Panama Urban Mobility NAMA

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Panama

| Population | 3,929,141 |
| GDP (nominal) | $47.473 billion |
| GDP (per capita) | $11,849 |

NDC commitment

- 30% of electricity (installed capacity) to come from non conventional renewables in 2050
- 10% increase of carbon intake in LULUCF sector vs baseline scenario in 2050 (80% if supported)
Panama Metropolitan Area

<table>
<thead>
<tr>
<th>Area</th>
<th>5,303 Km² = 7%</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015 Population</td>
<td>1,8 MM hab = 46% of the country</td>
</tr>
<tr>
<td>Employment</td>
<td>770 Mil = 60%</td>
</tr>
</tbody>
</table>
The energy sector contributes 17.3% of national CO2 emissions, transport is 59% of this.

Expected 110% transport sector growth by 2050.
Travel times for transit and private vehicle are among the longest in Latin America.
Barriers to transport GHG mitigation

- Fragmented institutional structure for mobility infrastructure investment and management.
- Un-integrated public transit with uncontrolled growth of informal sector
- Concentration of activity in center generating one hour average commute time
- Sub-optimal multi-modal transport infrastructure
GOAL: Transform travel behavior and real estate investment in the region to increase quality of life and lower emissions.

HOW: Leverage the investment in the Metro lines to create a comprehensive urban mobility framework that integrates public transit, mobility management, land use planning and urban design.

Planning basis:
• Phase 1 study complete
• Recommendations for five lines of action
• National Government of Panama
• Metro de Panama
• Financed by IDB
Panama Urban Mobility NAMA Proposal

- PIMUS (Integral Plan of Sustainable Urban Mobility)
  - Institutional restructuring
  - Integrated public transport passenger system (SIT)
  - Transport demand administration
  - Investment in Urban Mobility Infrastructure
  - Citizen involvement in Urban Mobility

Urban Mobility NAMA (Ministry of Environment)

Emission Reductions

Additional Financial Source

State Investment

MBX SYSTEM

MBX SYSTEM

GREEN CLIMATE FUND

CAF
Institutional reform to evolve toward a single functional entity to coordinate urban mobility and land planning in the Panama Metro Area.
Integrated Transit System (SIT)

The elements

- 2025 Metro system 3 lines:
  - L1 Albrook – Villa Zaita
  - L2 San Miguelito – 24 de Diciembre
  - L3 Albrook – Ciudad del Futuro

- MetroBus
  - Central Area (actual)
  - North, East and West areas

- Integrated Fare

- Preferential transit lanes
- Improved sidewalks and Complete Streets
- Improved interchanged modal facilities
Catalytic projects

Six regionally strategic projects would start to catalyze the transit and demand management programs.
## Catalytic Projects

<table>
<thead>
<tr>
<th>ID</th>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SIT Central Area</td>
<td>Preferential public transport lanes and Complete Streets</td>
</tr>
<tr>
<td>2</td>
<td>SIT North Area</td>
<td>Reorganization La Cabima feeder routes. Integration with L1 Metro and Metro Bus</td>
</tr>
<tr>
<td>3</td>
<td>SIT North Area</td>
<td>Reorganization San Isidro feeder routes. Integration with L1 Metro and Metro Bus</td>
</tr>
<tr>
<td>4</td>
<td>SIT West Area</td>
<td>Total restructuration transit system. Operational and fare Integration with L3 Metro</td>
</tr>
<tr>
<td>5</td>
<td>La Chorrera Urban Acupuncture</td>
<td>Complete Streets and Walkability in la Chorrera Central Area</td>
</tr>
<tr>
<td>6</td>
<td>SIT Central Area</td>
<td>New Interchange Modal Facilities</td>
</tr>
</tbody>
</table>
NAMA Implementation

Coordinated implementation:
• Metro de Panama
• Ministry of Public Works
• ATTT
• Municipality of Panama
• Municipality of La Chorrera

Financial coordination:
• Ministry of Finance an Economy
• Secretary of Goals
• CAF
Overall NAMA would reduce metropolitan transport emissions by 13% and result in $14 m in fuel savings annually

<table>
<thead>
<tr>
<th>Year</th>
<th>2030*</th>
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</thead>
<tbody>
<tr>
<td>Base Scenery (BAU)</td>
<td>1,403,724</td>
</tr>
<tr>
<td>Scenery: PIMUS</td>
<td>1,235,710</td>
</tr>
<tr>
<td>Implemented</td>
<td></td>
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<tr>
<td>Emission Reduction</td>
<td>168,014</td>
</tr>
<tr>
<td>Percentage of Reduction</td>
<td>13%</td>
</tr>
<tr>
<td>Annual Savings in Fuel</td>
<td>14 Millones USD</td>
</tr>
</tbody>
</table>

*Annual emissions tCO₂e
Expected Social Outcomes

- Decreased travel times
- Better balance of jobs and housing,
- Higher quality transit and pedestrian environment
- Enhanced access to jobs and services
International Climate Support Request $100M

- $10M grants for tech assistance and urban acupuncture
- $20M in loan guarantees for transit preferential lanes*
- $70M in loans for bus system reorganization and infrastructure

*NAMA Support Financing Request

Existing and planned investment in Metro system lines 1-3: $4-5 Billion

Cost of six catalytic projects and tech assistance: $300M

Total additional cost of PIMUS: $1.3 Billion

*This would leverage an expected $200 million loan from CAF
Panama Sustainable Urban Mobility NAMA

- Addresses passenger transport sector comprehensively.
- Advances ongoing paradigm shift in region.
- Provides replicable example for the rest of the nation.
- Improves economic competitiveness and quality of life.
- Leverages existing commitment to transit reform.

International support will accelerate the transformation and demonstrate the advantage of a comprehensive approach to transport sector reform.
THANK YOU

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