SMART INFRASTRUCTURE FOR SMART CITIES

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EDITOR & PUBLISHER, INDUSTRIAL ECONOMIST

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About IE

- Pioneered business journalism
- Celebrated golden jubilee in March 2018
- Well-researched, thoroughly-analysed articles
- Global expert writers
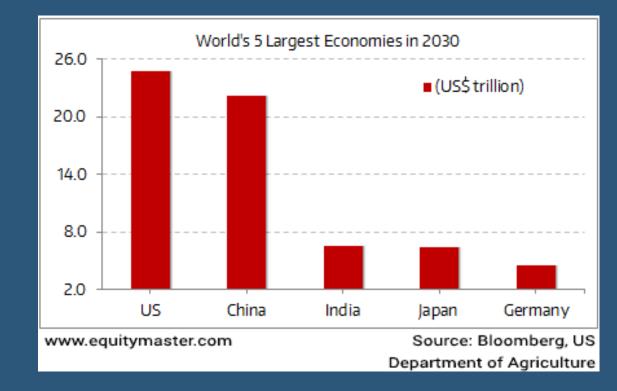- Deep focus on agriculture, education, national gas grid

Seminar on KG Gas - a fair share for South on 19 December 2009. (L to R): C K Ranganathan, Chairman, CII-TN and MD, CavinKare, S Viswanathan, Editor, IE, P R Ramasubramaneya Rajha, Chairman, Ramco Group, Dr S Narayan, Former Advisor - PMO, B Santhanam, MD, Saint Gobain Glass and Rajeev Ranjan, Principal Secretary, Industry, TN

India – Booming Economy

- **GDP $2.6 trillion**
- **Ranks sixth in the world**
- **Among fastest growing economies**
- **GDP poised to grow to $10 T by 2030**
- **Inexorable Urbanization ~50%**
- **Self-reliant…**

But, challenges remain
- **Fifth of population BPL**
- **Basic necessities inadequate**

World's 5 Largest Economies in 2030

■ (US$ trillion)

www.equitymaster.com

Source: Bloomberg, US Department of Agriculture
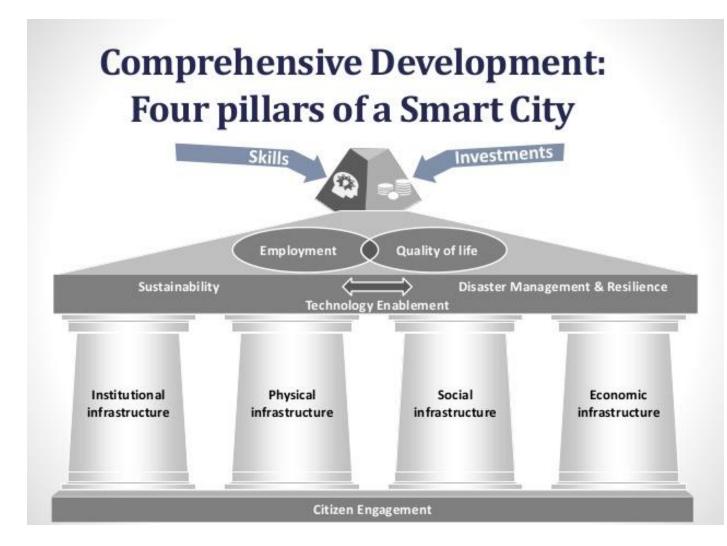
ROLE OF SMART CITES IN INDIA'S GROWTH
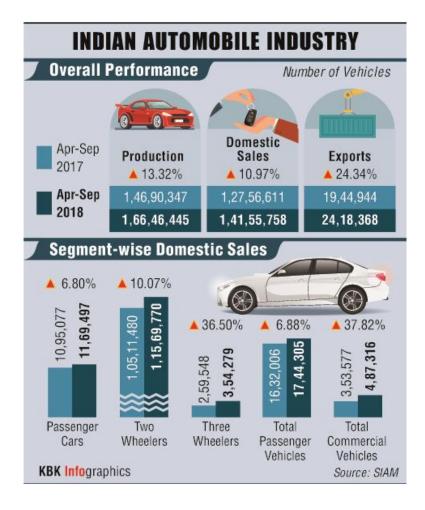

SMART CITIES
UNDER "SMART CITIES MISSION"

- **Smart city incorporates information and communication technologies (ICT) to enhance the quality and performance of urban services such as energy, transportation and utilities in order to reduce resource consumption, wastage and costs.**

- **Smart city will enhance the quality of living for its citizens through smart technology.**

- **Smart cities are expected to attract investments, especially for business and developing new technologies.**

- **100 smart cities have been identified in India among 36 States and UTs**

TOP LEVERS FOR SMART CITIES

- **Transportation**
- **Energy**
- **Security**
- **Digital Governance**
- **Technology**
- **Healthcare**
- **Housing**
- **Water & Sanitation**
- **Education**

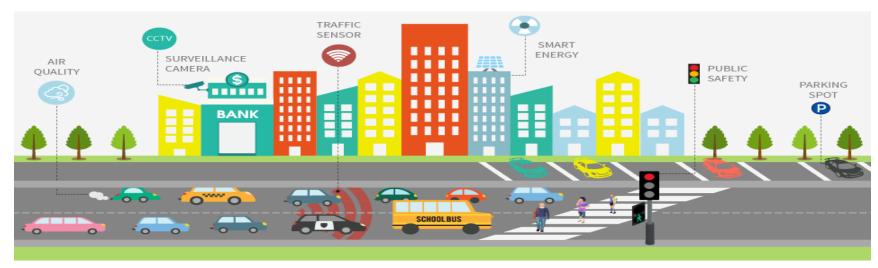# TRANSPORTATION IN CITIES – AUTO CENTRIC TO CITIZEN CENTRIC

ENERGY – MOVE TOWARDS CLEAN FUELS TO POWER GREEN BUILDINGS

India's First 1 MW Canal-top Solar Power Project

> - **India to add 175 GW of renewable energy generation capacity by 2022**
>   - **100 GW of solar power by 2022 along with 260 GW of thermal and nuclear generation and 62 GW of hydro generation capacity.**
>   - **Phasing out lignite and coal over the next 10 years for new power plants**
>
> - **Goal: Provide clean, affordable and 24/7 electricity to its citizens**
>
> - **Green buildings with rooftop solar & smart reversible meters, rainwater harvesting, gas grid**
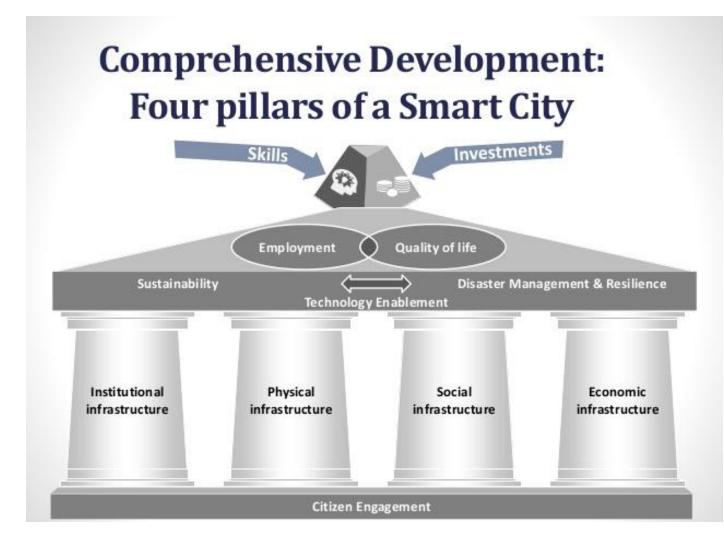
SECURITY – RAPID IMPROVEMENT IN SAFETY

❖ **Smart City Centres as city's nervous system where digital technologies are integrated to enable centralised monitoring and action**

❖ **Internet of Things (IoT) , sensors, GPS equipment and cameras collect, transmit data to a central facility**

❖ **Data converted and information received enables real time monitoring and expeditious response**

❖ **Clear results:**

   ❖ **Reduction in crime rates (e.g. 18% in Rajkot)**

   ❖ **Better traffic management (e.g. violations addressed faster)**

   ❖ **Increased surveillance has led to reduction in littering, urination in public spaces**

   ❖ **Environment sensors help with weather monitoring, air quality monitoring and lightning detection**

DIGITAL GOVERNANCE – EASING ACCESS TO BASIC PUBLIC SERVICES FOR CITIZENS

- Key enablers supporting delivery of services
  - Aadhaar (unique identification number) covers ~1.2 Billion citizens enabling Digital India
  - Smart phones penetration ~1.15 billion phones
- Enables smart delivery of public services like
  - Land records, birth/death certificates, registrations, taxes
  - Payment gateways
  - 2 way communication including disaster mngt.
  - Direct transfer of benefits

TOP LEVERS FOR SMART CITIES

Comprehensive Development:
Four pillars of a Smart City

- **Transportation**
- **Energy**
- **Security**
- **Digital Governance**
- **Technology**
- **Healthcare**
- **Housing**
- **Water & Sanitation**
- **Education**

KEY QUESTIONS/ISSUES TO PONDER

- **Why 100 cities out of a possible 4000?**

- **Is Urbanisation inevitable? Why not enrich rural India?**

- **Will Corporate sector and MNCs have a free hand?**

- **The SPV (Special Purpose Vehicles) are to be funded by the Centre and the State – What is the role of the Municipal government?**

- **What impact with the planning and execution have on the fundamental rights of vulnerable sections and cost of services?**

THANK YOU

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