

#### WORLD Resources Institute

### WORLD RESOURCES INSTITUTE: E-BUS BARRIERS & ENABLERS

Presented by: Camron Gorguinpour, PhD Senior Global Manager for Electric Mobility

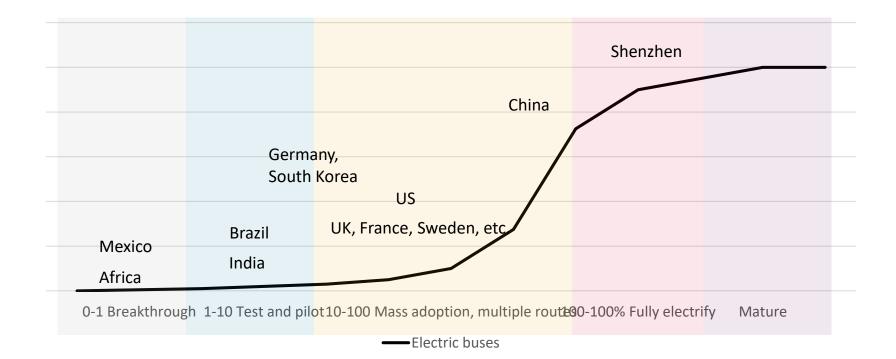
# **OBJECTIVE: ACCELERATE THE TRANSITION TO ELECTRIC BUSES**



Hybrid buses



### **LEADING TO THE DEVELOPMENT OF A FRAMEWORK**





# **E-Bus Projections through 2025**

Despite global progress, electric bus adoption outside of China will be marginal in 2025.

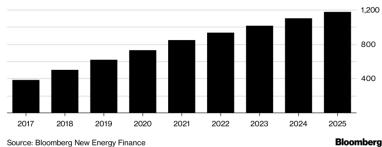
#### Estimated total # of e-buses in 2025:

<u>India</u> 13,000 Latin America 16,000 China

1,200,000

#### Here Comes the Electric Bus

China forecast to dominate a market expected to more than triple in seven years



Total electric bus deployments, in thousands

### **WRI E-BUS PORTFOLIO**

#### <u>Tools</u>

- E-bus cost-benefit calculator
- E-mobility infrastructure cost calculator
- E-mobility infrastructure analytic model
- (Coming Soon) E-bus operational data portal
- (Coming Soon) E-bus technical specification database

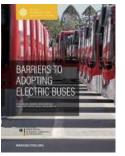
#### Technical Assistance Projects (Sample)

- Beijing
- Bogota
- Delhi

- Medellin
- Sao Paulo
- Santiago

Stay tuned for more

#### Recent Reports





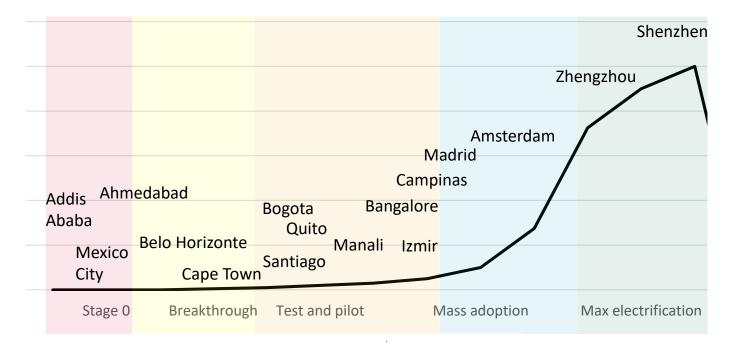


### **WRI E-BUS REPORTS CONSIDERED 16 CASE STUDIES**





### CASE STUDY CITIES DISTRIBUTED ACROSS ADOPTION CURVE





### **CONSISTENT CASE STUDY METHODOLOGY**

Primary stakeholders

Secondary

stakeholders Tertiary stakeholders

- Interviews with local stakeholders through an in-depth questionnaire
  - Institutional Cost and finance
  - Governance- Social
  - Technology Environmental
  - Operations



Standardised case-study template



## **Pervasive Barriers to E-Bus Adoption**

#### **Common Challenges Across Regions**





Lack of knowledge



Technical limitations



Procurement Practices



Non-Scalable

Financing

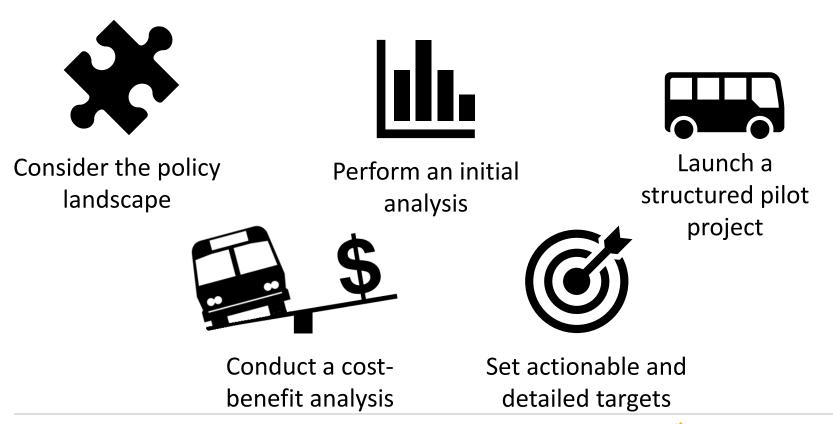


Institutional Limitations



#### Most common oversight: Charging Infrastructure & Associated Real Estate

### **PLAN FOR MASS E-BUS ADOPTION**

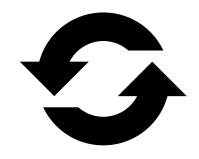


### **ACHIEVE MASS E-BUS ADOPTION**

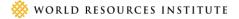




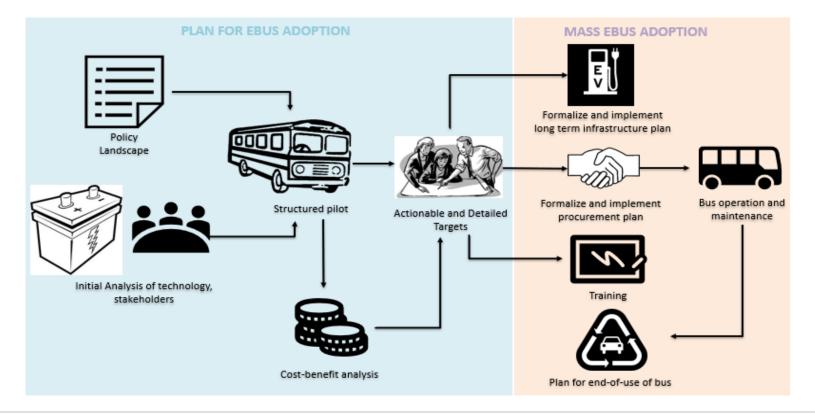




Formalize and implement long-term infrastructure plan Create and execute e-bus procurement plan Provide training Plan for end of use



### **ENABLERS**







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