STRUCTURING A ZERO-EMISSION BUS PILOT TO FACILITATE LARGE SCALE DEPLOYMENT

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Agenda

01. WHY DO WE NEED A PILOT?

02. HOW TO PROPERLY STRUCTURE A ZERO-EMISSION BUS PILOT

03. TOOLS TO SUPPORT DEPLOYMENT
01. WHY DO WE NEED A ZERO-EMISSION BUS PILOT?

What are the advantages of undertaking a pilot?
CITIES SIGNING THE GREEN AND HEALTHY STREETS DECLARATION

Amsterdam
Auckland
Austin
Barcelona
Berlin
Birmingham
Cape Town
Copenhagen
Greater Manchester
Heidelberg
Honolulu
Jakarta
Liverpool
London
Los Angeles
Madrid
Medellin
Mexico City

Milan
Moscow
Oslo
Oxford
Paris
Quito
Rio de Janeiro
Rome
Rotterdam
Santa Monica
Santiago
Seattle
Seoul
Tokyo
Vancouver
Warsaw
West Hollywood

Through the One Planet Charter, an additional 220 cities have established clear targets for reducing emissions associated with urban mobility.
There are a lot of buses already in operation.

Source: BNEF Electric Vehicle Outlook 2019
Why do we typically undertake infrastructure pilot projects?

• Reduce anxiety about changes
• Develop staff and institutional capacity
• Manage risks
• Quicker implementation
• Refine deployment plan
So why do we still need zero-emission bus pilots?

• They typically have larger capital costs (balanced by smaller operational costs), so are a larger financial and political risk.

• Cities around the world have undertaken hundreds of ZEB pilots, but many have been poorly structured. This had led to operational failures, political embarrassment and delay in further deployment. Globally this increased the perception of risk.

• We need to accelerate deployment of zero-emission buses to improve the quality of lives for citizens and combat the climate crisis.
HOW TO PROPERLY STRUCTURE A ZERO-EMISSION BUS PILOT

Steps and processes to structure a pilot programme to accelerate fleetwide deployment.
What are the steps to structure an effective pilot?

1. OBJECTIVE SETTING
2. STAKEHOLDER ENGAGEMENT
3. TECHNOLOGY AND ROUTE SELECTION
4. OPERATIONAL PLAN
5. CHARGING STRATEGIES
6. BUDGET DEVELOPMENT
7. CONSTRUCTION AND VALIDATION
8. PILOT MONITORING
9. DATA EVALUATION AND ANALYSIS
10. NEXT STEPS
03. TOOLS TO SUPPORT DEPLOYMENT

Roadmaps, tools and guides to support zero-emission bus deployment
A Practical Framework to Develop Successful Pilots

Co-developed by:

ZERO EMISSION BUS DEPLOYMENT IN CITIES
A Practical Framework to Develop Successful Pilots

- Roadmap to plan, deploy and monitor a zero-emission bus pilot
- Technology selection tool
- Draft workplans
- Charging infrastructure checklists
- Guidebook to evaluate data collection
- How to Guide for Taking Pilot to Full Implementation
- Staff training templates
Other CFF resources

- Charging Systems - Insights from Jakarta
- Electrifying Bus routes - Insights from Mexico City
- Technical Assistance report from CFF projects
- Financial Models
- Tool to measure the air quality and GHG benefits of project deployment.
- TCO Model
Thank you

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