Analyzing the Potential of Bike Lane Development as a Clean Development Mechanism Project Activity in Santiago de Chile

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This project explores the feasibility of the Clean Development Mechanism (CDM) as a means to increase the mode-split of non-motorized transport (NMT) in Santiago de Chile; more specifically, we are assessing the feasibility of the development of bike lanes as a project activity under the CDM.

For this project we have 3 main areas for investigation including:

1) A quantitative analysis of the potential emissions of CO_2 given business as usual/baseline projections for mode split of Santiago through 2011
2) A quantitative analysis (CO_2 emission forecasts, monitoring, etc.) of the development of a bike lane for a specific site in Santiago
3) An analysis of CDM project development requirements under the UNFCCC (additionality, leakage, crediting, etc.) for a NMT project

As an example of how we will quantify emissions, take the new *Ciclovía en la Alameda* that was recently announced on the CONASET website: (http://www.conaset.gov.cl/noticias.html). This bikeway, once constructed, will be 4.5 kilometers long connecting Estación Central and Santiago. Given the parameters of this bikeway and assuming that all new trips replace a trip in a private vehicle, we can calculate the CO_2 savings by using a simple equation. Please see text box.

Calculation:

(length of trip) X (average vehicle emission factor[1]) X (number of new trips generated)

So, **for every round trip** that a person took on this **new Alameda bikeway**, instead of driving their car, they would save **2.5kg CO_2**. If this same person did this **once a week for one year**, they would save **130kg CO_2** from being emitted into the atmosphere.

Currently we are elaborating on these findings using Santiago-wide mode-split data, including the 2001 EOD, and we look forward to discussing the results during our next trip in March 2004.

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[1] For this figure we used the average U.S. value for vehicle emissions of 455 grams CO_2/km or 277 grams CO_2/km.