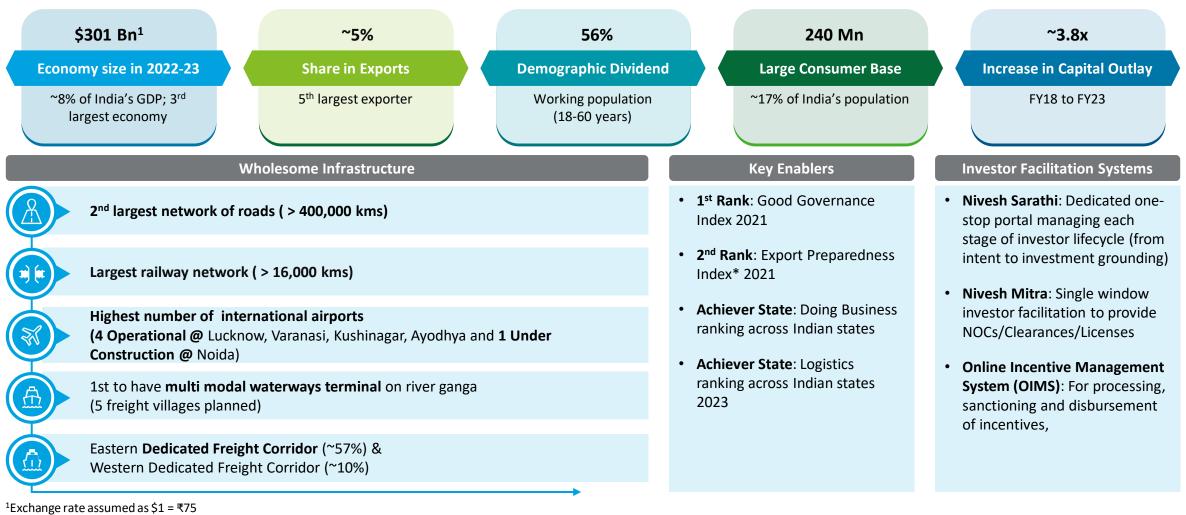


## Uttar Pradesh Information Technology & Data Center

Igniting Innovation & Empowering Growth

## UP – State with Robust and Resilient Economy

The economic momentum of UP is well-poised to continue on a higher trajectory

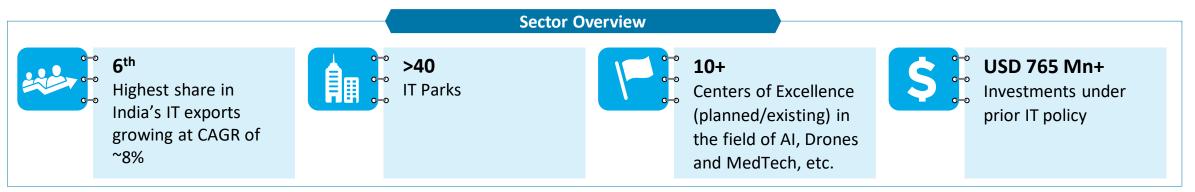


\*Among landlocked states

Source: UP DES, World Bank, IBEF; GSDP in current prices 2011-12 series, DGCIS

## Information Technology

Uttar Pradesh is committed to achieve 10x growth in IT/ITeS sector—focus on growing niche areas like AI, Machine Learning, Robotics, Gaming, etc.



#### Advantage UP

- World class educational institutions (2 IITs, 1 NIT, 1 IIIT and 1 IIM)
- Industry relevant skilling initiatives with 267 training partners
- Abundance of skilled labour at 10-20% lower cost
- Office space at 15-30% lower rental rates than other IT hubs
- Recognized as a 'leader' in start-up space- 10000+ registered
- Planned creation of 16 IT Parks and 4 IT Cities
- India's largest international airport under-construction in Jewar
- **650 MW of Data Center capacity** through 6 hyperscalers parks of more than 50 MW and 1 DC Unit

#### Key Investment Opportunities

- Infrastructure development of IT Cities / IT Parks / IT-BPM units
- Setting up of Technology Business Incubators
- Enhancement of security network
- Focus on e-Governance E-health, e-education & e-ticketing
- Setting up of Center of Excellence (COE's) for emerging technologies
- Setting up of Information Technology Investment Regions (ITIRs)
- Setting up of standalone/in-house R&D centers and Design centers

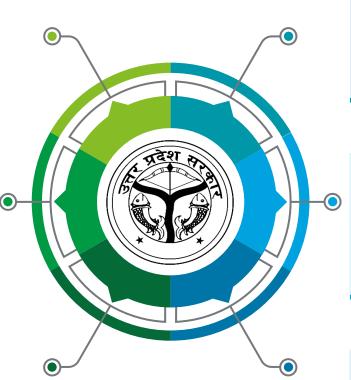
## Information Technology

Uttar Pradesh is implementing several key interventions to promote and enhance IT Sector in the state

**Uttar Pradesh IT Policy:** "UP IT Policy" launched for providing incentives to IT companies, promoting skill development, encouraging innovation and research in the IT sector.

**IT Parks and Technology Hubs:** Establishment of IT parks and technology hubs like the Lucknow IT City, Greater Noida IT Park to provide state-of-the-art facilities and connectivity for IT companies.

**Digital Skill Development:** The state has initiated programs to provide training in emerging technologies, coding, digital literacy, and entrepreneurship aiming to enhance employability and to bridge the skill gap in the IT industry.



#### **E-Governance and Digital Services:**

Implementation of various e-governance initiatives including the development of online portals and mobile applications such as eprocurement, online land records, e-ticketing, and digital payment systems.

**Digital Connectivity:** Collaboration with telecom operators like BharatNet to enhance network coverage and infrastructure to improve digital connectivity across the state.

**Promotion of Emerging Technologies**: Organizing of conferences, workshops, and training programs on emerging technologies such as AI, blockchain, IoT, and cybersecurity to create awareness and build expertise.

Uttar Pradesh has been proactively encouraging private participation in the growth of IT and ITeS sector to boost economic development

Software companies, GCCs being attracted by leveraging proximity to Delhi NCR

2

Gautam Buddh Nagar

0

**AI city** proposed to be established to transform emerging Tier 2 city into next IT hub after Noida

**Q** Lucknow

 $(\mathbf{O})$ 

Prayagraj

**Varanasi** 

Kanpur

**Robotic and Drones hotspot** in Kanpur, leveraging Centre of Mechatronics, IIT Kanpur **ER&D hub** by leveraging quality engineering talent from eminent institutions (IIT-BHU, MNIT, IIIT)

3

## Potential for fast-track growth of IT/ITeS infrastructure in the State

The IT/ITeS sector in Uttar Pradesh is thriving and witnessing significant growth

#### **Current Scenario**

- Booming IT/ITeS sector with a 22% annual growth in STPI exports to ~Rs. 31,300 crores
- **5** operational STPI Parks in Noida, Meerut, Lucknow, Kanpur, Prayagraj
- 2<sup>nd</sup> highest startup registrations in India in 2022
- 4<sup>th</sup> highest number of NIRF ranked engineering colleges in the country, producing high quality IT Talent
- Established E-SETU centers in **13 districts** of the state for providing technical training and skill development in rural areas

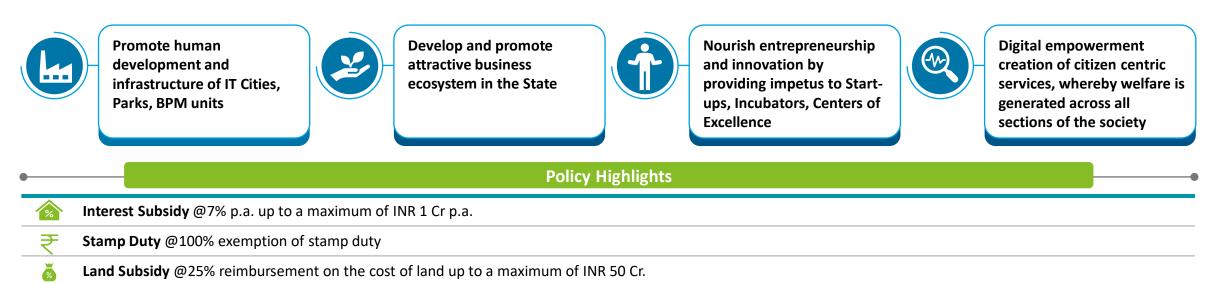
#### **Future Development Plans**

- Gautam Buddha Nagar is on its way to become a global emerging technology and data centre hub. The well-established IT ecosystem comprising large companies, existing centers of excellence is being leveraged to further grow the IT/ITeS sector in Uttar Pradesh. The high-quality talent pool and lower rentals are strong value propositions for large IT/ITeS investors.
- \*Lucknow is being developed as an AI City to promote the city as a new age technology hub and the next IT hub of UP after Noida. The proposed state capital region will lead to mobility of skilled workforce and the presence of eminent technology institutions that will provide quality talent which is imperative for the AI ecosystem.
- \*Kanpur will become a Drones and Robotics hotspot leveraging the Centre for Mechatronics in IIT-Kanpur. A state-of-the-art drone and robotics park shall be built to provide value add services to companies which will include shared research labs and requisite infrastructure.
- **Prayagraj and Varanasi** are to be developed as an **ER&D hubs**. The **lower rental rates** will result in cost advantage to potential investors and the proposed creation of advanced infrastructure will create a cluster effect which will drive collaboration among the ER&D units in these cities.
- Upcoming STPI parks in Agra, Bareilly, Gorakhpur & Varanasi.

\*Lucknow & Kanpur identified as Emerging Technology Hubs of India as per *Deloitte-NASSCOM Report on Tier 2-Tier 3 cities, 2023* Source: Indian Tourism Statistics 2022, Ministry of Tourism

## Support from Government: Key Policy Objectives

Uttar Pradesh IT Policy 2022



**Operating Subsidy** @ 10% up to INR 20 Cr. p.a. (excluding salaries)

Grant on EPF @ 100% reimbursement of EPF up to a maximum of INR 1 Cr. p.a. for women/SC/ST/Transgender/Divyangjan employees

Special Incentives				
<ul> <li>INR 20,000 per employee (UP Domicile) in units located in UP. Not applicable for Gautam Buddh Nagar &amp; Ghaziabad units</li> </ul>				
• 10% capital subsidy up to a maximum of INR 50 Cr.				
• 100% reimbursement of EPF for expansion case up to INR 1 Cr.				

Source: Uttar Pradesh IT policy 2022



FDI, Fortune Global 500 & Fortune India 500 Companies Investment Promotion Policy, 2023

#### **Eligibility Criteria:**

- ✓ Projects with Foreign Direct Investment (FDI) Capital Investment of above ₹100 crores.
- ✓ Projects with Capital Investment of more than ₹100 crores by companies included in the list of Fortune Global-500 and Fortune India-500, subject to Negative list.

## UP FDI and Fortune 500 Policy 2023 – Fiscal Incentives

		Majo	r benefits		
<ul> <li>Capital subsidy</li> <li>25% of *ECI (excluding land cost) in Gautam Buddha Nagar and Ghaziabad regions</li> <li>30% of ECI (excluding land cost) in Paschimanchal and Madhyanchal regions</li> <li>35% of ECI (excluding land cost) in Bundelkhand and Purvanchal regions</li> <li>Capital Subsidy will be provided in 7 equal annual instalments with annual capping of INR 100 crores</li> </ul>		S	Land subsidy	<ul> <li>Upto 75% in Paschimanchal and Madhyanchal region</li> <li>Upto 80% in Bundelkhand and Purvanchal region</li> </ul>	
		<ul> <li>Option A - Net SGST reimbursement on sales:         <ul> <li>100% of net SGST paid for 10 years</li> <li>Annual capping: Upto 10% of ECI, Overall capping: Upto 100% of ECI (excluding land cost and capital subsidy)</li> </ul> </li> <li>Option B - Input SGST refund on capital goods: 100% SGST refund in 5 annual instalment (Applicable only in case of inverted duty structure)</li> <li>Note: Option to choose any one out of A and B is available</li> </ul>			
		Other fi	scal benefits		
<ul> <li>Stamp Duty &amp; Registration Fees: From 50% to 100% exemption/ reimbursement</li> <li>Electricity Duty: 100% exemption from for 5 years</li> <li>Skill development subsidy: Upto</li> </ul>	capital subs Effluent Tre at INR 2.5 c • Industrial H Reimburser	stry Incentives: 50% idy on the cost of atment Plant capped rores <b>Iousing Incentives:</b> nent upto 10% of the elopment of workers'	<ul> <li>R&amp;D incentives: Reimbursement upto 25% of the cost of standalone R&amp;D centre capped at INR 10 crores (with minimum capital investment of INR 20 crores)</li> <li>Centers of Excellence (CoE): Grant upto 50% of the project cost</li> </ul>	<ul> <li>Logistics Subsidy: Reimbursement upto 50% of the transportation on import capped at INR 12 cro per unit (in case of shifting of ex- plant from international or dor locations to UP)</li> <li>Patent cost: Reimbursement up</li> </ul>	cost res xistin nestio
INR 5,000 p.m. per person for 5 years (max. 500 persons)	housing or	dormitory for 7 years bed at INR 10 crores	capped at INR 10 crores per project Note: Option to choose any one out of above is available	75% of the cost capped at INR 1 (for domestic) and INR 20 lakh ( international)	

Artificial Intelligence (AI) City Deve	lopment				
About the Project	The Department of IT and Electronics has earmarked a prime land to develop an AI City in Lucknow. The AI city will comprise leading AI companies, startups, AI focused Centre of Excellence and incubator. To support such an ecosystem, Data Centres may also be established.				
Location	Near the Airport				
Connectivity	Connected to 4 countries and all major Indian cities by air				
	<ul> <li>Excellent road network comprising 5 National Highways that connect to Delhi, Varanasi, Kanpur, Gorakhpur, Jhansi</li> </ul>				
Transaction structure	Public-Private Partnership				
Value proposition for the Investor	State-of-the-Art AI focused City, fostering an AI centric ecosystem				
	As per the India Skill Survey, Lucknow is one of the top cities for available computer talent				
	Lower office rentals enhances attractiveness to IT and ITeS units				
	<ul> <li>Attractive policy incentives for IT parks, IT and ITeS companies setting up their operations in Uttar Pradesh, CoEs, R&amp;D Centres</li> </ul>				

## Transforming Lucknow into an AI City

#### Vision

 Government of Uttar Pradesh seeks to develop a state-of-the-art AI City in Lucknow, with participation from diverse and relevant stakeholders



#### **Pillars of AI Ecosystem**

- A comprehensive strategy will be adopted to support technology startups, establish deep-tech divisions of large technology companies and promote industry-academia partnerships
- **PE, VC investors** will play a pivotal role in driving these initiatives forward
- Collaborate with a **world-class developer** to develop the AI City

#### Governance

- A 'Board of Directors' to drive the vision of the AI City
- Representation from prominent industry and academia

#### Startup Ecosystem

- Incubators and accelerators to support AI startups
- Create opportunities by digitalising public services

#### Leading Tech Companies

- Targeted outreach to anchor investors
- Offer high-end tech. services from Lucknow

# 

#### **Private Investments**

- Compute infrastructure investments (which include GPUs, Hyperscalers and Data Platforms)
- Engage PE/VC investors to set up an AI fund to boost AI projects
- Provide market access,
- scaling up guidance

#### Academia

- Collaborate with prominent institutions to formulate Al courses
- Focus on upskilling existing talent with AI skills
- Establish dedicated AI/ML R&D labs with eminent institutions

**Innovation Hubs** 

Set up **COEs** in emerging technologies

IT Parks			
About the Project	An IT Park is constructed with minimum floor area of approximately 15,000 square meters. It may or may not include public utility offices/facilities in the said premises. The area allotted for IT activities should be 75% of the allocable area.		
	An IT Park contains most of the technological infrastructure similar to an IT city like optic fiber connectivity, Broad band connectivity, Wi-Fi access, Video conferencing facilities etc. IT Park is a subset of an IT City with entire area dedicated majorly on IT activities.		
Location	Across the state- Agra, Bareilly, Gorakhpur & Varanasi, etc.		

Centres of Excellence	e (CoEs)
About the Project	Centres of Excellence are being developed across the state in emerging technologies. The state currently has three CoEs located in Lucknow (Medtech), Noida (AI) and Kanpur (Drones). The IT and ITeS Policy, 2022 aims to further establish three CoEs in collaboration with reputed academic institutions and/or industry associations/industry or any other Govt./ Private entity.
Location	Across the state
Value Proposition	• Regulatory focus to develop CoEs for emerging technologies along with attractive policy incentives: Upto 50% of the total CoE project cost (subject to a maximum of Rs.10 crores) will be borne by the Government of UP
	• 5 operational STPI Parks in Noida, Meerut, Lucknow, Kanpur, Prayagraj ; 4 more upcoming STPIs
	• UP had the 2 <sup>nd</sup> highest startup registrations in India in 2022
	<ul> <li>Intent to develop CoEs in emerging technologies by collaboration of academia and leading tech players</li> </ul>
	• UP has the 4th highest number of NIRF ranked engineering colleges in the country, which could be leveraged for collaboration

## Engineering Research & Development Hubs



Prayagraj and Varanasi are planned to be developed as Engineering Research & Development (ER&D) hubs.

The lower rental rates will result in cost advantage to potential investors and the proposed creation of ER&D Parks will create a cluster effect which will develop an ER&D ecosystem in these cities



Larger and longer

strategic ER&D Deals

#### ER&D Market Overview

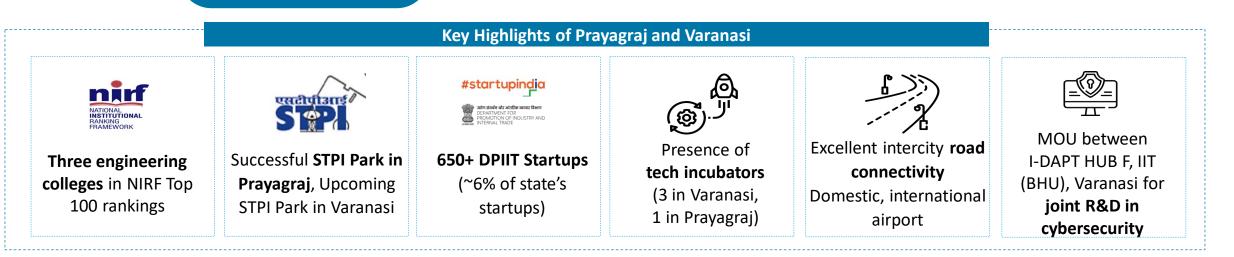
- India's share in global ER&D outsourcing market is >30% and with consistent double-digit growth, is expected to reach 50% within a decade
- 900+ ER&D GCCs in India with Tier 2 and Tier 3 cities also gaining traction

(<del>(</del>

 Software, Healthcare & Automotive sectors account for ~50% of global ER&D spend

Evolving digital engineering

use cases across verticals



Key Trends:

Migration of engineering

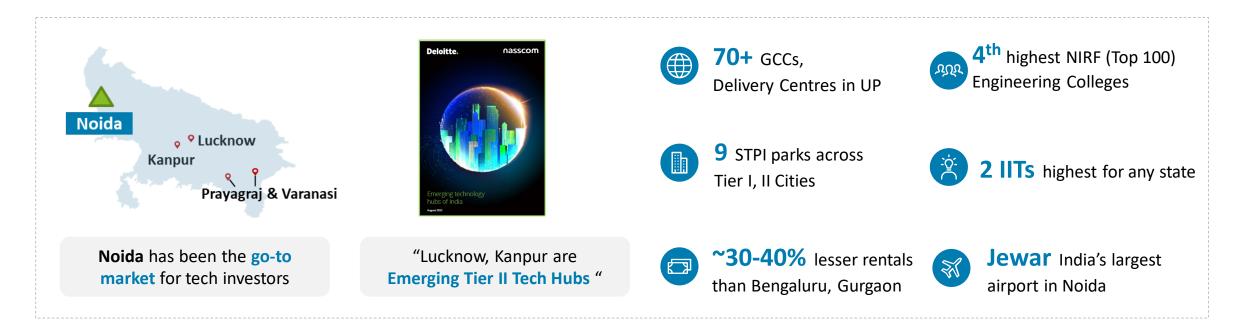
activities to cloud

## Drone and Robotics Hub of India

Kanpur, formerly known as the 'Manchester of India', has been identified as an emerging technology hub lead NASSCOM. Located in Central Uttar Pradesh, it is envisioned to become a <b>Drones and Robotics hotspot</b> lead the Centre for Mechatronics in IIT-Kanpur					•	
<b>♀</b> Kanpur		Drone CoE at IIT-K (Unique 1 km runwo flight testing lab, wind tunnel facility	ay, (Home to HAL, Small A Factory, Field Gun Fact	rms EndureAir, Lohia Aero tory (Hotspot for military,	(4 incubators	under Data Maturity
Infrastructure	(		Talent	<b>(3</b> )	Social Ameniti	es 🚇
Real estate availability, affordability		High STPI, Technopark)	# of colleges	300+ (IIT Kanpur, Kanpur Inst. of Techn	ology) Eminent schools	DPS St. Mary's
Internet Connectivity		age, High Speed nedabad, Jaipur, Indore)	# of annual graduates	~50,000 (20% STEM)	Reputed hospitals	
Intra-city connectivity		High oming Ring Road)	# of employees in tech cos.	~7,000	4 & 5 star hotels	LANDMARK ROTALS & SUITES ROYAL ORCHID
					Malls	Z SQUARE One of India's large
Inter-city connectivity	(Direct flights - Mu	High mbai, Delhi, Bangalore; rilateral Highway)	Availability of gig workers	High (~13% growth in hiring in 202	2) International cricket stadium, Amusement Par	

Source: Deloitte-NASSCOM report titled 'Emerging technology hubs of India' \*UPDIC- Uttar Pradesh Defence Industrial Corridor

## Think GCC, Think UP



### **Existing GCCs in UP**



"Uttar Pradesh has vast untapped potential. It has an investment friendly government that is keen on improving ease of doing business and infrastructure in the state."

> -**Mr. Kumar Mangalam Birla**, Chairman, Aditya Birla Group