Interactive session on

"Smart Grids for Smart Cities"

30th October 2018

India Habitat Centre, New Delhi

Smart Grids for Smart Cities

Sunil Singhvi Chairman IEEMA Smart Grid division

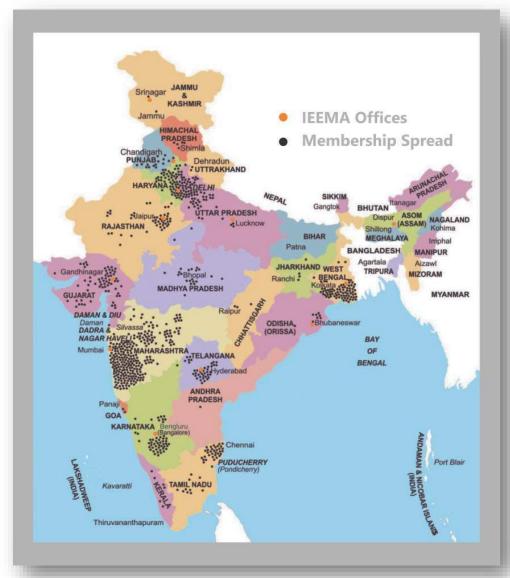
Jointly Organized by





Indian Electrical and Electronics Manufacturers Association

- Apex Industry Association of the Indian electrical equipment,
 industrial electronics and allied equipment manufacturers
- Has been serving the industry for more than 70 years
- Represents businesses encompassing the complete value chain in generation, transmission and distribution equipment
- IEEMA members have contributed to more than 90% of the power equipment installed in India
- Total 23 divisions and committees
- A platform for constructive interactions between Industry,
 Utilities and Policy Makers



Activities of IEEMA

Specific Standardisation/Benchmarking Activities
 Price Variation Clauses, Prices/Indices
 Statistical Analysis & Market Research
 International Conference
 IEEMA Journal
 Training Programmes & Skill Upgradation
 International Trade Promotions and Partnerships (
 MoUs, Fair Participation/Trade Delegation)









DistribuELEC	E3
Distribution on Hi-Tech Power Distribution	E3 is the largest convention in Eastern India
4th - 6th February 2019 Bombay Exhibition Centre, Mumbai	December 14-16, 2018 at NICCO Park, Kolkata.
Distribulec 2019 is a uniquely designed concept to bring Utility, Consumer, Electrical Operational Technology (OT) and Information Technology (IT) on same platform to Empower all Stakeholders	The convention acts as a catalyst for economic and business opportunities between India and ASEAN Countries
BuildELEC 2019, a concurrent exhibition has been planned to showcase convergence of OT and IT directly at consumer dwellings to make key utilization centers i.e. buildings -industrial, commercial and residential, more efficient and safe.	IEEMA has joined hands with REC and created a North East Cell to monitor the material supplies to various NE Discoms.
Intelect 2019 is a concurrent conference on 4th & 5th February 2019 with theme "Towards Smart, Reliable, Efficient and Safe Electricity"	E3 will have a concurrent 2 day conference with theme 1. Price Vs Value Proposition 2. Energy-A futuristic view 3. Commodity volatility Management 4. Capability Upgradation in International Outreach

Metering India 2019...Widening Horizons...

Flagship Event of IEEMA in Energy Metering ecosystem

25th & 26th April 2019 at Hotel Le Meridien, New Delhi

- Supported by Supported By
 - Ministry of Power, Government of India
 - National Smart Grid Mission

Highlights of Metering India 2017 ie 7th edition Seminar: 500 + Participants, 170 Participating Organization, 157 Participants from 49 utilities Participation from entire Energy Metering ecosystem: Utilities, Regulators, Consultants, Franchisees, Institutions, Testing Labs, System Integrators, IT Solution providers Meter Manufacturers and other Component Manufacturers.

- > Brochure explaining the theme and proving other details is there in the kit
- Papers are invited from all participants
- > the cut off date of paper submission is 30th November 2018.
- > Please visit MetereingIndia.ieema.org for details

IEEMA Smart Grid Division

Vision:

"Evolve as the reliable partner in the nation building roadmap of Government of India to ensure comprehensive and structured deployment of nation wide smart grid infrastructure to address the current challenges like 'energy security', 'Electricity for all', and 'financial health of distribution utilities' along with 'Modernization of the Grid' in a holistic and sustainable manner. "

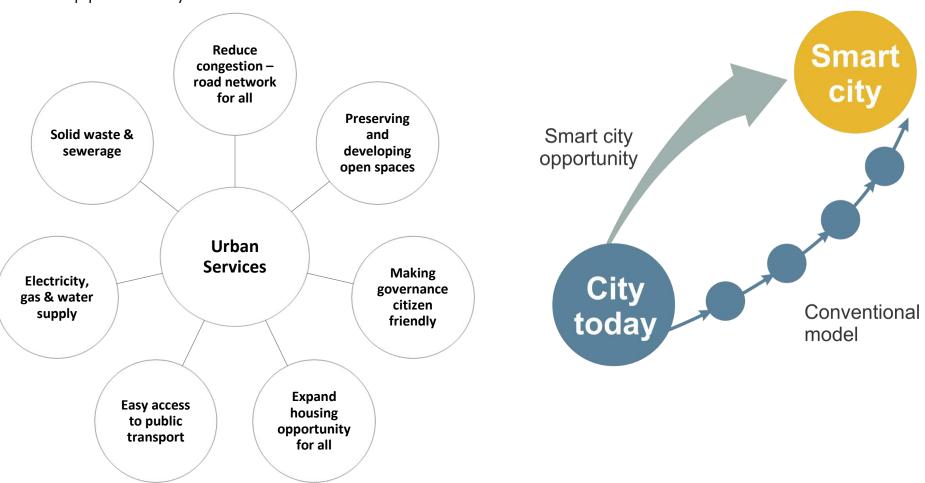
TEEMA Smart Grid Division Value for Indian Utilities

- ➤ More than 50 years of experience with the Indian Utility customers
- > Width and depth of understanding of the pain areas of the utilities
- > Technical competency to provide the solution from the grass root requirement to the epitome of technology
- Familiar with the operational requirement of the utilities and can designed the solution and product to suite their requirement
- > IEEMA Smart Grid division comprises of organizations who can in individual capacity or as a team support the target of effective transformation of utility from a traditional to Smart utility

"Smart Grids for Smart Cities"

Smart cities

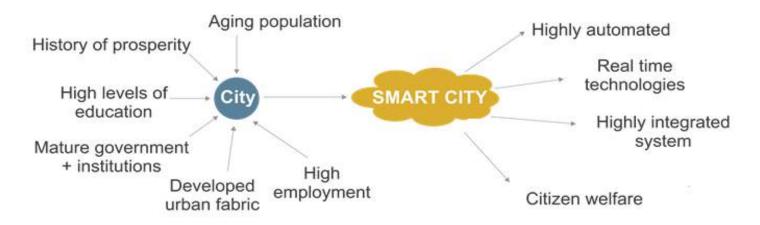
an opportunity



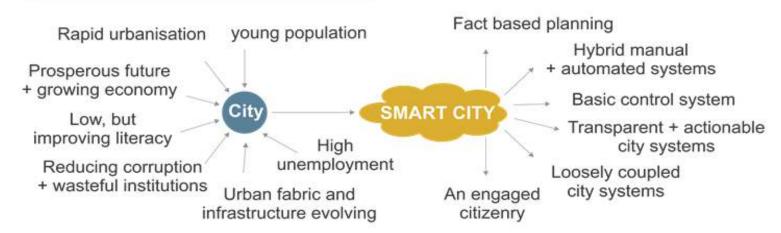
Smart cities in India are an opportunity to leapfrog the development stages for cities

Smart cities

"SMART CITY" A model from the west



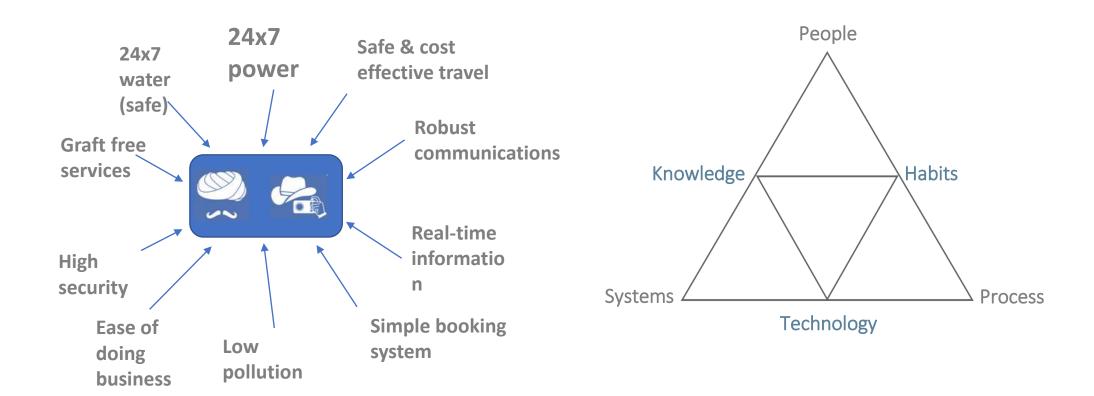
"SMART CITY" the Indian model



Effective technology coupled with people working to a common goal is a smart city

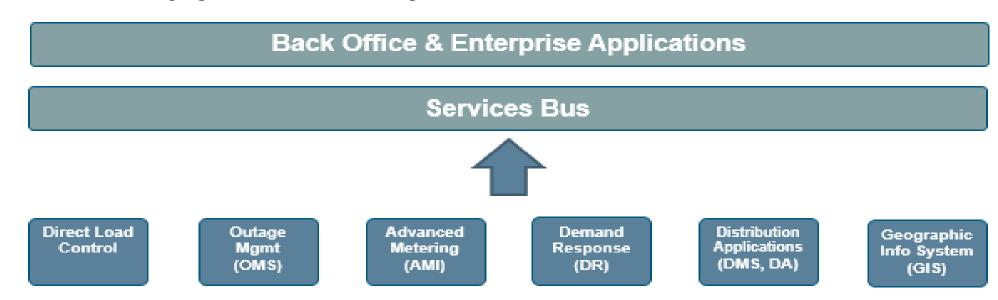
Smart city

technology alone will not deliver



A smart city programme that keeps citizens and visitors at its heart will succeed

Multi-application platform for Smart Grid:



IPv6 based Multi-Application Platform

- Standardized network management tools
- Standardized security
- Quality of service (QoS)

Substations

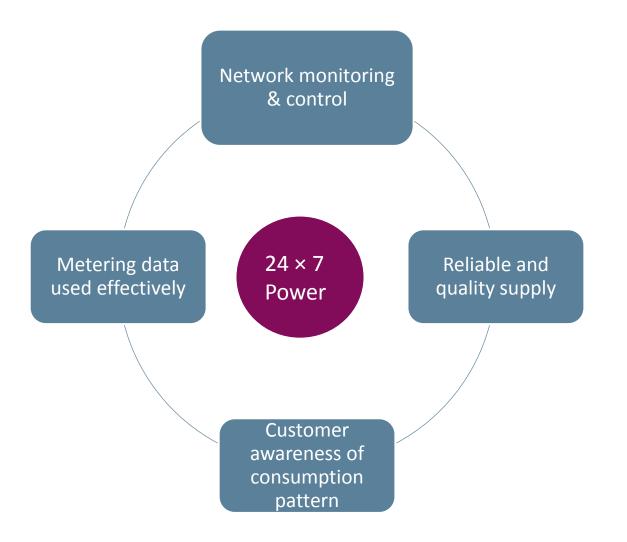
Electric Vehicles

Meters

In-Home Devices Distributed Generation and Storage Distribution Sensors / Switches

Field Devices

Electricity assurance and management



Effective outage management

Waste & energy reduction

Reduced equipment failures

Improved revenue cycle

Reduced opex

Affordable power

Effective load management

Benefits:

- ➤ Peak reduction Would enable utilities to reduce purchase of costly power and maintain grid discipline
- > Quality and control of electricity flow, Improved reliability Self healing grid
- ➤ AT&C Loss reduction Prevention of disruptions, improved energy management—and energy accounting. Leakages would be detected quickly and prevented
- ➤ Increased efficiency Individual producer could generate power onsite and feed into the grid.
- ➤ Empowerment of consumers Consumers could optimize their usage and billing; Smart Grid enables a competitive electricity market
- ➤ Sustainable energy Integration with sources of renewable energy generators; Environmental improvements
- > Outreach Micro grids would pave the way for increasing the outreach of electricity

.....Thank You