Approval by Mail: Colombia: Technological Transformation Program for Bogota's Integrated Public Transport System (IDB) - CTF

Dear Patricia,

Please would you pass on the following questions to the IADB project team regarding the above project:

Carbon Savings and cost effectiveness

- Is it possible to clarify the what the carbon savings will be? The overall amount of carbon savings seems quite high and somehow contradicts between what is stated in the CTF indicators, the results matrix and the attached report. \$18.6/t seems to be calculated correctly based on the numbers provided. Although, it is unclear how \$146/t cost effectiveness figure is calculated.

Additionality

- It is unclear in the proposal how the pilot fleet will demonstrate the market potential and lead to the replacement of the fleets of other operators – so that the envisaged transformational impact is achieved.

Electric vs Hybrid

- Have implementation issues for electric buses been taken into consideration - given the battery technology? As we understand it - deep cycling a battery from 100% to 0% charge will limit its lifetime to about 18 months and therefore operators of electric vehicles would be subject to a regular substantial cost of battery replacement on a fairly regular basis. In comparison to properly designed hybrid buses where the battery will only cycle between about 40% and 80%. This increases battery life to about 7 years and therefore reduces costs substantially (although offset by the need to still burn some diesel).

- There is also no mention of the impact of electric buses on the grid.

Kind regards

Simon Ratcliffe | Energy Advisor | Department for International Development |