Sugerencia: Ya aquí, destacar el sólido paraguas institucional que se ha logrado articular en esta fase, con cuatro agencias fundamentales.
Urban and Regional Transport Policy

**Massive Integrated Transport System (SITM)**
- Population greater than 600,000 habitants

**Strategic Public Transport Systems (SETP)**
- Population between 250,000 and 600,000 inhabitants

**Small Cities Strategies**
- Population lower than 250,000 inhabitants

**Integrated Public Transport Systems (SITP)**
- Strategy to improve transport service providing efficiency and quality

**Integrated Regional Transport Systems (SITR)**
- Multimodal Regional Strategy

**Mobility plans (PM)**
- Territorial Planning

**Binational Systems (SAB)**
- Territorial Planning
3 main transport policy guidelines: Avoid – Shift – Improve

**AVOID/REDUCE**
The need to travel

- Reduce or avoid the need to travel

**SHIFT**
To sustainable modes

- Shift to more environmentally sustainable modes

**IMPROVE**
technologies, standards…

- Improve energy efficiency of modes and vehicles

Adapted from Dalkmann & Braningan, 2007
8 Integrated Massive Transport Systems (SITM) - BRTs

- Capacity building
- Capital cities and/or metropolitan areas with more than 600,000 inhabitants
- High demand / trunks and feeder routes.
- **6 in operation:** Cali, Bogotá, Soacha, Pereira, Bucaramanga, Medellín, Barranquilla.
- **1 under construction:** Cartagena
- **1 in design phase** Cúcuta.
- 3 million passengers per day mobilized
- About 20 million people live in these cities. Nearly 8 million people benefit indirectly with the service.
- Public investment of $USD 6 Billion
12 Strategic Transport Systems (SETP)

- Local capacity building
- Municipalities with population between 250,000 and 600,000 inhabitants.
- Public spaces and high quality services in order to capture demand from informal/illegal services
- **7 under construction**: Santa Marta, Pasto, Armenia, Popayán, Sincelejo, Montería, Valledupar.
- **5 in design phase**: Neiva, Ibagué, Buenaventura, Manizales, Villavicencio
- Public investment of $USD 2 Billion
Overview

- MRP Objective(s) and Focus
- MRP Development Process

Market Readiness Proposal

1. Policy Context and the Big Picture
2. MRP Target Areas: Assessment and Rationale
3. Core Technical and Institutional Readiness Components, including Regulatory Components
4. Planning for a Market-based Instrument
5. Organization, Communication, Consultation and Engagement
6. Schedule and Budget
Overview
• The MRP presents Colombia’s draft request for funding to the PMR Assembly
  – Focus on transport sector
  – Selection of 3 instruments
  – Opportunity to develop other “economy-wide” instruments
Activity 1 (Coordination)

Government stakeholders (local, national) and experts

Activity 2 (market readiness of transport), (support from Embarq)

A2+ A3/A4 coordination

Activities 3 /4 (market instruments in transport + definition of instruments), (support from Gruetter + South Pole)

Review of results with government

Activity 5 (Carbon tax study)

= Workshops and consultations: government stakeholders, A2+A3 discussion, review of results, expert review
BB1: The Big Picture
Considerable climate change policy-related progress

LEDS Colombia progress aligned and supporting PMR (i.e. via national-level, multisector MRV work and other activities)

Broader agenda and mandate for PMR work:
- Inclusion of Ministry of Finance
- Engagement with National Planning Department
- Local stakeholders involved in consultations
Climate policies

The REDD+ National Strategy
The Colombian Low Carbon Development Strategy
The Strategy for financial protection against natural disasters
The National Adaptation Plan for Climate Change,

Colombian Low Carbon Development Strategy (ECDBC) components

**Component 1**
Begins in 2012
Projection of Sectoral emission scenarios, and Identification and formulation of alternatives for low carbon development

**Component 2**
Begins in 2013
Sectoral Mitigation Action Plans - SMAPs
- Mitigation options prioritization (NAMAs, programs and policies) to be included in the SMAPs.
- Design of policies, plans, and options.

**Component 3**
Begins in 2014
SMAP implementation and development and implementation of a monitoring system
- Sectoral Mitigation Action Plans – SMAPs Implementation
  - Development of a monitoring system
  - Development of financial and institutional arrangements for each mitigation action in each SMAP.

**Component 4. Capacity building.**
- Sectoral emission scenarios up to 2040.
- Identification of sectoral mitigation actions.
- Assessment of costs and abatement potential of mitigation options.

**Component 5. Communication and cooperation platform.**
Institutional Arrangements

Ministry of Environment and Sustainable Development (MADS)

The Department of National Planning (DNP)

Ministry of Transport
Ministry of Mines and Energy
Ministry of Commerce, Industry and Tourism
Ministry of Agriculture and Rural Development
Ministry of Housing, cities and territories

Climate Change lead (cross cutting work)
Economic projections (cross cutting work)

Ministries leading their SMAPs construction

Sectors

Transport
Ministry of Transport
SMAP of Mines
SMAP of Industry
SMAP of Agriculture
SMAP of Housing
SMAP of Electricity
SMAP of Waste

MinFinance
Agriculture: 39%
Deforestation: 14%
Energy and mining: 14%
Transport: 12%
Industrial: 12%
Waste: 6%
Others: 3%

2004 Total Emissions: 180M Ton CO₂e

Road: 90%
Aviation: 4.5%
River: 5.5%
Railroad: 0.37%

COLOMBIA
Population: 46.36 million hab
Area: 1,141,748 km²
Density: 40.74 hab/km²
CO2 reference scenario emissions for transport sector

Source: LCDS Colombia
Urban transport policies in Colombia
Mitigation and Sustainability in Public Transport
- Maintenance and improvement of infrastructure
- TOD Promotion Center
- TOD NAMA
- Fleet Renovation
- Electric Public Transport

Support to the National Logistics Policy
- Urban cargo
- Freight broker

Promotion of alternative modes of Freight Transport
- Promotion of River-borne Transport
- Promotion of Rail-based Transport

Non Motorized Transport
- Bike lanes
- Pedestrian lanes
- Bike parking and other services
- Construction of Bike lanes

Policies
- Sectorial Mitigation Action Plan
- Congestion charging and pollution-based charges

Programs
- TOD Promotion Center
- TOD NAMA
- Fleet Renovation
- Electric Public Transport
- Support to the National Logistics Policy

Actions
- Maintenance and improvement of infrastructure
- Urban cargo
- Freight broker
- Promotion of alternative modes of Freight Transport
- Promotion of River-borne Transport
- Promotion of Rail-based Transport
- Bike lanes
- Pedestrian lanes
- Bike parking and other services
- Construction of Bike lanes
- Congestion charging and pollution-based charges

Suggestion: This sheet about SMAP transport is probably the most important in this section. Consider stopping only at this >>> to highlight that MRP supports the implementation of SMAP.
Sustainable Urban Mobility Unit

UMUS
Viceministerio de Transporte

LEDS Colombia
Dirección de Cambio climático

Sector plan of low carbon transport

4 Ministry-level entities integrated to development of PMR
BB2: Policy framework
Why focus on Transport sector?

1. Participation in total GHG emissions;
2. Sector Mitigation Action Plan;
3. NAMAs;
4. “Champions” at Ministerial level
5. Clean Development Mechanism experience and lessons learnt
6. National Plan for Urban Transport and Sustainable Urban Mobility Unit;
7. Large-scale mass transit projects implemented, now moving forward to development of TDM, NMT policies for the country;
9. Integrated policy approach

- Challenging sector: requires technical expertise and support
- Donor coordination opportunity
Criteria to evaluate instruments

- Mitigation/GHG reduction potential (environmental effectiveness)
- Cost-effectiveness (economic effectiveness)
- Implementation cost
- Technical feasibility
- Political / legal / regulatory viability
- Financial feasibility (barriers to public and private finance)
- Policy Alignment
- Co-benefits for Sustainable Development (SD)
BB3: Core Technical and Institutional/Regulatory Market Readiness Components
<table>
<thead>
<tr>
<th>Area</th>
<th>Data Type</th>
<th>Data Usage</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuels</td>
<td>Fuel quantity</td>
<td>Inventory, top-down GHG calculation, national reports</td>
<td>Tax base (quantities and types) and fuel regulations</td>
</tr>
<tr>
<td></td>
<td>Fuel type</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fuel quality</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vehicles</td>
<td>Number of vehicles per category</td>
<td>Inventory, top-down GHG calculation, national reports</td>
<td>Vehicle registration systems, vehicle tax collection, specific surveys (e.g. mileage)</td>
</tr>
<tr>
<td></td>
<td>age structure</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>annual mileage</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>emission category</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emission Factors</td>
<td>Fuel consumption</td>
<td>CO2 per km per vehicle category Impact of measures to improve transit</td>
<td>Vehicle registration, modelling, sampling studies, company statistics</td>
</tr>
<tr>
<td></td>
<td>Emission factors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Modes</td>
<td>Occupation rates / average trip distance</td>
<td>CO2 per PKM per vehicle category Impact of measures to shift transit</td>
<td>Surveys (passengers and/or households), traffic studies, visual observation studies</td>
</tr>
<tr>
<td></td>
<td>Trip share per mode (as % of trip distance)</td>
<td></td>
<td>Modelling or surveys for baseline</td>
</tr>
<tr>
<td></td>
<td>Trip share per mode baseline</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trips</td>
<td>Trip distance per mode per annum per inhabitant</td>
<td>gCO2 for transit per inhabitant Impact of measures to avoid transit</td>
<td>Household surveys, traffic observation Modelling or surveys for baseline</td>
</tr>
<tr>
<td></td>
<td>Trips baseline</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SD</td>
<td>Air quality</td>
<td>SD impact of measures</td>
<td>Measurements, surveys, traffic observation studies, modelling</td>
</tr>
<tr>
<td></td>
<td>Time required for transit</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Accident, mortality and morbidity rate transit</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Health costs air pollution</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Income/wealth distribution impact</td>
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<td></td>
</tr>
</tbody>
</table>
MRV guidelines

• **Robust “top-down” approach** to ensure coherent, measurable results that are well-aligned with the domestic policy, planning and budgetary processes.

• **Strong “bottom-up”**, operational, hands-on approach to ensure that the program will comply with the financial, technical and regulatory due diligence processes of the various funding and implementing entities;

• **MRV system with “glocal” lens**: while compliant and aligned with the international standards and the latest updates of the global climate change agenda, can be adapted to the local context and to the specific requirements of Colombia.
Regulatory framework of transport
Proposed institutional setup for PMR implementation

- **MinTrans**
  - UMUS
- **MinHac**
  - CONFIS
- **MADS**
  - DCC
  - DIES
- **DNP**
- **Management Board**
  - Inter-Ministerial Committee
- **NAMA Entity & Domestic Offset Administrator**
- **Liaison to UNFCCC**
  - UMUS
  - DCC
- **Second-Level Verificator**
  - ICONTEC/Expert Panel
- **Fiduciary & Fund Financial Manager**
  - FINDETER or other
- **Program / NAMA Participant 1**
  - Municipality
- **Program / NAMA Participant 2**
  - Private Transport Company
- **Program / NAMA Participant 3**
  - Transport PPP
BB4: Planning for market-based Instruments in Colombia’s transport sector
Chosen instruments

- (i) **Credited NAMAs** in the urban transport sector;
- (ii) **Domestic offset scheme**
- (iii) Assessing the introduction of a **performance standard** for vehicles combined with allowances
NAMAs developed following a standardized and structured step-wise development methodology. Proposed:

- urban transport NAMA,
- NMT/TOD NAMA (NMT+)
- vehicle performance standard NAMA
## Existing transport NAMAs in Colombia

<table>
<thead>
<tr>
<th>Action</th>
<th>Stage</th>
<th>Sector</th>
<th>Sub-sector</th>
<th>Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improvement of road-based freight sector</td>
<td>Proposal/Planning</td>
<td>Transport</td>
<td>Road vehicles cargo</td>
<td>Accelerate the renovation of the cargo vehicle fleet with the aim to improve economic competitiveness and environmental performance of the freight transport sector</td>
</tr>
<tr>
<td>Electric vehicles NAMA</td>
<td>Concept</td>
<td>Transport</td>
<td>road vehicles cargo and passenger</td>
<td>Substitute conventional vehicles with electric vehicles. The penetration of electric vehicles should reach 20% for the passenger sector, 30% for taxi fleets and 30% for urban freight.</td>
</tr>
<tr>
<td>Transit-oriented development</td>
<td>Concept</td>
<td>Transport</td>
<td>Passenger transport</td>
<td>Integrate climate change mitigation variables into local land-use plans and urban planning. Supported by NAMA Facility.</td>
</tr>
<tr>
<td>Non-Motorized Transport</td>
<td>idea</td>
<td>Transport</td>
<td>NMT</td>
<td>No specifics yet</td>
</tr>
<tr>
<td>Urban Transport</td>
<td>idea</td>
<td>Transport</td>
<td>Passenger transport</td>
<td>No specifics yet</td>
</tr>
<tr>
<td>Demonstration and assessment of battery-electric vehicles for mass transit in Colombia</td>
<td>Pilot studies (being analyzed with GEF cooperation)</td>
<td>Transport</td>
<td>Passenger transport</td>
<td>Promote battery-electric, large-capacity vehicles for mass transit in Colombia by means of removing technology, regulatory, awareness and financial barriers, as a measure to reduce GHG emissions and improve local air-quality</td>
</tr>
<tr>
<td>Low-carbon and Efficient National Freight Logistics Initiative</td>
<td>Pilot studies (being analyzed with GEF cooperation)</td>
<td>Transport</td>
<td>Freight transport</td>
<td>To reduce GHG and criteria pollutants emissions from freight transportation operations in Colombia</td>
</tr>
</tbody>
</table>
• Main topics and coverage:
  – urban public transport (metropolitan areas),
  – Non motorized transport (metropolitan areas),
  – Transport Demand Management (metropolitan areas),
  – Vehicle performance standards (entire country)

• Expected emissions reduction (preliminary):
  – Public transport: 3-5 million tCO2 as of 2020
  – NMT: 0.3 – 0.7 MtCO2 until 2025
  – Performance standard: 0.5 MtCO2 annually
2. Domestic Offset Instrument for Transport

- National compensation fund for domestic transport offsets.
- Compensation fund financed from a carbon tax on transport fuels.
- Funds used to finance domestic reduction projects in the transport sector.
- Carbon tax would partially replace the fuel surplus tax (see graph).

2012 gasoline price: 128 c/l
Country Category 1
High Subsidies (up to 68 US-Cents)
The retail price of Gasoline is below the price for crude oil on the world market.

Country Category 2
Subsidies (69–96 US-Cents)
The retail price of Gasoline is at least as high as the price for crude oil on the world market and below the price level of the United States.
Note: The fuel prices of the United States are average cost-covering retail prices incl. industry margin, VAT and incl. approx. 10 US-Cents for the 2 road funds (federal and state). This fuel price may be considered as the international minimum benchmark for a non-subsidised road transport policy, though not yet covering external costs for health and environmental damages.

Country Category 3
Taxation (97–163 US-Cents)
Retail price of Gasoline is at least as high as the price of the United States and below the price level of Luxembourg.
Note: In November 2012, Gasoline prices in Luxembourg were the lowest in EU-27. Prices in EU countries are subject to VAT, specific fuel taxes as well as other country specific duties and taxes. The EU sets minimum taxation rates for fossil fuels.

Country Category 4
High Taxation (164 and more US-Cents)
The retail price of Gasoline is at least as high as the price level of Luxembourg.
Note: At these levels, countries are effectively using taxes to generate revenues and to encourage energy efficiency in the transport sector.

Red Benchmark Line:
Price of Crude Oil on World Market
= 69 US-Cents/Litre

Green Benchmark Line:
Retail Price of Gasoline in the United States
= 97 US-Cents/Litre

Grey Benchmark Line:
Retail Price of Gasoline in Luxembourg
= 164 US-Cents/Litre

Data as of mid-November 2012
http://glz.de/fuelprices
<table>
<thead>
<tr>
<th>Tax per liter of fuel (USD cents)</th>
<th>Equivalent Carbon Tax (USD per tCO₂)</th>
<th>Annual Income Compensation Fund (million USD)</th>
<th>Offset price with 10% ER transport (USD per tCO₂)</th>
<th>Offset price with 25% ER transport (USD per tCO₂)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.5</td>
<td>2</td>
<td>40</td>
<td>20</td>
<td>8</td>
</tr>
<tr>
<td>1</td>
<td>4</td>
<td>80</td>
<td>40</td>
<td>16</td>
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<tr>
<td>2</td>
<td>8</td>
<td>160</td>
<td>80</td>
<td>32</td>
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<tr>
<td>3</td>
<td>12</td>
<td>240</td>
<td>120</td>
<td>48</td>
</tr>
<tr>
<td>4</td>
<td>16</td>
<td>320</td>
<td>160</td>
<td>64</td>
</tr>
<tr>
<td>5</td>
<td>20</td>
<td>400</td>
<td>200</td>
<td>80</td>
</tr>
</tbody>
</table>
3. Performance Standard for Vehicles with Permit/allowance trading

- Performance standard for vehicles combined with allowances
- **Allowances can be traded** between importers and producers.
- EU: maximum CO2 emissions per km for car fleets (manufacturer or importer level).
- Legislation sets binding **emission targets** for new car and van fleets.
- **Only fleet average is regulated**: manufacturers balance vehicles with emissions above the limit value curve and vehicles below the curve.
- If average CO2 emissions of a manufacturer's fleet exceed its limit value in any year, it has to pay an **excess emissions premium** for each car registered.
- Based on the penalty price, importers or manufactures can therefore have an **incentive to sell cars with low GHG emissions** with a lower profit rate and put a levy on cars with higher GHG emissions (avoiding the penalty).
Example: Vehicle emissions (grCO2/km)

- Car A1: 146.67 grCO2
- Car A2: 146.67 grCO2
- Car A3: 146.67 grCO2
- Fleet Average: 146.67 grCO2
- Car B1: 177.50 grCO2
- Car B2: 177.50 grCO2
- Car B3: 177.50 grCO2
- Car B4: 177.50 grCO2
- Fleet Average: 177.50 grCO2
- Car C1: 125.00 grCO2
- Car C2: 125.00 grCO2
- Car C3: 125.00 grCO2
- Fleet Average: 125.00 grCO2

150 grCO2 max

Trading
Issues to consider

- **NAMAs can be developed in the short run** (do not require regulatory changes or significant domestic interventions and finance);
- **NAMAs can provide MRV structure** also for domestic interventions;
- **Domestic offset scheme can provide foundation** for medium/long-term sustainable and low carbon transport interventions;
- **MBIs with vehicle performance standards to be studied in depth** in the first stage to determine advantages and disadvantages of specific elements while assessing institutional, legal and technical requirements for implementing such a system in medium term (potentially to be combined with a NAMA).
Implementation phases

- **Phase I (short-term, 2014-2016) – PMR implementation phase:**
  - NAMA Development steps (Design completed and piloted on priority cities)
  - Preparatory work for the domestic offset scheme (assessing feasibility of an upstream carbon tax in the mid-term and testing its applicability)
  - Creating enabling political and institutional environment
  - Increasing country’s know-how and MRV preparedness
  - Institutional and regulatory reforms
  - Performance standard is designed.

- **Phase II (mid-term, 2016-2020) – post – PMR implementation:**
  - Domestic offset scheme launched into a full-fledged operational scheme
  - NAMA will undergo a phased implementation transition period (up to 2020) to be fully operational in the long term (by 2020).
  - Performance standard is implemented.
BB5: Organization, Communication, Consultation and Engagement
Key agencies

Main agencies involved
• Ministry of Environment and Sustainable Development (MADS)
• Ministry of Transportation
• Ministry of Finance
• National Planning Department

Others identified as relevant agencies:
• Ministry of Mines and Energy
• Ministry of Industry, Commerce and Tourism
• Ministry of International Commerce
<table>
<thead>
<tr>
<th>ID</th>
<th>Capacity Building Area</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Baseline setting, GHG ER estimation, SD valuation and MRV principles</td>
<td>Methods of baseline setting in transport; determination of ERs including baseline, project and leakage emissions; identification and quantification of SD impacts; MRV elements.</td>
</tr>
<tr>
<td>2</td>
<td>Management Domestics Offset (DO) fund</td>
<td>Key aspects and guidelines for managing a DO fund including project identification, project approval process, control, guidance documents, QA, communication strategy, reporting etc. Includes initial training and follow-up / hand-holding</td>
</tr>
<tr>
<td>3</td>
<td>NAMA Operation and Management</td>
<td>UMUS will have to train its staff and develop internal guiding documents to operate the NAMAs</td>
</tr>
<tr>
<td>4</td>
<td>Verification: Training of Trainers</td>
<td>UMUS/ICONTEC will need to train validators / verifiers. This TA will prepare them to be trainers.</td>
</tr>
<tr>
<td>5</td>
<td>NAMA / Domestic Program IT System Operation</td>
<td>UMUS will have to use IT-based solutions to manage, record and track progress of the Domestic Offset Program and the NAMAs</td>
</tr>
<tr>
<td>6</td>
<td>Knowledge Management (KM Strategy Operation)</td>
<td>The IT Program mentioned above should contain KM provisions and UMUS will have to be trained specifically on using those to avoid losing the acquired capacity.</td>
</tr>
</tbody>
</table>
Other stakeholders

- Sub-national governmental agencies
- Private sector stakeholders (car, oil industry, operators, importers)
- Civil society and academia stakeholders (Main universities, Civil society organizations)
- International stakeholders (development banks, UN Agencies, bilateral aid, international NGOs)
Communications strategy (improve understanding of market mechanisms). Includes:

• Definition of key target groups for the communications strategy
• Development of main messages depending on target group
• Development of survey(s) to review overall progress of PMR implementation and perception
• Implementation of communications strategy and survey(s).

Public information campaign to increase public support for price increases. Includes messages:

• Encourage more efficient energy consumption and reduce the impact of future international price increases.
• Fiscal reform will contribute to fiscal sustainability and economic growth, and thus poverty reduction.
• Higher income groups benefit the most from no-taxation of carbon emission.
• Importance of environmental tax revenues in financing priority public expenditures
• Inform of use of revenues and evolution of mobility pattern
Consultation plans

- Initial (kick-off) workshop
- Follow-up yearly workshops
- Topic-specific workshops
- Final workshop
BB6: Summary of Activities, Timeline and Budget
<table>
<thead>
<tr>
<th>ID</th>
<th>Activity</th>
<th>Year 1</th>
<th>Year 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Q1</td>
<td>Q2</td>
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<td></td>
<td></td>
<td>Q3</td>
<td>Q4</td>
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<tr>
<td></td>
<td></td>
<td>Q5</td>
<td>Q6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Q7</td>
<td>Q8</td>
</tr>
<tr>
<td>MBI 1: NAMA Development</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>1</td>
<td>Urban public transport NAMA development, including baseline studies</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>(fuel efficiency studies, occupation rate studies), MRV concept and</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>financial structuring</td>
<td></td>
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<tr>
<td>2</td>
<td>NMT+ NAMA development, including baseline, MRV concept, household</td>
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<tr>
<td></td>
<td>survey design and approach and pilot household surveys and financial</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>structuring</td>
<td></td>
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<tr>
<td>3</td>
<td>Performance Standard NAMA development, including regulatory assessment,</td>
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<tr>
<td></td>
<td>baseline setting, MRV concept and financial structuring</td>
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</tr>
<tr>
<td>4</td>
<td>External validation of NAMAs 3 entities</td>
<td></td>
<td></td>
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<tr>
<td>MBI 2: Domestic Offset Scheme</td>
<td></td>
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<tr>
<td>4</td>
<td>Detailed fund structuring, including regulations and work concept</td>
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<tr>
<td>5</td>
<td>Development of guiding documents, templates for project development,</td>
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</tr>
<tr>
<td></td>
<td>validations and verifications</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Procedures and guidelines for assessing baselines, emission reductions</td>
<td></td>
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</tr>
<tr>
<td></td>
<td>and MRVs for domestic offset programs</td>
<td></td>
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<tr>
<td>MBI 3: Performance Standard for Vehicles</td>
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<tr>
<td>6</td>
<td>Study to assess international experience with performance standard and</td>
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<tr>
<td></td>
<td>design possible approaches for Colombia</td>
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<tr>
<td>7</td>
<td>Stakeholder involvement for performance standards</td>
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<tr>
<td>8</td>
<td>Establishment of a detailed MRV system for implementation</td>
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<tr>
<td>ID</td>
<td>Activity</td>
<td>Year 1</td>
<td>Year 2</td>
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<td>Q3</td>
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<td>Q5</td>
<td>Q6</td>
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<td></td>
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<td>Q7</td>
<td>Q8</td>
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<tr>
<td>9</td>
<td>Baseline setting, GHG ER estimation, SD valuation and MRV principles</td>
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<tr>
<td>10</td>
<td>Management of the Domestics Offset (DO) fund</td>
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<tr>
<td>11</td>
<td>NAMA Operation and Management</td>
<td></td>
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<tr>
<td>12</td>
<td>Verification: Training of Trainers</td>
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<tr>
<td>13</td>
<td>NAMA / Domestic Program IT System Operation</td>
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<tr>
<td>14</td>
<td>Knowledge Management (KM System Operation)</td>
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<tr>
<td>15</td>
<td>Administration costs: Set-up, training of dedicated staff,</td>
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<tr>
<td></td>
<td>operational costs (NAMA Entity)</td>
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<tr>
<td>16</td>
<td>Staff and office costs UMUS for MBI program</td>
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<tr>
<td>17</td>
<td>Management costs: Document management, GHG accounting, issuance,</td>
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<tr>
<td></td>
<td>tagging and certification of generated ERs, cost of other</td>
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<tr>
<td></td>
<td>decision-support tools</td>
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<tr>
<td>18</td>
<td>Marketing &amp; Communication Costs</td>
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<tr>
<td>19</td>
<td>Training to potential participants to the DO Program/NAMAs on the</td>
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<tr>
<td></td>
<td>type of projects, methodologies, GHG ER and SD calculations, etc.</td>
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<tr>
<td>20</td>
<td>IT management</td>
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<tr>
<td>21</td>
<td>Costs for running MRV system</td>
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<td></td>
<td>TOTAL</td>
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<td>Q1 Q2</td>
<td>Q3 Q4</td>
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<td></td>
<td>Q5 Q6</td>
<td>Q7 Q8</td>
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<tr>
<td><strong>Baseline Determination</strong></td>
<td>1 Occupation rate studies</td>
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<tr>
<td></td>
<td>2 Fuel efficiency studies</td>
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<tr>
<td></td>
<td>3 Overall baseline urban transport</td>
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<tr>
<td></td>
<td>4 Household survey design and approach</td>
<td></td>
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<tr>
<td></td>
<td>5 Household surveys (pilots)</td>
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<tr>
<td></td>
<td>6 Overall baseline NMT+</td>
<td></td>
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<tr>
<td><strong>Monitoring</strong></td>
<td>7 MRV detailed approach urban transport</td>
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<td></td>
<td>8 MRV detailed approach NMT+</td>
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<tr>
<td></td>
<td>9 Passenger surveys year 1 (4 cities)</td>
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<tr>
<td></td>
<td>10 Household surveys year 1 (4 cities)</td>
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<td></td>
<td>11 Monitoring report urban transport year 1</td>
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<td></td>
<td>12 Monitoring report NMT+ year 1</td>
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<tr>
<td><strong>Verification</strong></td>
<td>13 Detailed system design incl. procedures and templates</td>
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<tr>
<td></td>
<td>14 Capacity building verifiers</td>
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<tr>
<td></td>
<td>15 Capacity building registry</td>
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<tr>
<td></td>
<td>16 Cost validations international (2 units)</td>
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<tr>
<td>ID</td>
<td>Activity</td>
<td>Year 1</td>
<td></td>
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<td>Q1</td>
<td>Q2</td>
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<tr>
<td>1</td>
<td>Communications strategy</td>
<td></td>
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<tr>
<td>2</td>
<td>Consultation mechanisms</td>
<td></td>
<td></td>
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<tr>
<td>3</td>
<td>Capacity building and knowledge management</td>
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### Budget components and summary

#### Activity – MBI development

<table>
<thead>
<tr>
<th>Activity</th>
<th>Cost Year 1 (USD)</th>
<th>Cost Year 2 (USD)</th>
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</thead>
<tbody>
<tr>
<td>MBI 1: NAMA Crediting Instrument</td>
<td>750,000</td>
<td>450,000</td>
</tr>
<tr>
<td>MBI 2: Domestic Offset Scheme</td>
<td>300,000</td>
<td>250,000</td>
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<tr>
<td>MBI 3: Performance Standard for Vehicles</td>
<td>100,000</td>
<td>150,000</td>
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<tr>
<td>Capacity Building Packages</td>
<td>100,000</td>
<td>300,000</td>
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<tr>
<td>Operation of MBI Management Entity</td>
<td>500,000</td>
<td>800,000</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>1,750,000</strong></td>
<td><strong>1,950,000</strong></td>
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#### Activity – MRV development

<table>
<thead>
<tr>
<th>Activity</th>
<th>Cost Year 1 (USD)</th>
<th>Cost Year 2 (USD)</th>
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</thead>
<tbody>
<tr>
<td>Baseline Determination</td>
<td>500,000</td>
<td>100,000</td>
</tr>
<tr>
<td>Monitoring</td>
<td>100,000</td>
<td>750,000</td>
</tr>
<tr>
<td>Verification</td>
<td>200,000</td>
<td>150,000</td>
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<tr>
<td>Total MRV including Baseline Studies</td>
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#### ID Activity – BB5

<table>
<thead>
<tr>
<th>ID</th>
<th>Activity – BB5</th>
<th>Cost Year 1 (USD)</th>
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<tbody>
<tr>
<td>1</td>
<td>Communications strategy</td>
<td>75,000</td>
<td>25,000</td>
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<tr>
<td>2</td>
<td>Consultation mechanisms</td>
<td>100,000</td>
<td>100,000</td>
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<tr>
<td>3</td>
<td>Capacity building and knowledge managt</td>
<td>300,000</td>
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<tr>
<td></td>
<td><strong>Total Building Block 5</strong></td>
<td><strong>475,000</strong></td>
<td><strong>225,000</strong></td>
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#### ID Summary table

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<thead>
<tr>
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<th>Cost Year 1 (USD)</th>
<th>Cost Year 2 (USD)</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>MBI development</td>
<td>1,750,000</td>
<td>1,950,000</td>
</tr>
<tr>
<td>2</td>
<td>MRV including baseline</td>
<td>800,000</td>
<td>1,000,000</td>
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<tr>
<td>3</td>
<td>Building Block 5 activities</td>
<td>475,000</td>
<td>225,000</td>
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<tr>
<td></td>
<td><strong>Total PMR implementation costs</strong></td>
<td><strong>3,025,000</strong></td>
<td><strong>3,175,000</strong></td>
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</table>
Thank you.