PMR Extraordinary Meeting
Shenzhen, March 2012

“Mexican Status on PMR”

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Current outlook on mitigation

**PECC “Special Program for Climate Change”**

Short Term: Reduce 51 Mt CO\(_2\)e/year in 2012 (6% of BAU = 786 Mt CO\(_2\)e) financed with federal resources (*through 86 mitigation goals = NAMAs*).

- **Goal PECC**: 50.66 MtCO\(_2\)e/year
- **Dec 2011**: 38.1 MtCO\(_2\)e/year (75.36% = 38.18 MtCO\(_2\)e/year)
- **Prospectiva 2012**: 52.76 MtCO\(_2\)e/year
General Law on Climate Change; approved by the Senate in December 2011 and is currently under analysis in House of Deputies.

The law promotes:

1) Transition towards a low-carbon competitive economy
2) Periodic update and publication of the Climate Change Program and Strategy
3) Formalization of the Interministerial Commission on Climate Change
4) Creation of a climate change and ecology institute (subst INE)
5) Allows GHG emissions regulation in most sectors
6) Allows for creation of carbon market
7) Coordination between federation, states and municipalities
8) Education, research, and technology development and transfer
9) Incorporation of a gender equity perspective, inclusion of society, private sector, academy, young people and indigenous communities in the decision making process
10) Design and promotion of economic, fiscal, and financial instruments
11) Elaboration of budget projections for adaptation and mitigation in order to reduce the vulnerability of the country
12) Monitoring and evaluating mechanisms
Pledge: 30% reduction from BAU in 2020

Potential Mitigation Sources

Source: IMCO 2011
Potential NAMAs (Portfolio)

• 1. Housing/Urban
• 2. Steel industry
• 3. Energy efficiency in Small and Medium Size Enterprises
• 4. Cement
• 5. Pulp and Paper Industry
• 6. Chemical Industry
• 7. Public transport
• 8. Freight Transport
• 9. Appliances (fridges)
• 10. Appliances (washing machines)
• 11. Mining
Mexican NAMAs and PMR

- Design options for a registry platform/tracking tool
- Develop 2-3 NAMAs for a new crediting mechanism:

  Urban (Housing)
  Appliances (Energy Efficiency)
  Public Transport

Including:

Capacity Building: impact on domestic targets and potential for market development
Raising Awareness: opportunities for market development, promote better and more ample participation
MRV Development: strong institutional capacity for monitoring, record keeping, and verification

Inventories, Registry, Clearing-house, Boundaries
Strategies

Financing

Options

- Existing Federal Programs
- Gov’t Funds
- Int’l Development Agencies
- Int’l Financing Institutions

support
Strategies

Enhance existing activities

Existing Program

Champion

Financing

Increase Impact “Upscaling”

Increase reach “Penetration”

Strategies

Increase reach

“Penetration”

Increase Impact

“Upscaling”

Enhance existing activities
Increase Participation/Othership
Public Transport NAMA

- PROTRAM
- BANOBRAS
- PTTU
- Financing
- Local Gov'ts
- CTS
- Private Sector
- Federal Gov't
- Donors
- Inteligency
- Clean Air Inst
- ECOFYS
- SHCP
- INE
- Semarnat
- Sedesol
- WB
- DF
- GDL
- MTY
- PROTRAM
- BANOBRAS
- PTTU
- Financing
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- Private Sector
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- Donors
- Inteligency
- Clean Air Inst
- ECOFYS
- SHCP
- INE
- Semarnat
- Sedesol
- WB
- DF
- GDL
- MTY
For each identified NAMAs, elaborate needs, gaps and options (as well as highlight key considerations and implications) of:

1. Scope and boundary
2. Possible crediting baselines.
3. Necessary MRV elements
4. Estimate of emission reductions potential
5. Regulatory framework and institutions
Housing/Urban NAMA  Climatic Finance Strategy

Efficiency

Territory

Urban NAMA

DUIS

Net 0

Passive

Haus

Baseline

Autoconstruction  Existing  INFONAVIT  FOVISSSTE  SHF

CER  POA  HV

$  CO₂  CO₂
Objective:
Move from technology focus to results based perspective “Whole House Approach”
Requirements cover all standard energy consumption (heating/cooling, cooking, electrical appliances, hot water)
Incentive to reduce total energy consumption considering the interaction between different measures
Requirements can be easily updated / tightened

Phase 1.- Extend basic penetration of basic efficiency standards
Phase 2.- Upgrade efficiency standards

Progress:
- Technical design
- International presentation
- Certification tool
- MRV system
- Financial Mechanisms

Further work:
- Pilot projects
- Implementation
- MRV followup
Urban NAMA

**Objective:**
The Urban NAMA concept is nested in the idea that high level coordination of mitigation actions across electrical, water, waste, transport, housing, health, education and communication services can lead to greater sustainability gains that addressing these sectors individually. However, any approach that impacts this many sectors must necessarily be fit into the larger sustainable development initiatives being pursued in Mexico.

The Urban NAMA is an ambitious concept that enables carbon finance to support sustainable development in Mexico’s cities. However, to provide a level of confidence that is sufficient to attract private investment, it is necessary to have a robust and credible operational framework that takes into account the needs of stakeholders, and operates efficiently within the authority of the local, state, and federal government agencies; and with private sector services providers, already present in Mexico’s urban settings.

**Progress:**
- Concept development
- International presentation
- USCO concept definition

**Further work:**
- Project design and proposal
- MRV system definition
- Fundraising
- Implementation
International Funding

Urban NAMA
- Water
- Drainage
- Lighting
- Facilities

Housing NAMA Whole House
- Architecture
- Passive Design
- Technology
- Appliances

Housing POA
- Energy Efficiency
- Renewable Energy

NAMA transport SEMARNAT

Penetration SHF FOVISSSTE

Optimization INFONAVIT SHF

Existing

New
Transport NAMA

Background

- 35 cities > 500,000 inhabitants
- Growing to the periphery/ low densities/ demand for transportation
- 53% Mexicans live in large cities
- Sustainable urban development needs to promote higher density with public transport a relevant role
- Automobiles grow annually 8%
Transport PROTRAM / UTTP

- **PROTRAM**: Federal Mass Transit Program to improve urban transport
- Funds investment in mass-transit **infrastructure, equipment, scraping**
- Funds from National Infrastructure Fund (FONADIN) managed (BANOBRAS).
- In 2009, The Clean Technology Fund (CTF) and the IBRD provided a loan for USD 350 million to BANOBRAS to be used as a complement to PROTRAM for integrated mass transit projects.
- This loan was packaged under the National Urban Transport Transformation Project (UTTP)
- **UTTP** finance projects which PROTRAM could not finance (**complementary infrastructure like pedestrian and bicycle facilities**).
**Transport**

**PROTRAM**
- Grants for planning studies of up to 50% of total cost.
- Grants for infrastructure investments of up to 50% of total investment
  - Private sector participation of at least 34%
  - Recoverable support for investments (guarantees and subordinated debt)

**BANOBRA/S FONADIN**

**World Bank/Clean Technology Fund**

**UTTP**
- UTTP credits to public entities or private investors (USD $350 M)
  - Capacity building (US$10M)
  - Credits for integrated mass transit corridors (US$216M)
  - Credits for low carbon vehicles (US $111 M)
  - Credits for low-carbon vehicles
  - Vehicle scrapping (US$ 13M)

**Eligible Projects**

Cities with more than 500k inhabitants
Integrated Public Transport Systems in:
9 Metropolitan Areas of +1 Mill people.
22 cities between 500k and 1 Mill

Technological Options
Integrated transport solutions through:
- Bus Rapid Transit (BRT)
- Light rail and trams
- Suburban trains and metros
- Multimodal integration
- Signaling, traffic lights and transit management
NAMA Objectives

- Medium term objective: provide complementary support to PROTRAM/UTTP by financing capacity building, MRV methodologies and institutional strengthening.

- Long term objective: ensure the continuity of the programs with long-term climate funds / market mechanisms.

Note:
PROTRAM: National Mass Transit Program
UTTP: National Urban Transport Transformational Program
ENERGY EFFICIENCY

Key concepts:
- 20% reduction in energy consumption.
- Replace R134a (HFC) by R600a (HC).

Affected units: Up to 600 liters (21‘) of capacity
Yearly additional cost: 30 MUSD (1 Million units)
+ Initial Required investment 8 MUSD

NAMA Program technology investment: 308 MUSD
NAMA life: 20 years

NAMA Benefits

☑ Program savings in terms of subsidy: 380.80 MUSD
☑ Program’s total benefit: 72.80 MUSD
☑ Eliminated emissions: 5.02 MtCO₂e

Energy savings by NAMA program users 571 M USD
Cost / Benefit (MUSD)

∑=308 MUSD

∑=952 MUSD
refrigerators

Emissions reduction due to R134a (tCO₂e) replacement
Emissions reduction due to energy

Year

Year 1 to Year 19

Emissions reduction in tCO₂e
Present
Energy consumption (KWh/year)

350
141b
R22
R134a

70 KWh

Projected

280
R600a
Cp

1 million refrigerators would eliminate a 70 GWh/year consumption.

The cost of inaction is far greater than the cost of action.

Monterrey 2010
- Solve accountability issues between voluntary pledges and reductions sold to markets (prevent double counting)
- Capacity of players should be build up using lessons learned from the CDM cycle.
- MRV systems must be fostered, at the same time registry of new mechanisms should be more flexible without damaging accountability
- Private sector involvement on mitigation national efforts
- Promote more participation of public sector in the carbon markets
- Take into account different crediting mechanisms, different emission sectors / local governments
Registry

Markets

Other Mechanisms
Voluntary
Bilateral
CDM

Pledges

R

"Market"

Reductions

PECC
NAMA
Local
REDD
Timeline

March  | May  | June | September | October

Define MRP  | Present MRP  | Approve Implementation