Bridging the gap

Pathways for Transport in the Post 2012 Process

Advancing Methods and Models to Monitor, Report, and Verify GHG Emission Reductions from Transport NAMAs

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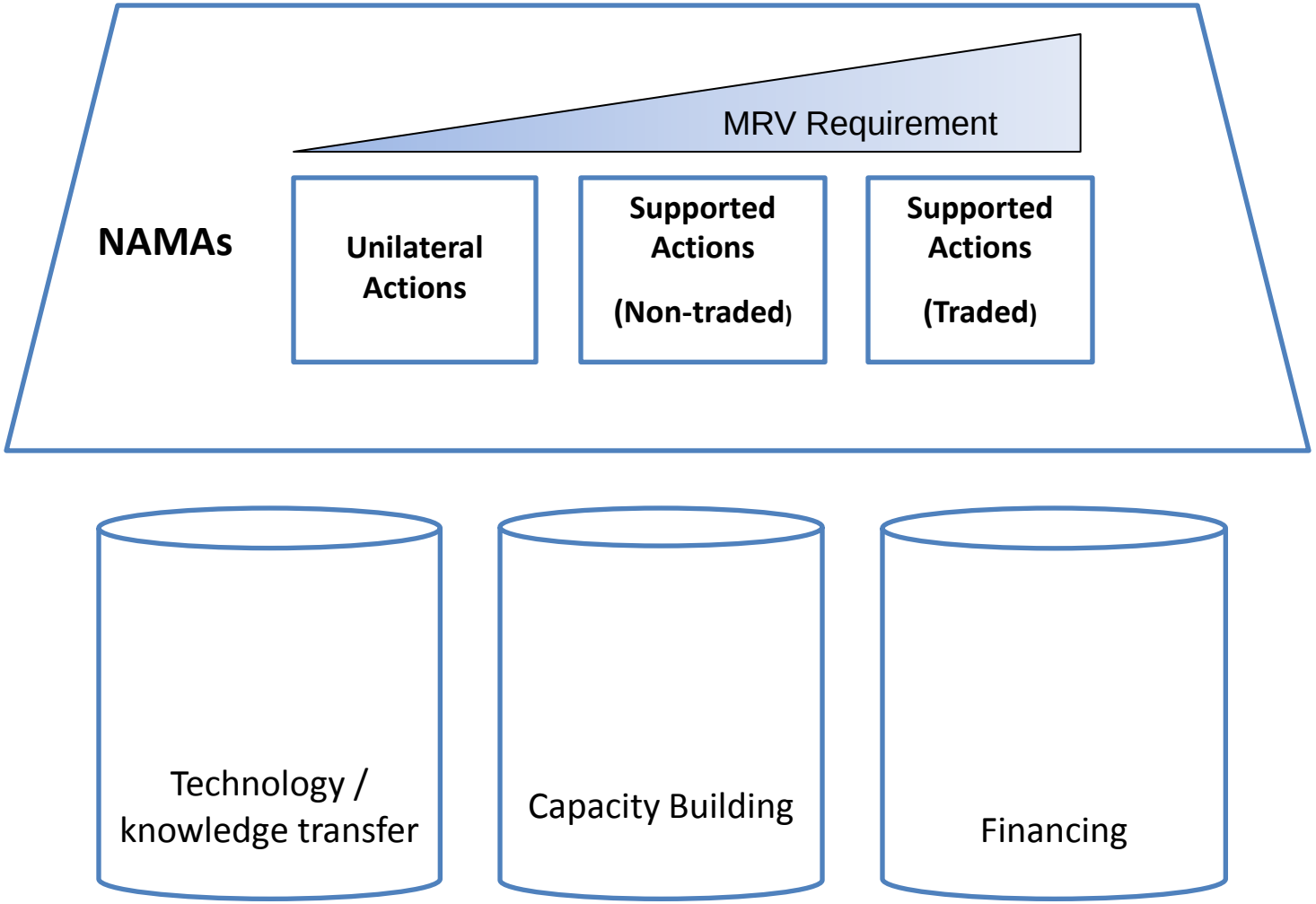
COP17 , Durban, South Africa ***December 1*, 2011**

giz TRL VEOLIA TRANSDEV UITP ITDP Institute for Transportation & Development Policy

Nationally Appropriate Mitigation Actions (NAMAs) and their supporting pillars



GHG Analysis for Transport NAMAs

Needs to integrate strategies at three different levels

Project & Portfolio

Need to take care to evaluate system-wide impacts, induced demand

Bus Rapid Transit BRT
Light Rail Project

TEEMP

Plan & Region

Optimal scale to consider system impacts for metropolitan plans/programs

Urban Mobility Plans
Non-motorized Mob. Plans

TEEMP CITY

National Level

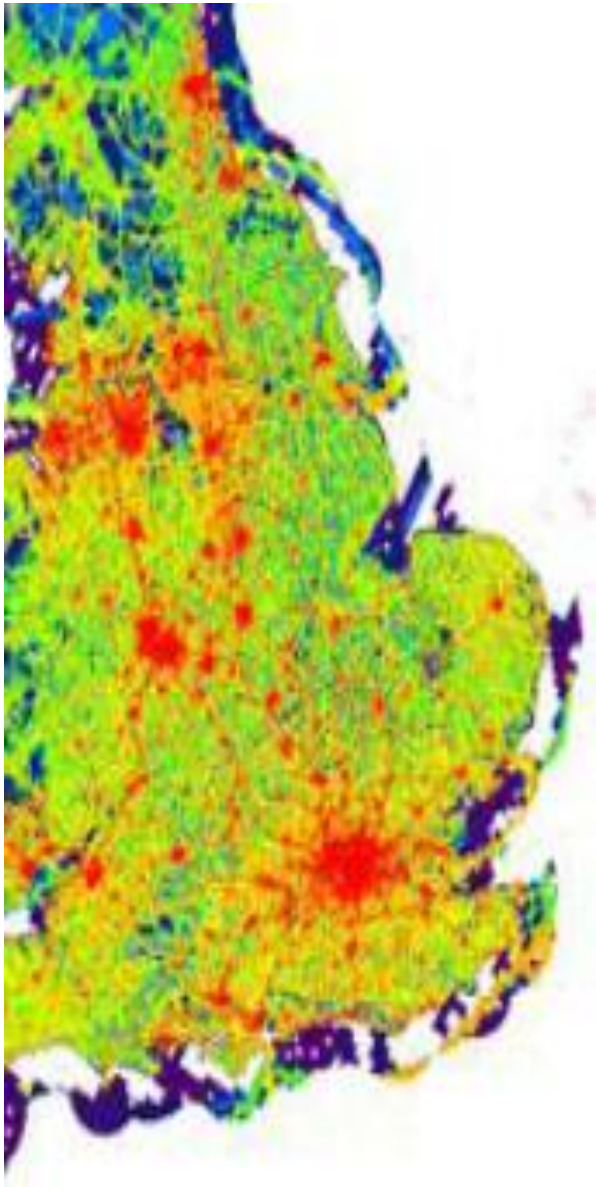
Often best for evaluating large programs and system policies

National Policy Programs

ROADMAP

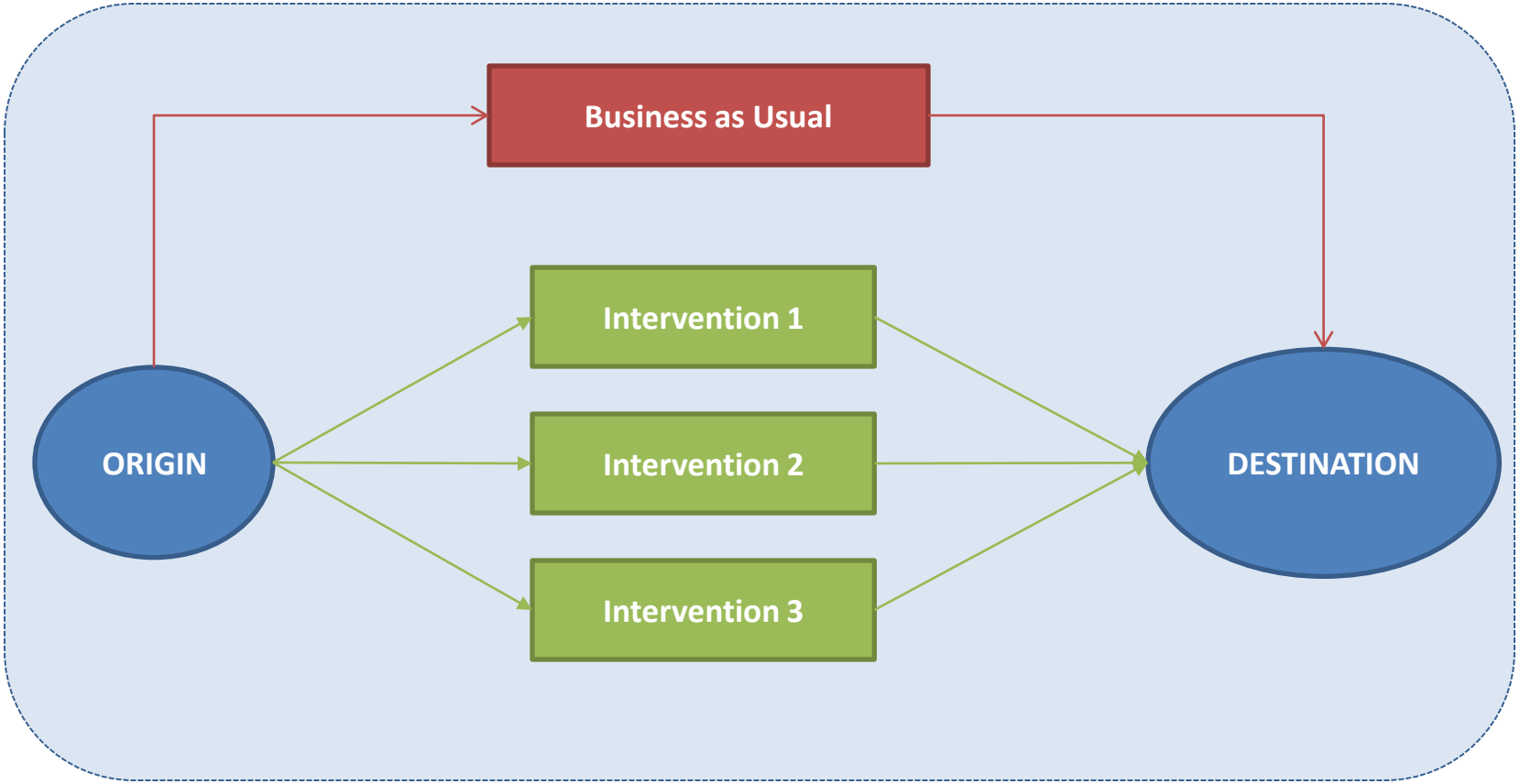
Importance of developing practical analysis tools

- Data is crucial for sound MRV NAMAs
- Good data collection practices will permit countries and regions to access climate finance and bilateral funding opportunities.
- If one lacks good data, it's OK using default data and appropriate policy-sensitive tools for decision making
- As sustainable mobility plans are implemented, agencies should invest in data collection for monitoring, verification, and analysis, which will lead to better inventories and improved projects and plans.



TEEMP Model :

Simple spreadsheet model to estimate GHG emissions and compare project interventions to business-as-usual scenarios



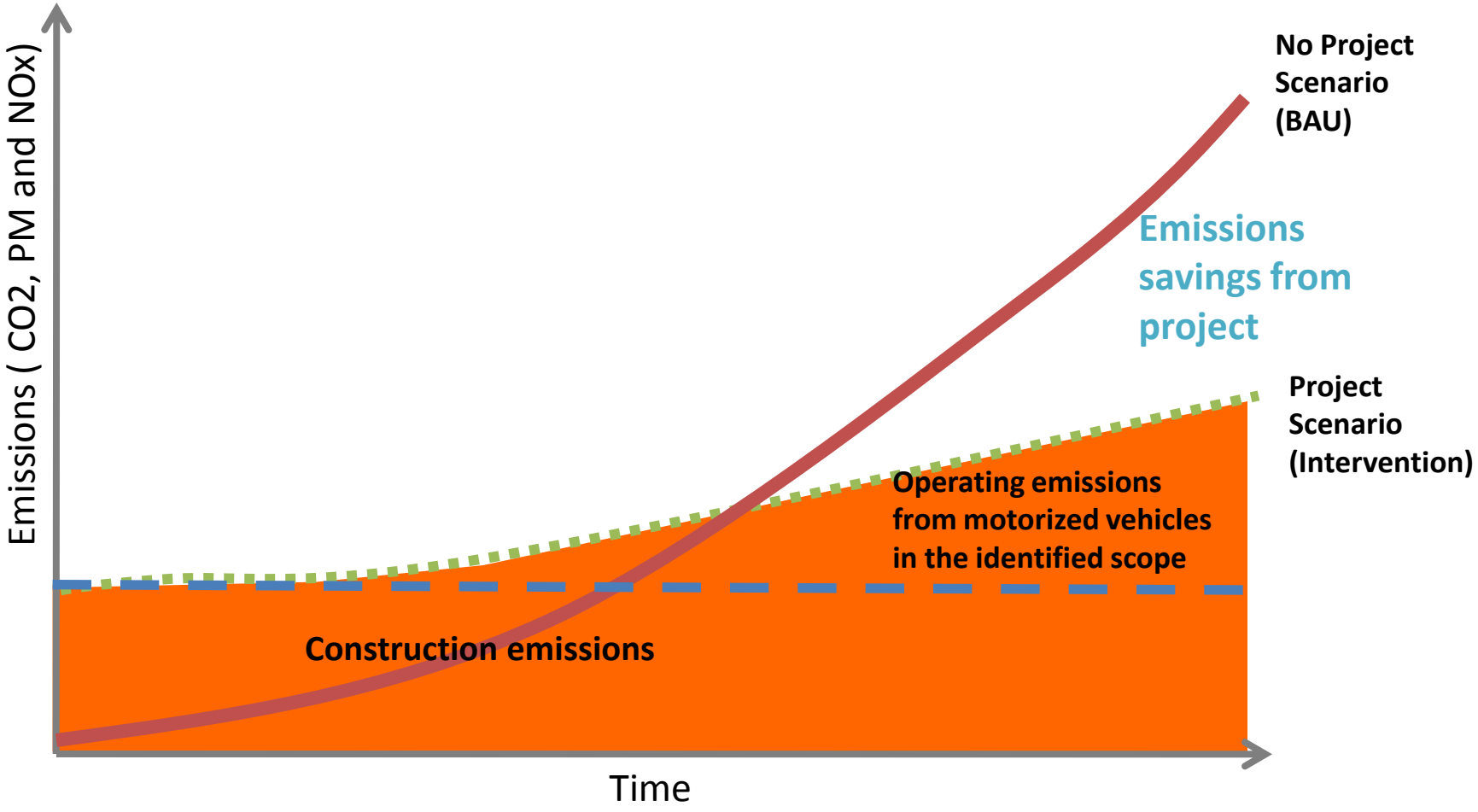
Project market influence area defined internalized baseline

TEEMP: Project-by-Project Tools

1. Bike sharing
2. Bikeways
3. Pedestrian Facility Improvement
4. Bus Rapid Transit (BRT)
5. Light Rail Transit/Mass Rapid Transit
6. Roads Projects – Expressways, Rural Roads and Urban Roads
7. Railways
8. City Sketch Analysis and Other Strategies - Commuter Strategies, Pricing Strategies, Eco-Driving , PAYD Insurance

1. Define the Baseline Scenario
2. Define the Project Scenario
3. View the Outputs

TEEMP: emissions savings
Business-as-usual vs. Project Interventions



What is TEEMP City?

TEEMP City is being developed with the idea of providing a clear vision of a livable city, and as a guide to these cities to provide efficient, clean, comfortable and safe public transport.

- Flexible (bottom-up) tool to estimate emissions and emission reductions from urban mobility plans

- Based on original TEEMP architecture to quantify:
  - Emissions ofCO_2, NOx y PM
  - Fuel use by different modes
  - Fatalities in roads

- Methodology to assess the quality, complexity and completeness of urban mobility plans

Global ROADMAP for the Transport Sector

Back to Top | **POLICY LEVERS**

Select the levers to be included in the trajectory case.

Lever	All	LDV	HDT	Other on-road	Rail	Aviation	Water
Fuel Economy Improvements		☐	☐	☐	☐	☐	☐
Biofuels / Efficiency Improvements in Upstream Processes (non-electricity)	☐						
Electrification / Grid decarbonization		☐	☐	☐	☐		
Mode shift	☑						
Activity Reduction	☑						
More stringent emission standards		☐	☐	☐	☐	☐	☐

The model's geographic scope includes 16 individual countries and regions

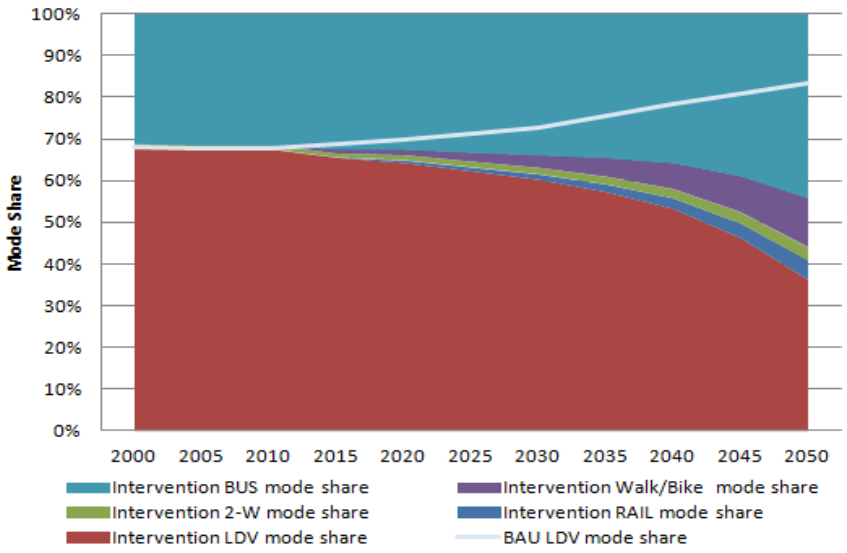
- Includes data on vehicle stock and vehicle activity by mode
- Data on vehicle and Fuel technologies
- Comparison of GHG emissions: base case scenario vs. alternative scenario

Contains levers for vehicle activity assumptions including:

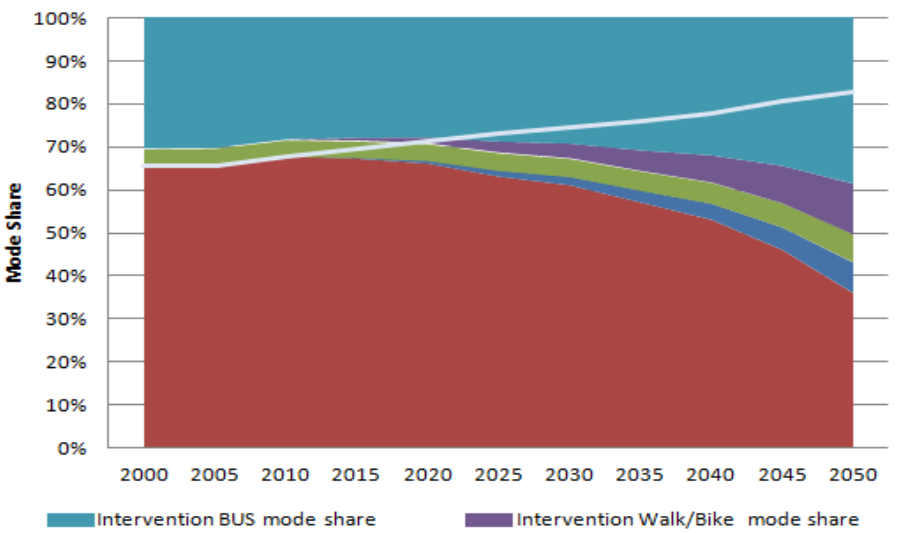
- Mode shift
- Fuel improvement due to reduction in urban traffic
- Reduction of average trip lengths due to better urban planning and design

ROADMAP - Scenario Results

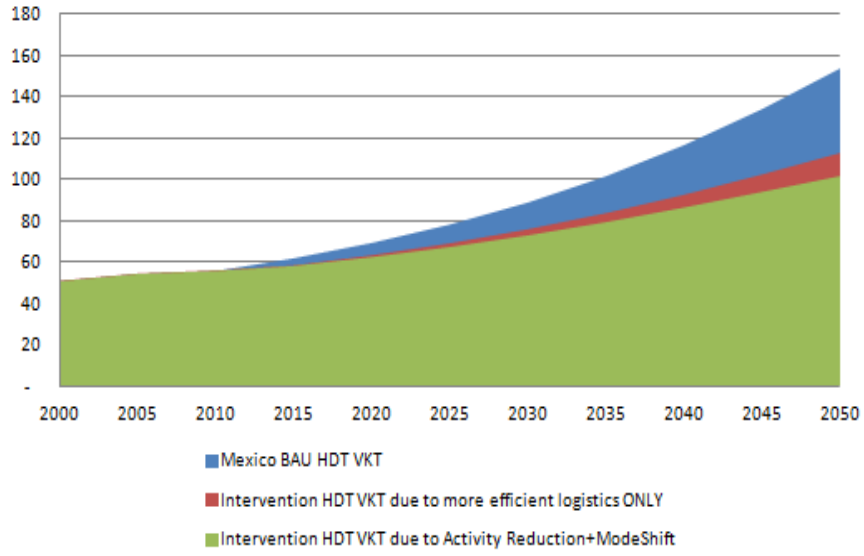
Mexico Intervention Strategy Mode Share



Brazil Intervention Strategy Mode Share



Mexico Potential Freight VKT Reductions



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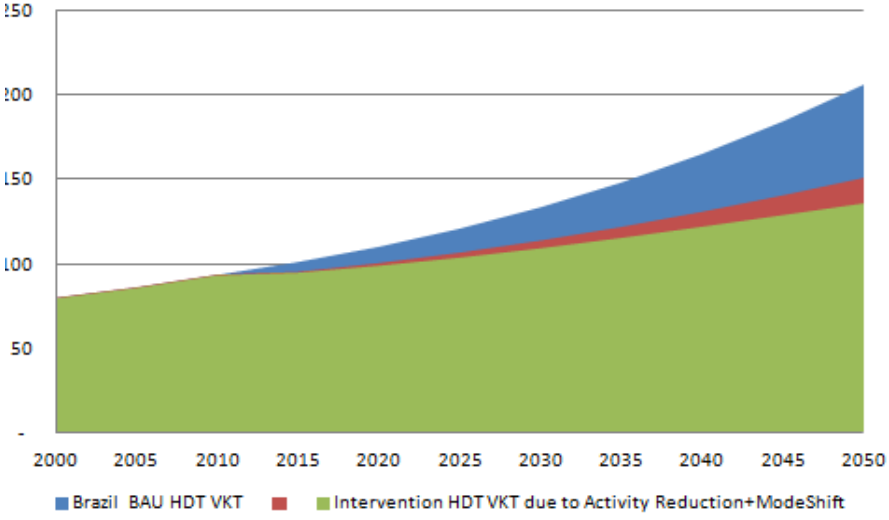

Conclusions

- Lack of local models and data should not be barrier beginning development and implementation of transport NAMAs
- Sketch models can be used with preliminary baseline projections and data for initial mitigation estimation
- Investment in data collection & MRV capacity are vital for continued effective longer-term planning & program operations

THANKS!

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