United Nations Framework Convention on Climate Change

Agenda item 4.1(c)
Paragraph 29 of the annotated agenda

AMS-III.XX: Efficient operation of public transportation

CDM EB 100

Bangkok, Thailand, 27 to 31 August 2018



Procedural background

- EB 89 initiated work in the development of a methodology for improved operation of public transportation
 - a) traffic management measures, improved programming of transit routes, implementation of systems for urban transport management
- MP 74 considered an information note containing the draft framework for a new methodology, identifying which are the elements that can be applied to identify the baseline, assess additionality, calculate emission reductions and develop the monitoring plan. A call for public inputs was launched and no comments were received.



Types of projects



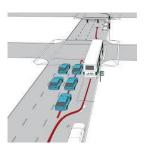
Implementation of ITS measures

Express service connecting high demand stops



Re-design of bus routes

Queue jump lane





Construction of viaducts, tunnels or other improvements

Rehabilitation of pavement





Priority lanes for buses

Introduction of higherquality pavement





Applicability

- a) Implementation of ITS measures to improve the operation of buses;
 - ITS is an operational system of technologies that improve the operating capabilities of the overall system (e.g. sensors installed in buses and in roads that detect buses approaching a crossroad and gives a traffic light priority for the buses);
- b) Improvements in bus routes such as:
 - · Re-design of bus routes;
 - Construction of viaducts, tunnels for improving infra-structure of dedicated bus lanes that are not part of a BRT system, eliminating traffic lights or roundabouts and improving the traffic flow of buses;
 - Implementation of priority lanes for buses that are not part of a BRT system;
 - Implementation of an express service connecting high demand stops by reducing the number of intermediate stops during peak hours;
 - Implementation of a bus queue jump lane;



Emission reductions

Baseline emissions

- CO₂ emitted per passenger-kilometer transported in the absence of the measures (tCO₂/pkm) in each baseline route;
- Baseline emission factor:
 - a) Historical Data
 - For each baseline route, the most recent three years of the following operational data (minimum of one year, if three years data are not available):
 - number of passenger-kilometres transported;
 - type and quantity of fossil fuels consumed by buses;
 - quantity of electricity consumed by the buses;
 - CO₂ emission factor of the electric grid.



Emission reductions (cont)

Baseline emissions (cont)

- Baseline emission factor:
 - b) Baseline Campaign
 - Allowed if one full year of historical data is not available;
 - For each baseline route, a survey to determine the following operational data:
 - number of passenger-kilometres transported;
 - type and quantity of fossil fuels consumed by buses;
 - quantity of electricity consumed by the buses;
 - CO₂ emission factor of the electric grid.
 - The baseline campaign shall:
 - be conducted through an entire week that neither correspond to a public holiday nor school vacations; and
 - shall be representative for the average demand for transport services, and fuel consumption of the baseline route



Emission reductions (cont.)

Project Emissions

 Amount of fuel and electricity consumed by the vehicles traveling in the project route



Impacts

The proposed new methodology will broaden the portfolio of methodological standards in the area of transport.



Recommendation to the Board

The secretariat recommends that the Board approve the methodology.

