# >>> Financing Indian Smart Cities: Ways of Financing Planning, Investment and Operation

Metropolitan Solutions Berlin, 31st May 2016

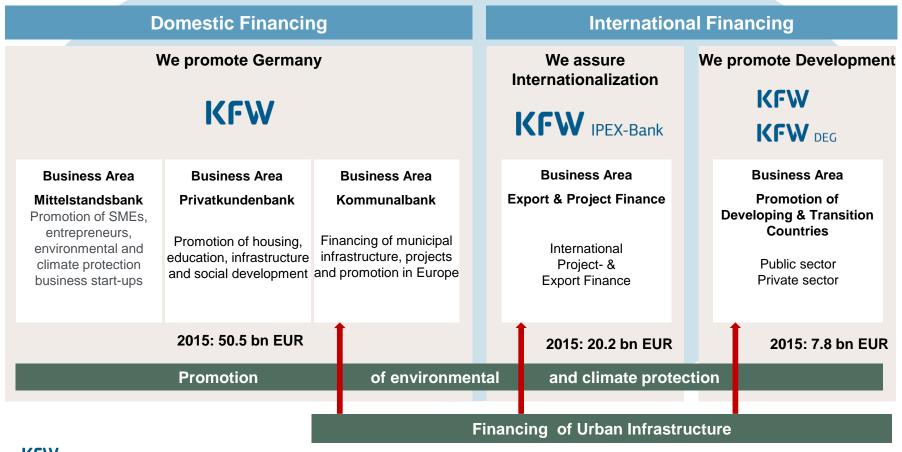
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## » KfW Group at a glance: A bank with various tasks

## **KFW**



## >>> "New Urban Agenda" on Urban Financing



#### Bridging infrastructure funding gap: prerequisite for NUA, SDG, Climate Goals

#### Sound domestic financial policy framework

Strong and transparent system of transfers

Local government autonomy

Robust regulatory frameworks for borrowing

National credit guarantees, municipal development funds

#### Local financial management

Capacities in planning, budgeting, accounting, procurement, auditing, oversight

Capacities to develop, implement and operate bankable projects

Establish and collect user charges and fees

Capturing the increase of land values

#### Partnerships and development cooperation

Public-private partnerships

Official development assistance as financier (grants, loans) or "de-risker" for investments and preparation

**KFW** 

## »» NUA on Urban Financing: Reality Check



#### **Policy framework**

- Imbalance between responsibilities and funding strained budgets, poor service quality
- > Legal borrowing hurdles, weak financial management, intransparent accounts little debt access

#### **Financial Management**

- > Low own income (taxes, tariffs) reduces new investments and wears down existing infrastructure
- Insufficient planning and capacity to develop+implement projects inefficient or low investment



Vicious circle of low service quality, deteriorating infrastructure and low growth requires responses on policy level, capacity building and adequate financial instruments

## »» KfW Instruments for Urban Financing



Mandate, Budget Funds, Risk Cover



#### SOFT-LOANS

#### **Investment**

→ large stand-alone projects
 → bundle of small/medium projects
 (programmatic approach)
 → investment design and supervision



#### GRANT

#### **Preparatory studies**

Project planning / preparation (FS, DPR etc.)

#### **Accompanying measures (AM)**

Capacity building for implementation & O+M

Via central and state governments / banks / urban development funds









Programs / Missions

**Activities of KfW** 

## KfW in India: Activities linked to "Smart Cities Mission"

**KFW** 

Ministry of New and

**Ministry of Urban Development** 

Fund (TNUDF)

**Board (NCRPB)** 

environment (\*)

Metro Nagpur

Tamil Nadu Urban Development

· Odisha Urban Infrastructure

Development Fund (OUIDF)

Karnataka urban sanitation &

MP urban sanitation & env. (\*)

& Demand Management (\*)

Bhubaneswar Smart City (\*)

· Bus Rapid Transit - Chennai,

Coimbatore & Bangalore (\*)

Integrated waterways Kochi (\*)

· Chennai SWD, Water Production

National Capital Region Planning

**Smart Cities Initative** 

**Swachh Bharat** 

**AMRUT** 

**Environ-**

mentally

Friendly

structure

Urban

Infra-

Urban

Renewable Energy **Ministry of Power** 

**Efficiency** 

**Energy** 

**Efficiency** 

Renewable

**Energy** 

**Trans-**

mission

Ministry of Finance (DFS)

**Affordable Housing** 

**National Solar Mission** 

**Enhanced Energy** 

**Green Energy Corridors National Mission on** 

Demand side

management

Efficient cooling

rural (\*)

Investment

measures for

Intra-state and

Solar Rooftops (\*)

measures - EESL

system in urban /

**Efficiency** 

SME through **SIDBI** Housing

**NHB** (\*) · Low cost /

affordable housing through **NHB** (\*)

through

Afford-

able Housing

Under preparation (\*):

350 mln EUR (loan)

and 2 mln EUR (AM grant)

Inter-state Transmissionevacuating energy

from generation centers to load centers Under implementation: 400 mln EUR

(loan) and 1.5 mln EUR (AM grant)

(loans)

• Under preparation (\*): 900 mln EUR

**Mobility** Municipal **Bonds** 

 Water & Sanitation Pooled Municipal Bond (via TNUDF) and 8.25 mln EUR (AM grants)

Volumes (approx.) Under implementation: 910 mln EUR (loans) • Under preparation (\*): 1.125 mln EUR (loans) and 2.5 mln EUR (AM grants)

• Under implementation: 100 mln EUR (loan)

Industry /

**Energy efficient** 

**Energy** 

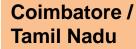
### >>> KfW and the 3 "German" Smart Cities in India



#### **Smart City / State**

## Bhubaneswar / Odisha







Ongoing Cooperation

Odisha Urban Infrastructure Development Fund (OUIDF): since 2012; 50 mn EUR loan, 2,5 mn EUR grant Integrated Waterways Kochi: preparatory studies 2015/16; 85 mn EUR loan, potential T.A. grant

Tamil Nadu Urban Development Fund (TNUDF): since 2012; 260 mn EUR loan, 3 mn EUR grant

Potential Cooperation

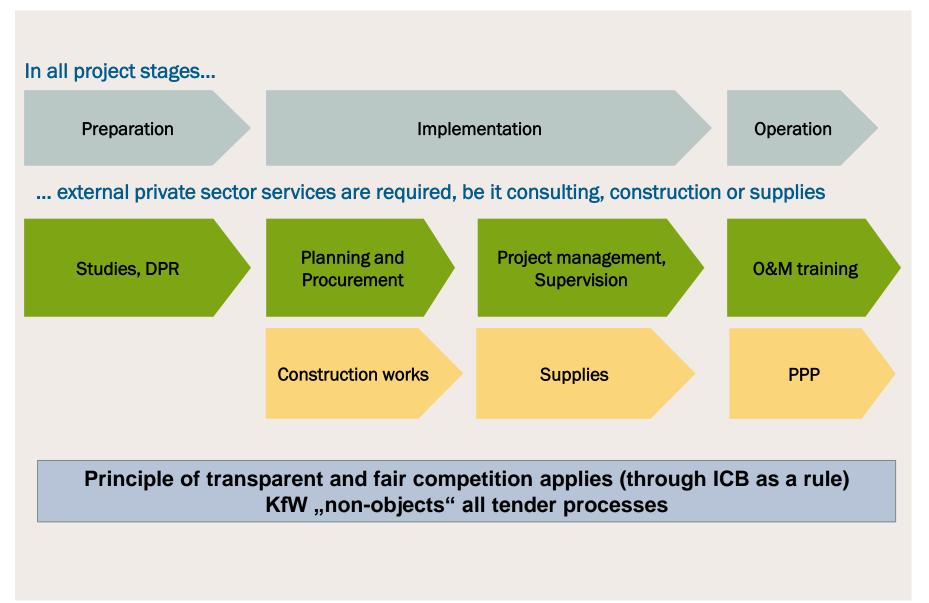
Climate-Friendly
 Urban Mobility
 Bhubaneswar
 Complete Street Design
 Non-motorised Transport
 City Bus System

- Climate-Resilient Storm Water Drainage Bhubaneswar
- OUIDF Phase II

- Introduction of Low-Carbon City Buses Greater Kochi
- Solar PV program under preparation
- Water&Sanitation?

- Climate Friendly Urban Mobility? (Bus Rapid Transit / Nonmotorised Transport)
- Water&Sanitation?

### » KfW Urban Finance: Private Sector Business Opportunities



#### » Conclusion – Smart Cities India: Potential Contribution of KfW

#### **Offer**

- 1. Based on strategic priorities of selected smart cities 3 partner cities + others
- 2. Feasibility Studies / DPR for investment preparation
- 3. Close handholding during investment and commissioning phase
- 4. Long-term, soft loans for investments of EUR 50 mn or larger
- > 5. **Lasting partnership** not just one-off investments

#### **Prerequisites**

- 1. Committed + responsive partners, willing to borrow (city, state)
- 2. Focus on Green Urban Development (mobility, water&sanitation, SWM, EE)
- 3. Potential for sustainable O&M (tariffs, non-fare revenues, partial subsidies)
- 4. Application of international standards (env+social; procurement)

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**BACKUP SLIDES** 



## »» Example 1: Tamil Nadu Urban Development Fund





Country

India

Project

**Sustainable Municipal Infrastructure Financing in Tamil Nadu** 

Partner

Tamil Nadu Urban Development Fund (TNUDF)

(PPP between state and financial intermediaries)

KfW Funding Volume

EUR 260 mn loan, EUR 3 mn grant in 3 phases

Objectives

- Better municipal infrastructure and services
- Improved and diversified access to finance for municipalities

**Approach** 

- KfW funding channeled to TNUDF via central/state gov't
- Loan funds to finance urban projects via established fund
- Grant funds for technical assistance to fund and towns
- Development and cofinancing of municipal bond pool

### » Example 2: Nagpur Metro





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India

**Project** 

**Nagpur Metro** 

Partner

Nagpur Metro Rail Corporation Ltd. (NMRCL)
(SPV between Gov't of India and Gov't of Maharashtra)

KfW Funding Volume

**EUR 500 mn loan** (+ cofunding from AFD)

Objectives

Climate Friendly, Sustainable, Integrated Urban Transport

Approach

- KfW loan channeled to NMRCL via central government
- Preparatory funding and investment loan for feeder system
- Consultancy support to ensure technical and E&S quality