

# »» KfW Development Projects in Energy Efficiency in India

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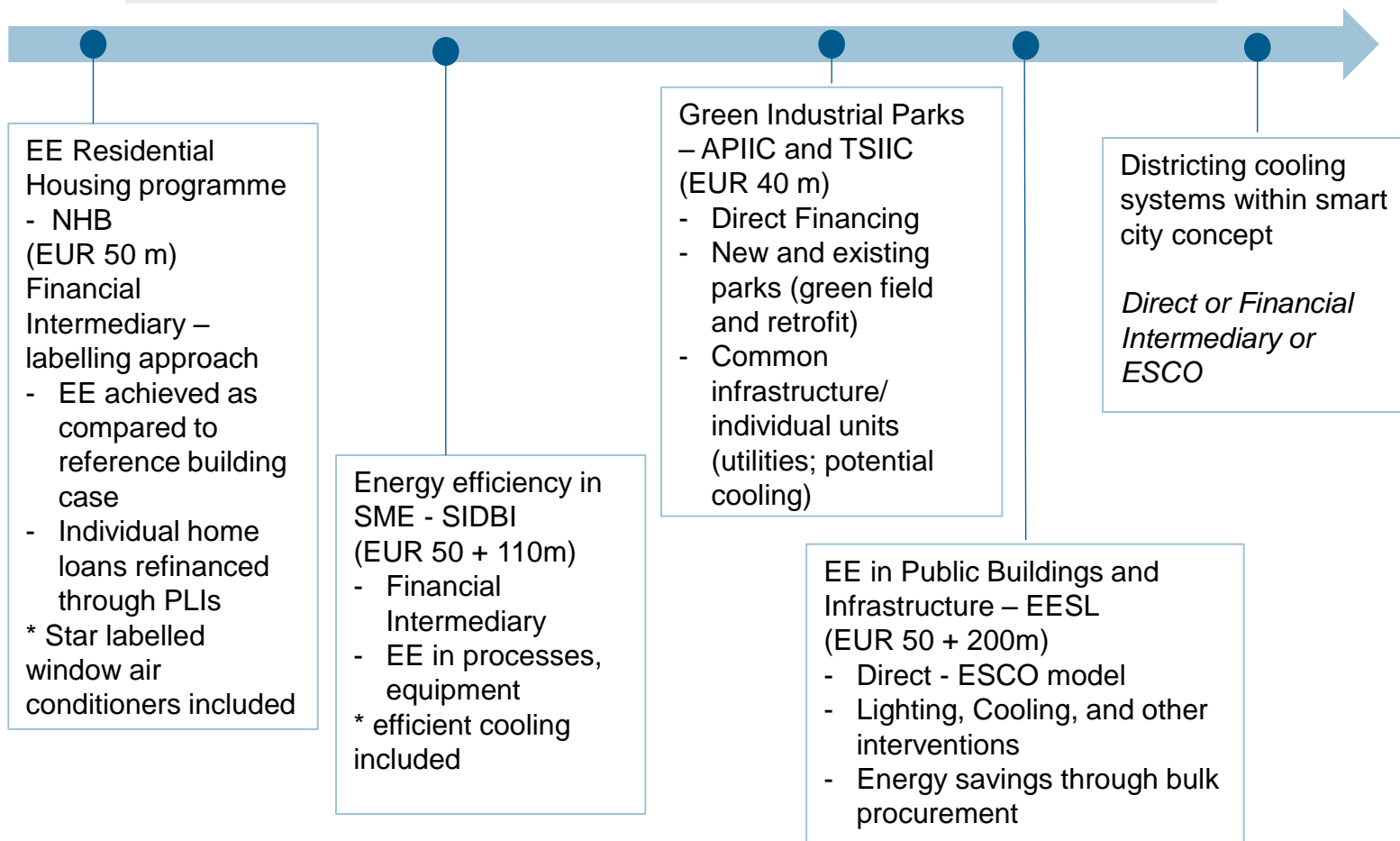
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**KfW**

# »» KfW Activities in India

## Financing Instruments for Energy Efficiency

Climate and Environment Protection (EE improvements and GHG reduction goals)



## »» Energy Efficiency in Buildings

### KfW – NHB partnership

- › Line of credit to National Housing Bank (NHB) to refinance loans for energy efficient houses
- › **Objective:** Establish a pilot programme for promoting energy efficient new residential housing in urban areas
- › **Investment** volume: 50 m EUR
- › **Technical assistance:** 1.5 m EUR, develop energy efficiency calculation tool, certify buildings, support in implementation and advise NHB, financial intermediaries, architects and building developers

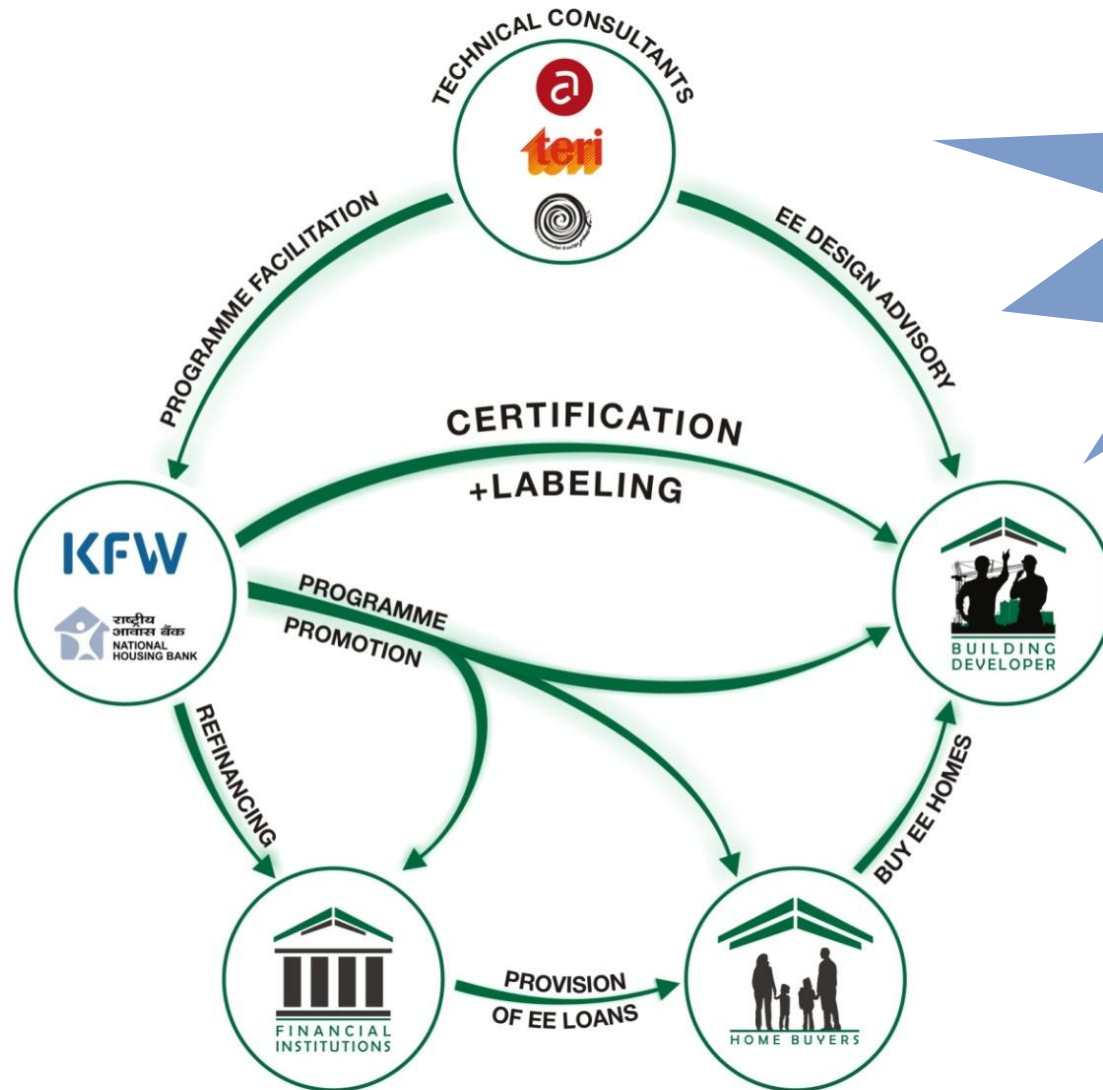


EE homes in Bangalore, 2012.

Further information: [www.ee-homes.com](http://www.ee-homes.com)

# »» Energy Efficiency in Buildings

Indo German cooperation - Transfer of know how



€ 50 million utilized  
6 PLLs  
2,065 loans  
21,577 residential units  
(162 towers)  
1,864 MWh/p.a. energy savings  
32,800 t/p.a. CO2 avoided

# »» Financing MSME Energy Efficiency Project SIDBI-KfW Cooperation



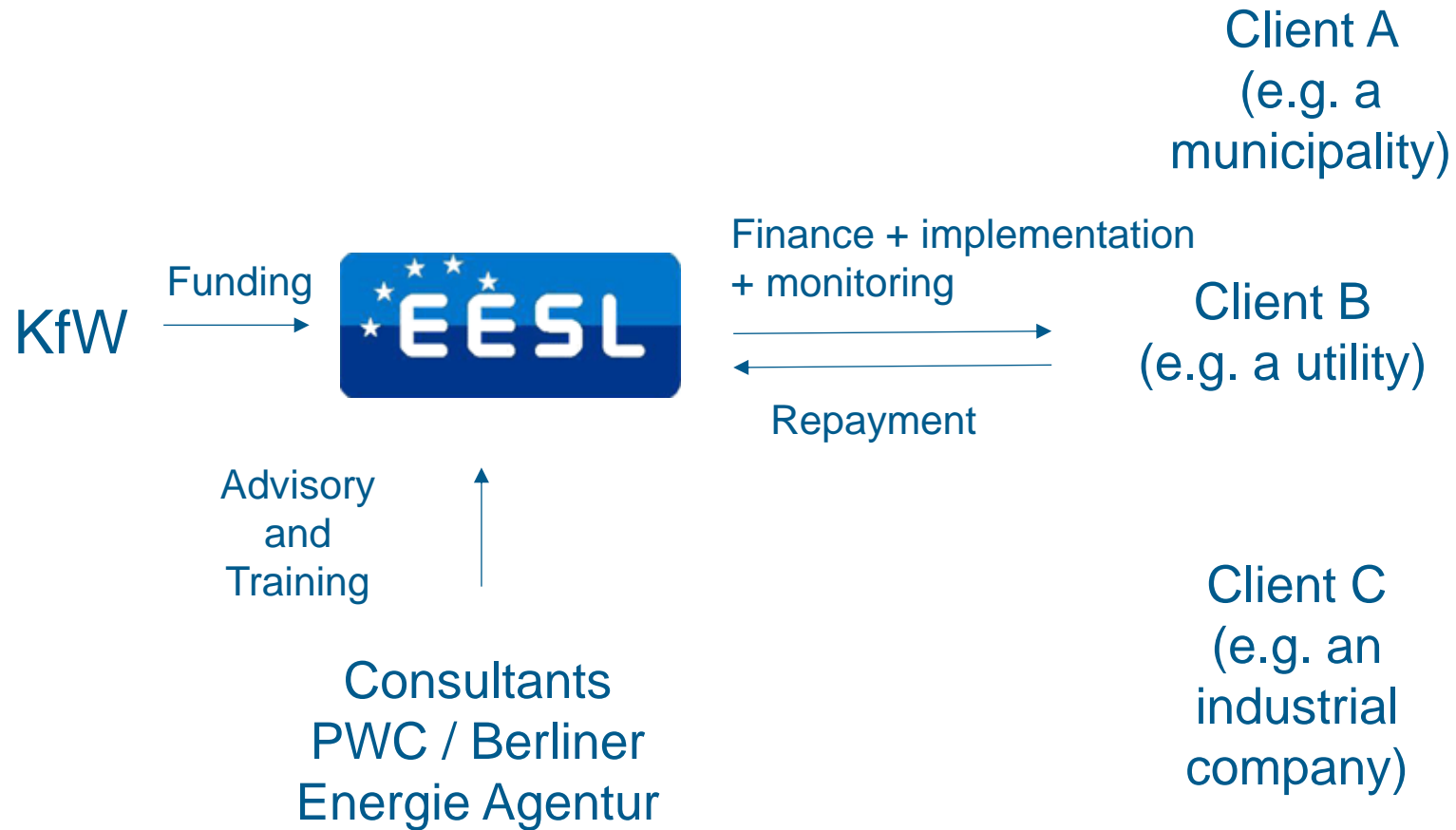
Extensive Cooperation among multiple business areas:



- On going program Energy Efficiency Credit Line II (110 Million US\$)
- Completed program Energy Efficiency Credit Line I (50 Million US\$)
  - 276 unites financed
  - Estimated reduction of CO<sub>2</sub> per year 113.023 t
  - Iron and Steel, Plastics, Auto Ancillaries were among the leading sectors financed

# »» EE in Public Buildings and Infrastructure with EESL

## Programme set-up



## »» Example 1: LED street lighting in Visakhapatnam



EESL's client: Greater  
Vishakhapatnam Municipal  
Corporation (GVMC)

Replacement of ~93,000 street lights

Investment: 9,25 m EUR

Annual electricity saving: 35 GWh  
(~60%)

Annual reduction in electricity bill and  
maintenance: ~3.5 m EUR

Annual payment to EESL: ~2.4 m EUR

Payback period: 7 years

## »» Example 2: Household LED lighting in Delhi

EESL's client: Delhi's 3 distribution companies

Replacement of ~8 million LED bulbs

Investment: 11,7 m EUR

Annual electricity saving: 250 GWh (~80%)

Monthly payment to EESL: ~0,5 m EUR

Payback period: 1 year



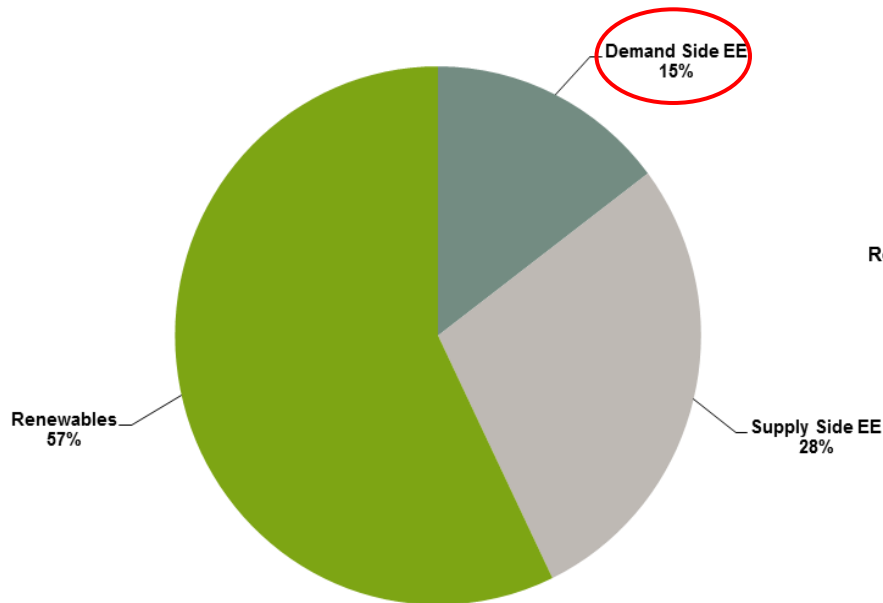


# »» KfW Activities globally in the Energy Sector

In our role as an environmental and climate bank we have to promote energy efficiency more strongly

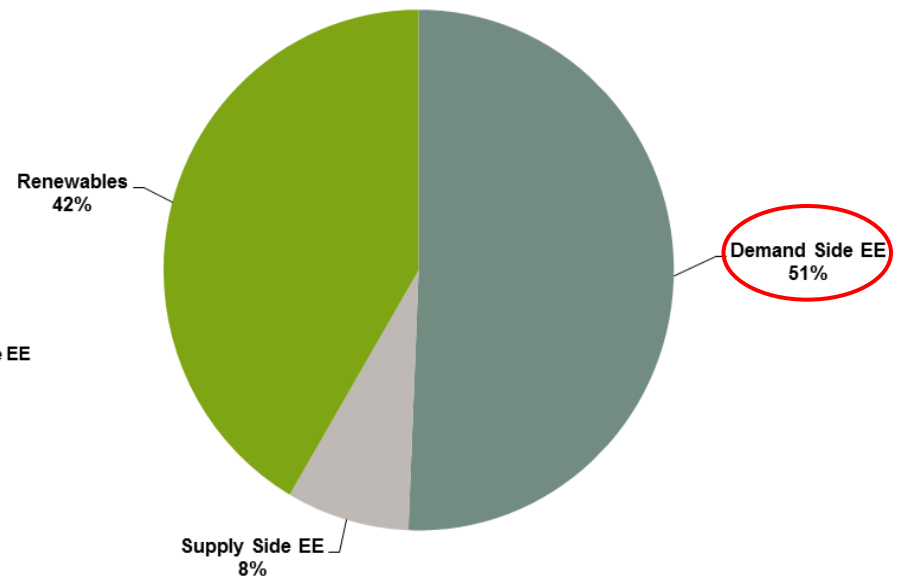
## KfW Energy Portfolio 2012 – 2016

(Total EUR10 bn only EE & RE)



## CO<sub>2</sub> Abatement in 2040 (NPC\*)

(only EE & RE)



\*NPC: IEA New Policies Scenario

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