





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#### **Tailor-made Incentives**

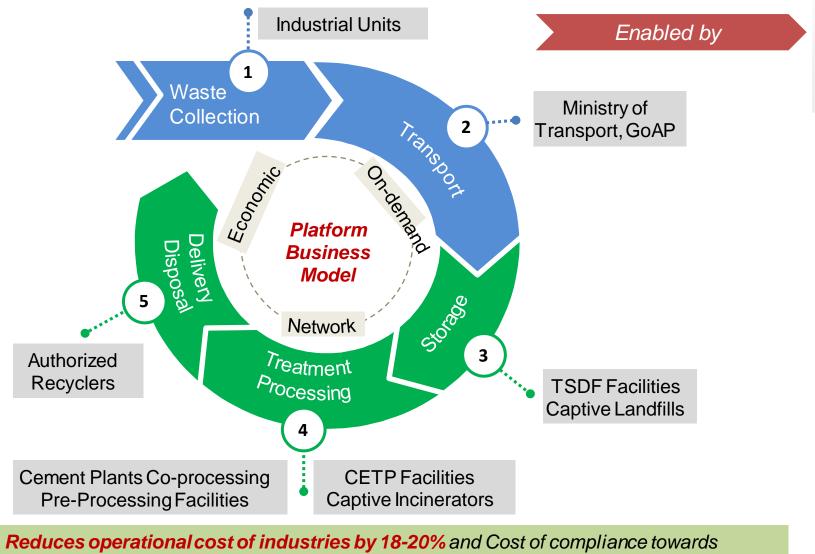
For Investment proposals generating employment for more than 2,000 or investment of INR 500 cr

LAND PRICES	POWER COST	WATER COST	SKILL WAGE
INR 2,000-2,250 per sq.meter	INR 6-7 per KwH	INR 50-60 per KL	INR 8,000-10,000 per month
25-30% lower	33% lower	Abundance and 40% lower	15-20% lower

# Effective — Minimizing Cost of Doing Business



First State to incorporate a government entity to provide effective mechanism for collection, transportation, storage, treatment, processing, delivery and disposal of the industrial and other wastes by industries



Environmental, Social and Governance norms

# Online Waste Exchange Platform

**2683** Waste Generators, **86** Waste Receivers **980 TPD** Waste Generated and Disposed

#### **Salient Features**

- 100% tracking of waste generation and disposal
- GPS Vehicle tracking for movement of waste
- Scrutiny and audit of waste
- Safe disposal of toxic waste
- Promote usage of recycled waste
- Promoting 6 R's of waste management Reduce, Reuse, Recycle, Refurbish, Redesign and Remanufacture to protect environment

# Waste and Manifest Management – Service Charges for Waste Management



With inputs and recommendations from BDMA, Cement Industries Association, CETPS, TSDFs, Pre-Processing units and Oil Reclamation (Recycling) units



Facilities Offered	Current Capacity	Planned Capacity
CETP	30.97 MLD	39.7 MLD
TSDF	10,25,000 MT	10,00,000 MT
Waste Pre- Processing Facility		50,000 MT (APIIC Atchutapuram)

#	Hazardous Waste	Service Charge (per Ton/ KL)
1	Utilizable Waste	INR. 100
2	Recyclable Waste	INR. 10
3	Incinerable waste	INR. 200
4	Landfillable Waste	INR. 50

#	Non-Hazardous Waste	Service Charge (per Ton/ KL)
1	Fly Ash	INR. 5
2	Domestic Solid Waste	INR. 1
3	Plastic, Glass	INR. 2

#	Liquid Waste	Service Charge (per Ton/ KL)
1	HTDS	INR. 50
2	LTDS	INR. 25
3	Marine Outfall	INR. 10

Pre-processing Facilities for sending pre-processed waste to cement industries for co-processing - INR 25 per ton/KL

# Going beyond Ease of Doing Business



Vision

Andhra Pradesh to be the most preferred investment destination with sustainable growth

Beyond EoDB

EoDB + Perception

Ease of Doing
Business (**EoDB**)





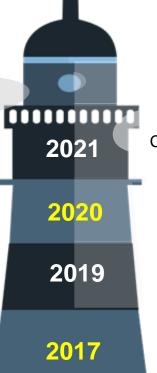
#### **Minimizing Cost of Doing Business**

Rationalization measures in fees charged, cost of compliances etc.

AP Environmental Management Corp Ltd, 'Platformbusiness model' for waste collection and disposal Ready Built Factories/ Plug & Play Facilities Skill Development

#### Implementation based rankings

Implementation of Business Reform Agenda shared by DPIIT, Business Process Re-engineering, Time bound service delivery, Online payment & status tracking of application



2016

2015

## **Reducing Risk of Doing Business**

Lease cum buy model to minimise risk of capital
"Industries Spandana" Query and Grievance
Centralized land encumbrance information systems
Alignment of Relationship Mangers to ensure
setting up compliance with all requirements
Export Promotion Committees at district level
Reforms in compliance inspection to reduce risk of
interruption in operations

#### EoDB | Ranked 1

#### Perception based rankings

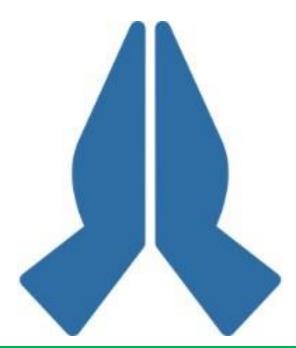
Ensure reform implementation at ground level Encourage usage of Single Window Portal Building capacity of investors and staff on newly implemented systems and reforms Kicked Off District Outreach workshop in Jan 2021 at Vizianagaram







# Sri R.Karikal Valaven, IAS Special Chief Secretary to Govt. & CIP Industries & Commerce Department prlsecy\_inds@ap.gov.in



# **Sri JVN Subramanyam, IAS**Chief Executive Officer, APEDB

Commissioner, Industries & Commerce ceo@apedb.co.in

We Welcome you to Partner in Andhra Pradesh's Industrial Growth Story