Jakarta, Indonesia:

Public Transport Electrification

Model: Public-Private Partnerships

TransJakarta, the public transport authority in the Indonesian capital, launched its roadmap to electrify public transport with a pilot of 100 electric buses that successfully integrated a range of operators into the system. Jakarta is aiming for 100% bus electrification by 2030.

THE CHALLENGE

The roadmap was part of Jakarta’s signing of the C40 Green and Healthy Streets Accelerator. However, electric buses carry high upfront costs and the public transport system consists of many large and small operators, including thousands of micro-bus operators.

HOW IT WORKS

Starting in 2019, the electric bus pilot public-private partnership (PPP) used a gross cost contract model, also known as a buy-the-service arrangement. The operators procure the buses and the city pays them a fee per kilometre on an exclusive route. TransJakarta receives the income from fares that bus users pay.

Since few companies have enough capital to buy large fleets, TransJakarta also worked on contracts with a large number of smaller operators. Out of 22 bus operators involved, close to 50% were small fleet operators organised in co-operatives, with fleets owned by individuals within the co-operatives. The Jakarta governor increased the concession period from seven to ten years, allowing for better returns on the investments.

The roadmap’s incremental structure helped to secure the business model first, while allowing time to integrate new players into the system prior to their electrification. For example, TransJakarta is bringing in micro-bus operators who will be part of future electrification phases.

Passenger surveys on the electric bus pilot showed very high levels of satisfaction across different factors such as on-board environment, noise, and comfort.

LESSONS

TransJakarta’s experience shows how important it is to understand the operating conditions and get the business model right early on; and to do so in a way that is appropriate for the existing range of operators.

Cities can then also better develop effective incentives, such as concession length or more favourable payment schedules that can accelerate the deployment of key sustainable infrastructure.