
btc
European Business &
Technology Centre
Enabling Europe-India
Collaboration
New Delhi, February 2018

WHY INDIA, WHY NOW?

- CURRENT SCENARIO
- GOVERNMENT INITIATIVES
- OPPORTUNITIES & CHALLENGES
- THE WAY FORWARD

CURRENT SCENARIO:
INDIA'S ECONOMY

Overview

- The demands and challenges of India's fast-growing economy provide **numerous opportunities** for Europe-India collaborations.
- A comprehensive set of interlinked **government initiatives** paves the way for more bilateral investments, partnerships, and projects on-site – both private and public.
- Through its rich experience in bilateral **project facilitation**, EBTC helps their Indian stakeholders benefit from European know-how in the field of clean technologies and smart solutions.

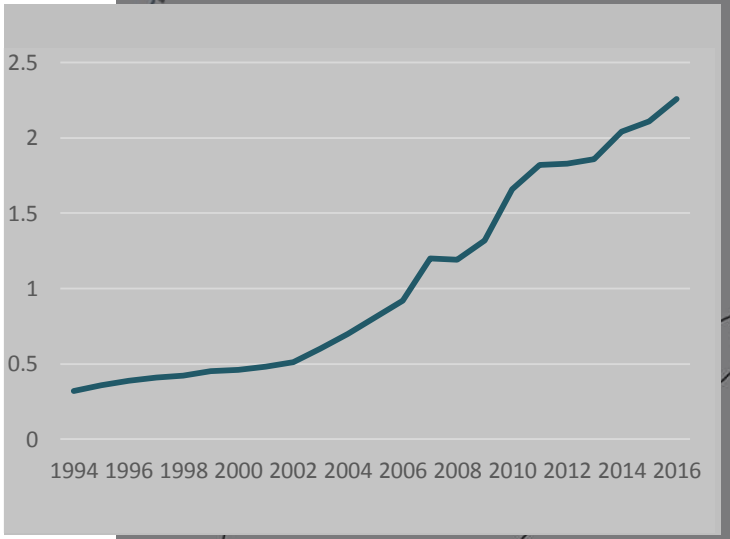
One Of The Largest & Fastest Growing Economies Globally

An economic giant

- Annual GDP growth rate of 7.3% (Q4/2016)
- Expected to become the third biggest economy by 2030 and the second by 2050

Attractive to foreign investors

- Amongst the top 10 FDI destinations globally, >USD 50 billion in the financial year 2015-16. 8% FDI increase between April 2016 and March 2017
- Rank at the Ease of Doing Business Index has improved by 30 ranks in the last year



India GDP Growth 1992-2016 (USD trillion), source: World Bank

India's Population: The Springs Of Future Growth

A favourable demography

- Second largest population in the world (around 1.3 billion)
- 50% of its population below 25 and 2/3 below 35
- Talent Pool: highly skilled, English-speaking labour force

Spurring a dynamic consumer market

- India's consumer market will be one of the largest globally by 2025
- Global impact: the rise of India's 'new middle class'
- Fastest growing e-commerce market

POLITICAL INITIATIVES
FOSTERING GROWTH AND INNOVATION

Vision Of A New India: Reforms And Initiatives

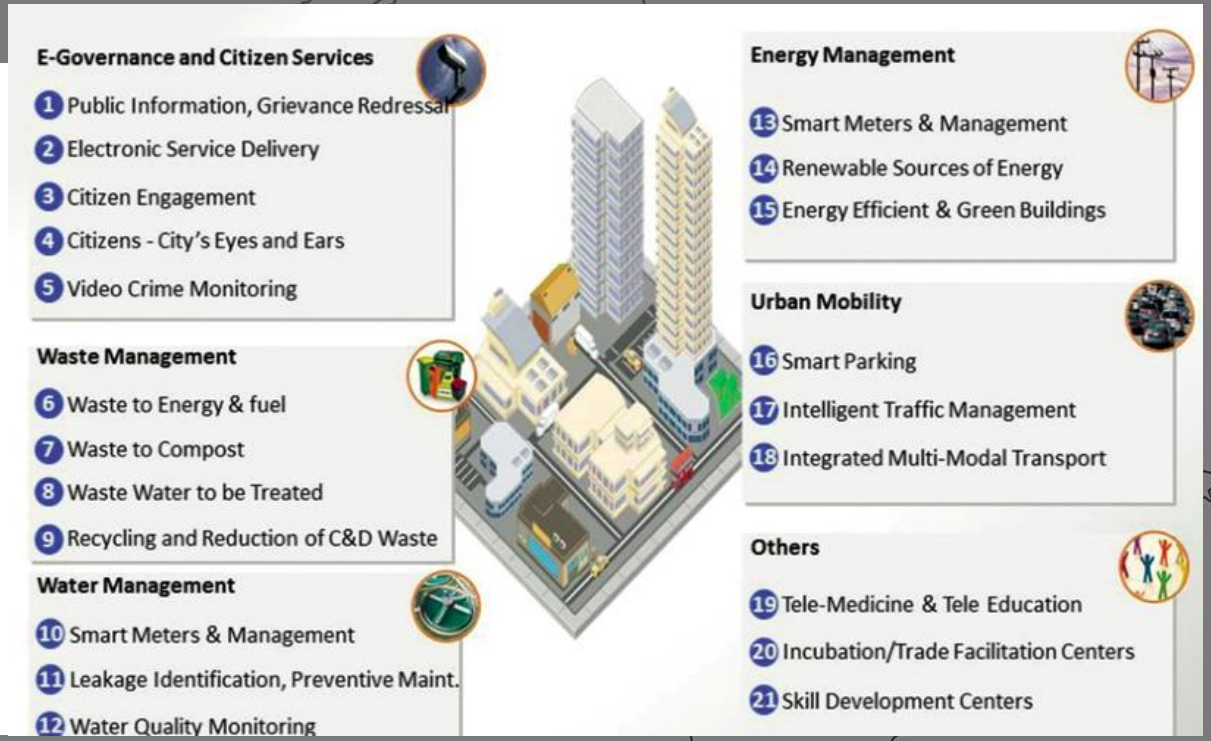
- Government's **vision of a new India** focuses on federal structure, agriculture reforms, urban development and infrastructure, healthcare, children and women's empowerment, inflation control, anti-corruption measures and education and job opportunities for youths.
- Initiatives launched in domains India has identified as key to its future, among those **energy, environment, industry, technology, and the digital economy**
- **Stable government**, reinforced by governing party (BJP) landslide win in Uttar Pradesh, the most populous state in India in spring 2017.

The Smart Cities Mission: Building A More Liveable India

- **Urban renewal** and retrofitting programme
- Launched in 2015
- Goal: develop **100 cities** (and rejuvenate 500 others) all over the country to make them more **citizen friendly** and foster a **clean and sustainable environment**
- Application of 'smart' solutions.
- Budget: around USD 7 billion.

Smart Solutions

Beyond the 100 selected Smart Cities, there are many other cities with smart aspirations and the desire to implement smart cities technologies as well as smart port cities and various private cities, for which the developers are looking for smart solutions.



Snapshot from the 'Mission Statement & Guidelines' document created in 06/2015 by McKinsey for the Ministry of Urban Development of India.

How Are Smart City Projects Created?

Implementation of Smart City Projects through SPVs: Ref. slide 22

Smart Cities In India: Some Of The Latest Projects

Indore, Madhya Pradesh	Replaces its conventional streetlights with energy saving LED
Pune, Maharashtra	Passenger Information System - Pune is improving its bus services through an Intelligent Traffic Management System (ITMS) and real-time tracking of all its buses.
Raipur, Chhattisgarh	Plans to develop the city as a low-carbon area with an emphasis on e-mobility and the conjoint use of solar panels on roofs as an energy source.
Dharamshala, Himachal Pradesh	First city to get a sensor-based underground waste bin network

Transforming India: Other Government Initiatives

Digital India

- Digitally empowered society and knowledge economy through digital infrastructures, e-services and citizens' education.

Clean India Movement

- Implement cutting-edge municipal solid waste management, eliminate open defecation and augment the capacity of Urban Local Bodies. Total cost: approx. USD 10 billion.

Sagarmala Project

- Modernization of ports, setting up of coastal economic zones, new major ports and fish harbours. Capital outlay USD 10 billion.

Clean Ganges

- Rejuvenation of the Ganges river by improving its quality and environment.

AMRUT

- Recast urban landscapes and make urban centres more liveable and inclusive. Capital outlay USD 7.69 billion.

Road & Rail

- Develop 7000 km of national highways. Capital outlay USD 12 billion.
- Dedicated freight corridor for decongest-ting existing network. Capital outlay USD 12.3 billion

OPPORTUNITIES & CHALLENGES:
A COMPLEX COUNTRY

Challenges: Highlighting India's Complex Environment

Traffic

Infrastructure

Pollution

Education coverage

Waste Management

Unique Business Culture

Digitalisation

Complicated processes

Potential Project Areas

ENVIRONMENT	RENEWABLE ENERGY	TRANSPORT
Waste Management: Municipal Solid Waste (Biomining, Landfill), Legacy Waste, E-Waste	**Solar:** National Solar Mission to add 20 GW of solar PV & thermal by 2022	**Public Transport and E-Mobility**
Water and Waste Water: River Rejuvenation, Urban Waste Water Treatment	**Wind:** Commercialization of grid interactive wind power with the help of the Ministry for Renewable Energy	**Transport Emissions**
Waste to Energy: Waste-to-energy plants, Biofuels		**Logistics/Freight**
Air Quality: Urban (Elimination of PM10 in major cities) & Rural (Prevention of agricultural pollution like crop burning)	**Off-Grid Distributed Energy:** Rural upliftment through electricity	
Green Buildings: Prevention of dust during construction, high-efficiency heating, ventilation and air conditioning systems, affordable green building materials	**Industrial and Agricultural Energy Efficiency**	

Indo-European Success Stories

ALSTOM India (HQ France)

First 'Make in India' metro designed in Bangalore, manufactured at Sri City. Several Metro Projects across India, e.g. Kochi Metro Project & Lucknow Metro Project

European Investment Bank (HQ Luxemburg)

Funded the Lucknow Metro Project.
Amount: 450 million Euros

VAN OORD India (HQ Netherlands)

Won a contract to keep the approach channel to the port of Kandla, one of the major ports in western India., up to depth for the next three years.
The contract was awarded by the Client Kandla Port Trust (KPT). The dredging activities started in summer 2017.

PHILIPS India (HQ Netherlands)

In September 2016, won the contract to supply fifty million 9-Watt LED bulbs to the Energy Efficiency Services Limited (EESL), the central government company that is implementing the UJALA scheme (Unnat Jyoti by Affordable LEDs for All).

FLUITECNIK (HQ Spain)

Chennai-based Wheels India Ltd has signed a technology transfer agreement with Fluitecnik for hydraulic components used in wind turbines, allowing for an extension of their existing portfolio.

THE WAY FORWARD

European Business & Technology Centre

EBTC'S ROLE

EBTC as an **enabler for bilateral collaborations** can bring together Indian and European stakeholders and help structure, set-up and monitor projects on-site.

WHAT WE CAN OFFER

- Strategic Project Advisory;
- Project Facilitation, Structuring and Monitoring;
- Technology Transfer;
- Training, Support and Capacity Building;
- Specialised Consortium Partner (Niche Know-How / Technological Specialisation).

Our Key Programmes & Mandates

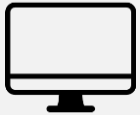
Smart City Knowledge and Innovation Programme (SCKIP)

Europe-India IP Facilitation Forum

Transport Cluster

Enterprise Europe Network (EEN)

Development Partner of Clean India Mission (Urban)



European Technology Experience Centre (ETEC)

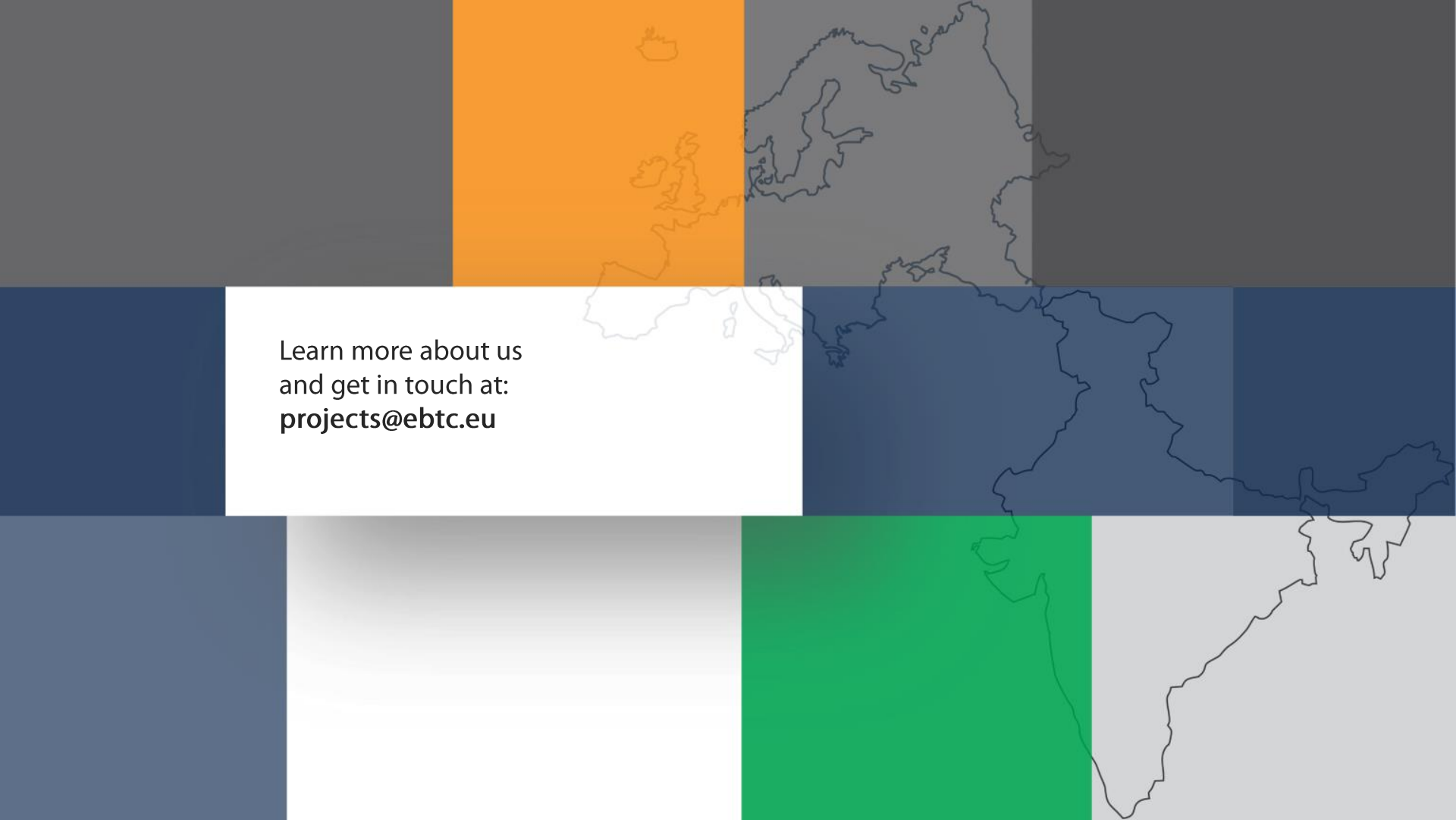
EBTC'S SUPPORT FOR EUROPEAN SMES

Market Intelligence through Partnerships

- Development Partner of the Clean India Mission Urban
- Technical Cooperation Partnerships with selected municipalities and urban local bodies
- Partnership with Invest India
- Partnership with the Federation of Indian Chambers of Commerce & Industry
- Partnership with the National Research Development Corporation
- Implementation Partner of the European Patent Office in India

EBTC Programmes to leverage Market Intelligence

- Smart Cities Knowledge and Innovation Programme
- EBTC Transport Cluster
- EBTC Water Platform



Learn more about us
and get in touch at:
projects@ebtc.eu

Additional insights: How are Smart City Projects implemented?

Reference slide 11

Special Purpose Vehicle (SPV)

- SPV to plan, appraise, approve, release funds, implement, manage, operate, monitor and evaluate the Smart City development projects
- Implementation of Local Action Plan through a SPV
- Assurance of operational independence and autonomy in decision making and implementation

Additional insights: Project structures

Public-Private Partnerships (PPP)

Government service or private business venture funded and operated through a partnership of government and one or more private sector companies. With close to 1300 PPP projects in various stages of implementation (source World Bank), India is one of the leading countries in terms of readiness for PPPs.

Management Contract

Private company takes over operation and maintenance of a particular part of the system.

Build Operate Transfer (BOT)

Contractor builds (and possibly designs) the facility, operates it for a specified period and then hands it back to the Government in good condition.

Additional insights: Project structures (continued)

Concession

Concessionaire finances investment, replacement and expansion costs, and working capital within pre-determined timeframe. Cost recovery through operation revenues over time.

Built Own Operate Transfer (BOOT)

Very similar to a concession, used where a large new facility is to be purpose-built, such as a water or sewage treatment works.

Leasing

Government makes necessary funding arrangements. Often used for running utilities.

Franchise

Private sector finances all, or most, of the investment costs.