

»» Advancing bus-based Public Transport for Green Urban Mobility in India: KfW Mobility Developments

Urban Mobility India, Ahmedabad, November 2016

Robert Valkovic

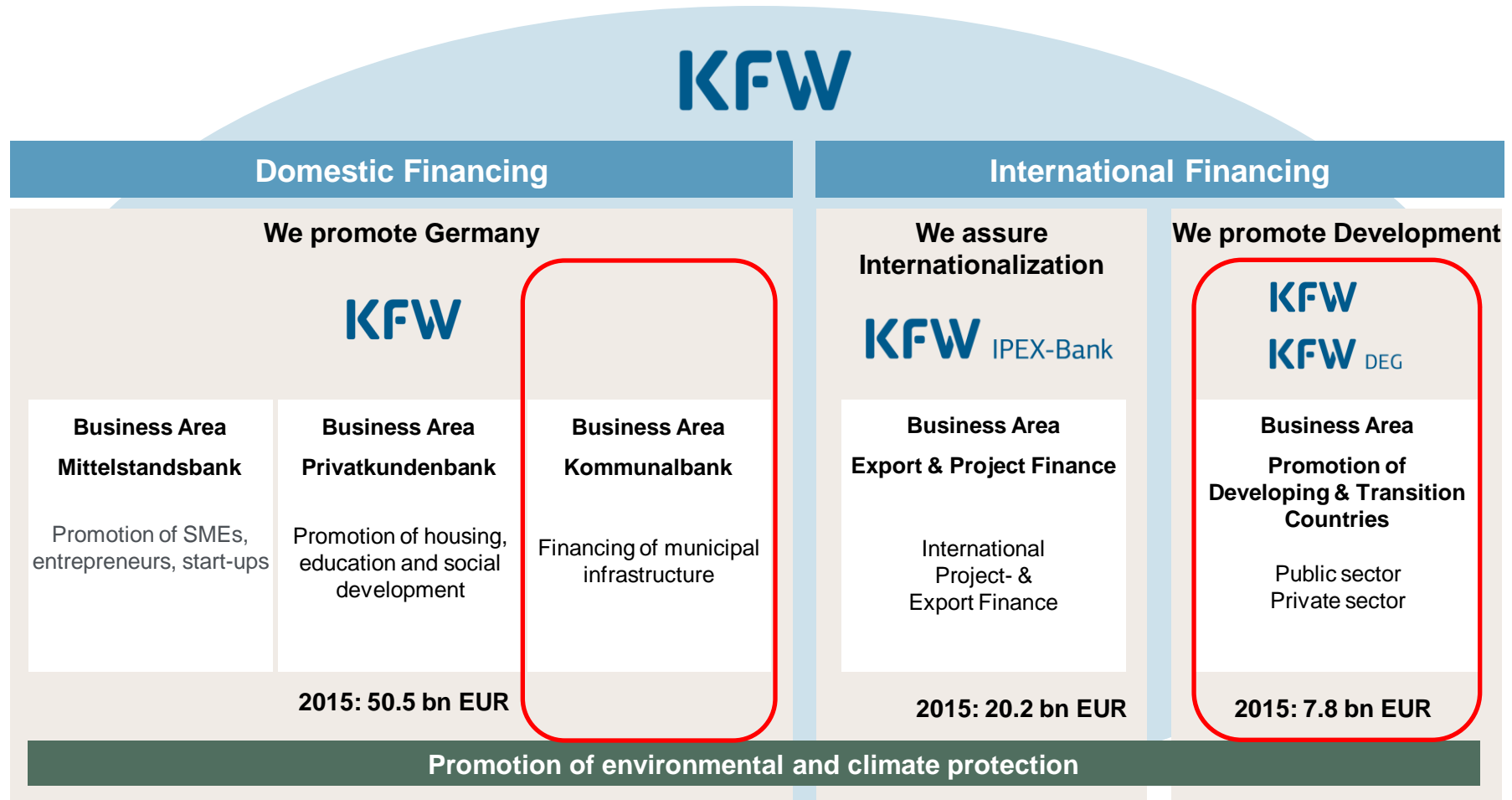
Senior Project Manager

Urban Development and Mobility, South Asia

Bank aus Verantwortung

KFW

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



»» KfW International: Mobility Financing Instruments



Mandate, Budget Funds, Risk Cover



SOFT-LOANS

or

MARKET BASED - LOANS

Investment

- › Large stand-alone projects
- › Programmatic approaches for smaller projects
- › Investment, design and supervision

GRANT

Preparatory studies

- › Project planning / preparation (FS, DPR etc.)

Accompanying measures (AM)

- › Capacity building for implementation & O+M

KFW

Via central and state governments, banks / urban development funds

Cities/Agencies (or SPV)

»» KfW's mobility sector and bus-based developments

- › Core principal of KfW Mobility support is environmental friendly transport modes
- › Mobility includes all public transport modes – metro, LRT, bus, BRT – and NMT
 - › Buses tend to less prominent public transport mode but will always be important for an effective public transport system and the major mode for small to medium sized cities (up to 1-2 million)
- › KfW Mobility and Bus investments
 - › Worldwide less than 5% of total annual KfW lending but growing rapidly
 - › – from zero prior to 2014 to program/loans of over EUR 1.1 billion for 2015-2017 in India
 - › German Government (under BMZ) launched at Habitat III in October the of Transformative Urban Mobility Initiative (TUMI) of EUR 1 billion investment per year from 2017 onwards
- › Developing country focus, increasingly Asia. Some ongoing bus developments include:
 - › Africa: South Africa, Kenya - BRTs
 - › Asia: Georgia, India, Vietnam, (China, Indonesia, Laos, Philippines)
 - › India

»» India bus sector study

- › Part of green mobility program between government of India and Germany
 - › Technical support provided to MOUD, being implemented through IUT.
- › Purpose of study - order to support increased usage of public transport in India
 - › Need to identify and assess current and ongoing bus development investments from India cities
 - › Assessment of International developments to determine appropriateness in India context
 - › Develop and disseminate lessons, best practices and broad guidelines for new bus investments

»» International lessons from other developing countries

1. Integrating public and private sector

International developments and trends

- Publicly funded public transport require ongoing subsidies if to meet all user demand/needs (lower revenue basis not offset by some lower cost)
- Within typical government frameworks it is difficult to incentivize operational efficiency and performance standards, and overcome existing vested interests
- Private sector can more readily introduce innovation, but cannot be expected to meet full service requirements of a city and still be viable
- A need to have a Public Private Partnership approach
 - Hybrid model of Net/Gross cost model tends perform
 - Government needs to be more prominent in regulatory role, but still cannot avoid some level of investment (usually high, >50%)

»» 2. Integration of different transport modes

International developments and trends

- Public transport users expect seamless and convenient modal transfers, so clear integration planning and investment in associated modes important for bus services
 - Issues between various intermodal operators and stakeholders is not the concern of user
- Higher frequency of service and density of services valued over high capacity corridors
- Capacity of bus services need to be planned and long term requirements considered – upgradation to BRT and/or substitution to LRT
- ITS for operation and information purposes is expected, with best practices providing enhance utility – free wifi, apps, etc

»» 3. Facilitating fuel technology policy changes

International developments and trends

- Major developing countries moving beyond simply improved carbon based fuels (diesel to CNG, LPG,
 - Hybrids viable provided economies of scale achieved
 - High Number buses
 - Indigenous content and manufacturing improves viability
 - Electric options are evolving fast but systems still very diverse (and higher degree of proprietary restrictions), making substantive investment more risky
 - still at least 5 years away from achieving viability even at scale
 - Will require some notable technology breakthrough to reduce cost (or national green policy)
 - use of developed country's solutions need to be cautious adopted/applied
 - Electric more services/paratrans



»» 4. Bridging the financial viability gap

International developments and trends

- Financial requirements usually exceed government resources or bond market under-developed or private sources risk adverse – international financial institutions offer competitive interest rates and closer match to revenue return/period
 - Viability gap financing eligible for global climate change sources
 - GHG savings under innovative buses technologies can receive GCF grant/loans
 - direct or through sector level NAMAs
 - International financing agencies grant or subsidized lending
 - Financial sustainability of individual investments at high risk if a holistic strategy for all public transport not addressed (even if implemented separately)
 - Financing of associated non-system integration infrastructure needs to be considered in a social cost context – some degree of equity is unavoidable but viewed an “external” cost.
 - Need to develop innovative revenue streams
- KfW** ■ Capture indirect benefits – property, accessibility, health

»» KfW: Success Factors for Bus Investments

- › **Clear regulatory framework** - strong support for integration with an effective strong PTA, and city institutional leadership
- › **Integration of last mile connectivity** – development of appropriate user focused systems – paratransit, walkable paths, bicycle friendly access and parking, secure and safe environment
- › **Maximize revenue streams** – multiple sources, with partnering with private sector where appropriate
- › **Strengthening of operational efficiency** – determine and monitor key performance criteria to minimize losses
- › **Diversify other funding sources** – loans, bonds, PPP where feasible
- › **Sound preparation and implementation of investments** – minimize period to achieve revenue streams through prioritization and phasing/dimensioning of scope, efficient procurement and contracting



KfW

»» Thank You

Bank aus Verantwortung

KFW