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Input to Benchmark for Additionallity BRTs

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The benchmark of 20 gCO_2/PKM for BRTs is not in accordance with reality and virtually non-achievable. The table below shows the monitored actual performance of BRTs which are registered CDM projects. Many of these projects, eg. TransMilenio Bogota or Insurgentes Mexico are considered world-class BRTs and used as examples worldwide. The BRT Transmilenio was showcased various times by UNFCCC as model CDM project. Thus if the registered and "star-projects" are far off the benchmark obviously latter is wrong.

GHG emissions per PKM of CDM BRT projects (based on monitored data)

Project	Current gCO_2/PKM[1]
BRT Barranquilla, Colombia	70
BRT Bogota, Colombia	40
BRT Cali, Colombia	60
BRT Medellin, Colombia	30
BRT Pereira, Colombia	30
BRT Edomex, Mexico	70
BRT Insurgentes and Metrobus, Mexico	70
BRT Guadalajara, Mexico	40
BRT Guatemala City, Guatemala	40
BRT Quito, Ecuador	50
BRT Chongqing, China	50
BRT Zhengzhou, China	50
BRT Joburg, South Africa (VCS project)	40

Two facts are important to notice:

- A benchmark of 20 gCO_2/pkm is unrealistic and in practice not achieved by any BRT system. Conventional bus systems have normally values of 100 gCO_2/pkm or more. A demanding benchmark would be around 50 gCO_2/km.
- Significant differences exist between BRT systems. These are not necessarily due to having more or less efficient systems. If a BRT includes feeder lines the average performance level in terms of CO_2/PKM will increase. This can be seen clearly in Bogota where the average GHG emissions per pkm increased from 25 gCO_2/pkm to 40 gCO_2/pkm between 2010 and 2013 due to expanding the scope of the BRT and including also feeder lines to a much larger extent. This approach is highly advisable and replaces much more traditional bus systems but of course the efficiency on the trunk route with very large buses is far better than on a

[1] Based on monitored data of actual GHG emissions, passengers transported and average distance per passenger

feeder route with less passengers and smaller buses – however still much better than a traditional system.

Recommendation:

Change the benchmark from 20 gCO_2/pkm to a more realistic **50 gCO_2/pkm** which is still far better than any traditional bus system.