



UNEP TRANSPORT PROGRAMME and PROJECT OVERVIEW

Promoting Low Carbon Transport in India

2nd National Stakeholders' Workshop
18-20 October 2011
India Habitat Centre, Delhi

In partnership with :



IIT Delhi

Supported by:



Federal Ministry for the
Environment, Nature Conservation
and Nuclear Safety

based on a decision of the Parliament
of the Federal Republic of Germany

Energy Use and security

- Consumes **25%** of world energy, **90 %** are fossil fuels
- Transportation's fuel consumption has **doubled** since 1970

Climate Change

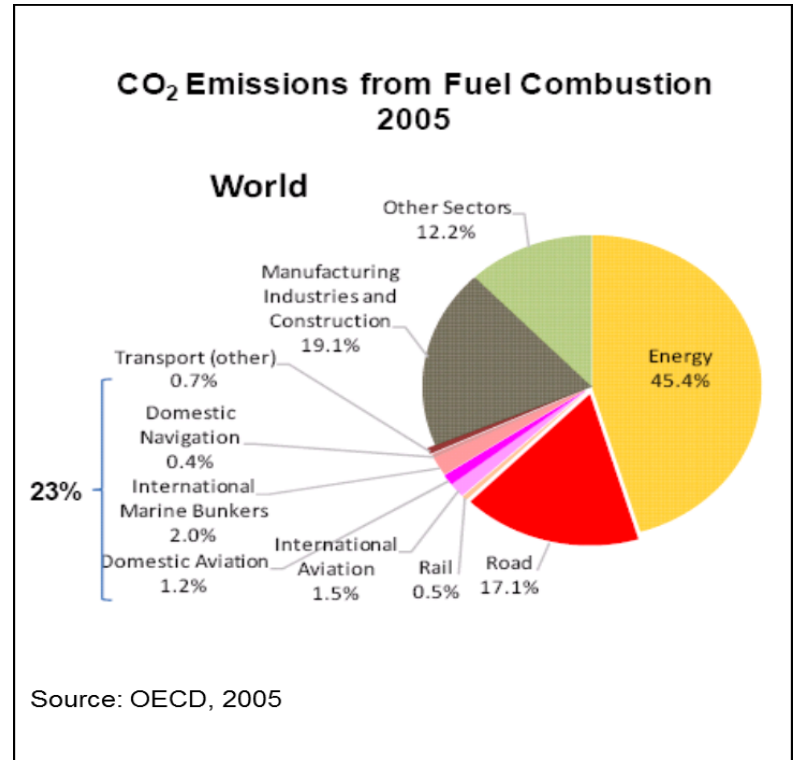
- Responsible for **23%** global CO₂ emissions
- Fastest growing sector in GHG emissions, **2.5%** yearly until 2020

Noise pollution

- as a result of rapid motorization

Air Quality & Health

- Largest source of air pollution in many cities, with pollution exceeding WHO standards and costing more than **5% GDP**



Issues and challenges

- Systems overwhelmed by growth in **urban populations**
- **Quality of systems** in developing world appears to be deteriorating
- Stagnating or **declining modal share** of transit use in many cities around the world
- Lack of integration between land-use and transport **planning**
- **Policy actions** and **economic incentives** to dampen rate of increase car ownership, oil use, CO₂
- **Under-investment** towards infrastructure for public and non-motorised transport
- **Behavioral changes** on mobility choices



Sustainable transport pathway

- Urgent need to re-think transportation trends and decouple from negative impacts
- Cost-effective options such as walking and cycling need to be promoted (are often overlooked)
- Moving towards green transport development - directing investments in sustainable transport infrastructure and achieve co-benefits (job creation, poverty eradication, carbon emission reductions)
- Need a participatory approach where all relevant stakeholders are involved in the decision making process
- Integrated infrastructure + available technology + efficient services + complementary policies will positively affect the choices people make

UNEP Transport Strategy



Objective : progressive shift to transport systems and approaches to mobility that are less disruptive to the environment



Cross-cutting integrated approach



Partnership for Clean Fuels and Vehicles (PCFV) promote cleaner fuels (lead and sulphur) and vehicles to reduce urban air pollution in >120 countries



Global Fuel Economy Initiative (GFEI) promote national efficient vehicles policies – 4 pilot countries

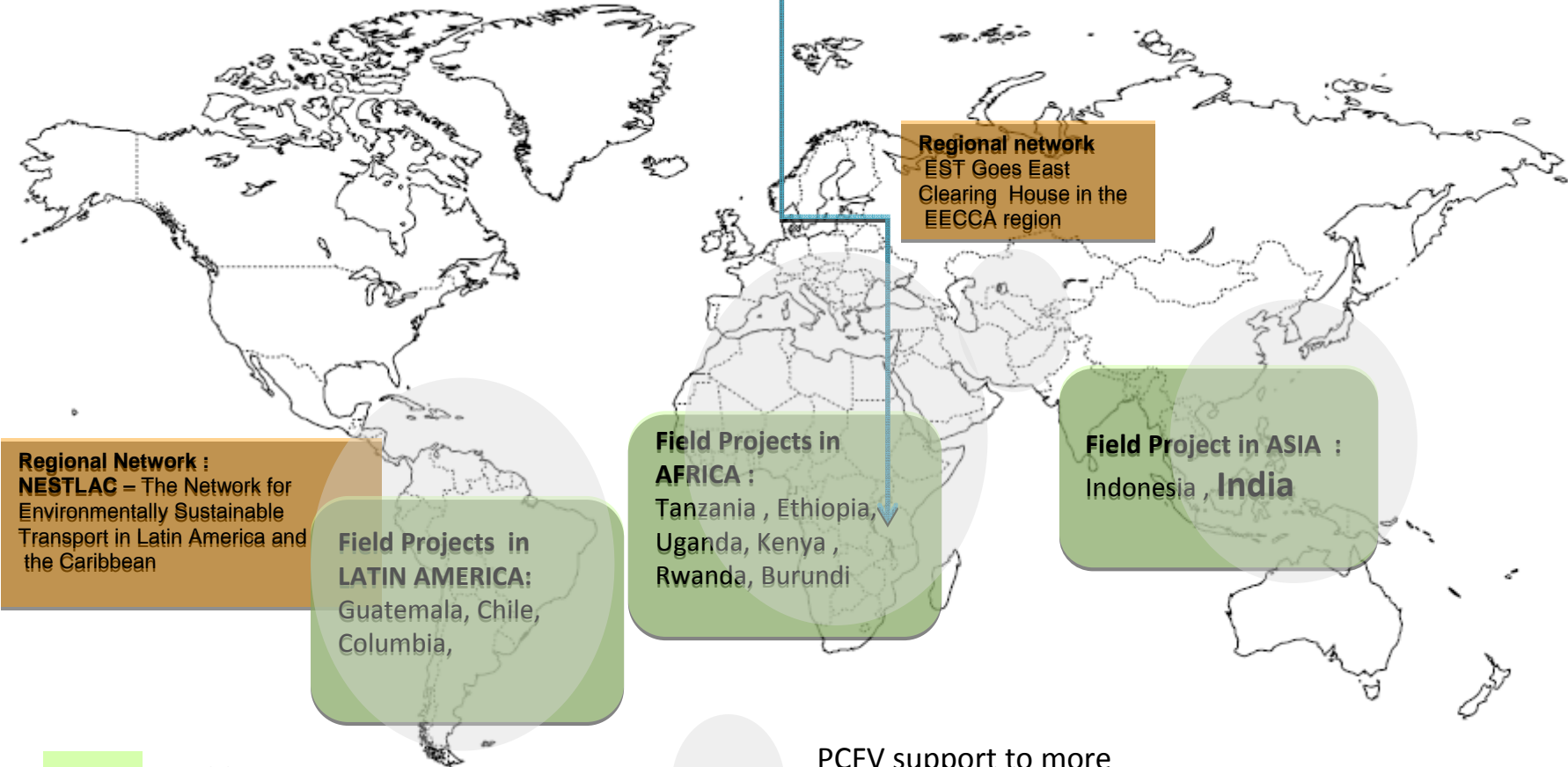


Share The Road (NMT) promote investment for non motorized transport (walking and cycling) infrastructures – East Africa



Public Transport - promote investment in public transport infrastructure (e.g efficient bus systems, BRTs, Mass Rapid transit (metros, light rails, inter-modality)

**UNEP TRANSPORT
UNIT, Nairobi**



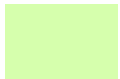
Regional Network : NESTLAC – The Network for Environmentally Sustainable Transport in Latin America and the Caribbean

Field Projects in LATIN AMERICA: Guatemala, Chile, Columbia,

Field Projects in AFRICA : Tanzania , Ethiopia, Uganda, Kenya , Rwanda, Burundi

Regional network EST Goes East Clearing House in the EECCA region

Field Project in ASIA : Indonesia , India



Public Transport + NMT + GFEI



PCFV support to more than 120 countries



Project Overview :

Promoting Low Carbon

Transport in India

Key Facts

- **Duration:** 2010 – 2013 (3 years)
- **Implementing Agency:**
 - United Nations Environment Programme (UNEP)
- **Implementing Partners:**
 - UNEP Risoe Centre, Denmark
- **Along with :**
 - IIMA: Indian Institute of Management, Ahmedabad
 - IITD : Indian Institute of Technology, New Delhi
 - CEPT University, Ahmedabad
- **Funding:**
 - Under International Climate Initiative of German Government



Project Launch



Shri Jairam Ramesh, former Minister of Environment and Forests, India

“It took India 59 years to reach a sale of 1 million cars till 2009. And then in 1 year by 2010 we added another million”

“Rate of growth of transport emissions is most important in the transport sector as it could double in 15 years”

“Policy framework need to be right that does not discriminate certain modes such as public transport while encouraging SUVs, etc”

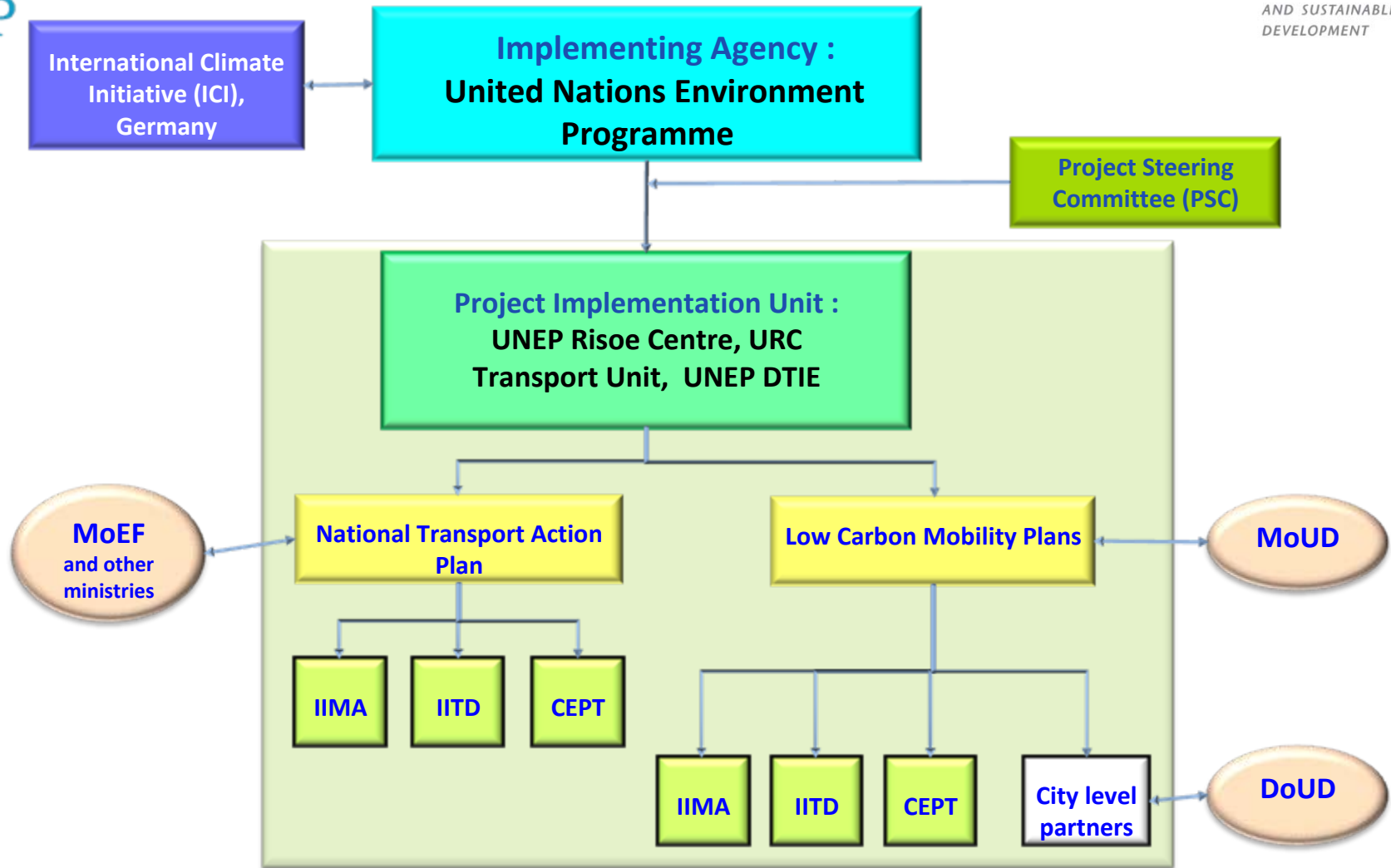
“The Govt is to set standards – we need guidance – sort of a roadmap on what improvements are required, what are barriers to certain policy”

Project Objectives

- Delineating an enabling environment for coordinating policies at **national level** to achieve a sustainable transport system
- Enhancing capacity of **cities** to improve mobility with lower CO₂ emissions.



Institutional Structure



Abbreviations:

MoEF : Ministry of Environment and Forests, Government of India

MoUD : Ministry of Urban Development, Government of India

DoUD : Department of Urban Development at state level

IIMA : Indian Institute of Management , Ahmedabad

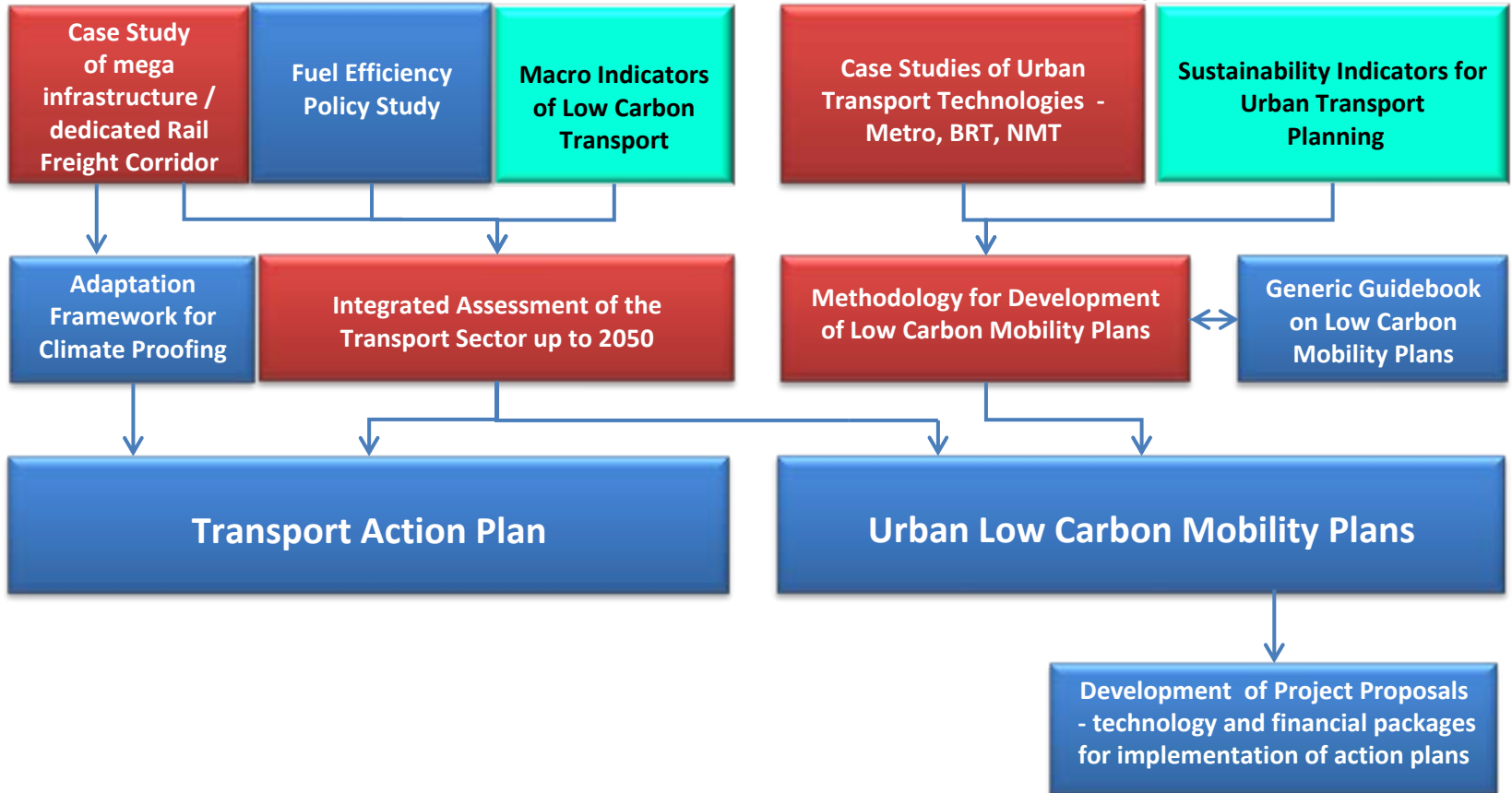
IITD : Indian Institute of Technology, Delhi

CEPT : CEPT University, Ahmedabad

Key Interventions


National Level


City Level



Networking and Information Sharing
(Workshops, website, publications, case studies)

 Completed activity

 ongoing activity

 Target activity for 2012 /13

National Level Outputs

Analytical /Toolkits

- ❖ **Macro Indicators** for Low Carbon Transport Services
- ❖ National level **assessment of transport sector for various scenarios** – BAU, Low Carbon & Policy
- ❖ **Case studies** of existing and under implementation projects.
- ❖ A **Climate Adaptation** framework for transport infrastructure



Transport Action Plan

- ❖ A **Road Map** of technology needs, related R&D and technology transfer, finance and pathways for international cooperation in transport sector.
- ❖ In line with **India's National Action Plan on Climate Change**

City Level Outputs

Analytical /Toolkits

- ❖ **Indicators** of Urban Mobility
- ❖ **Case Studies** of BRT, Metro and NMT modes
- ❖ A **methodology** for developing low-carbon mobility plans at city level



Low Carbon Strategies

- ❖ **Low Carbon Mobility Plans** at city level
- ❖ **Project proposals**

Transport
Investing in energy and resource efficiency

ADVANCE COPY ONLINE RELEASE

Workshop on Promoting Low Carbon Transport in India

Promoting Low-carbon Transport in India
Factsheet

Promoting Low-carbon Transport in India
Factsheet

Overall Context

India is currently the fourth largest greenhouse gas (GHG) emitter in the world. With the fastest growing population, its per capita emissions are though less than half of the world average. The transport sector is the second largest contributor to carbon dioxide (CO₂) emissions in India. Besides CO₂ emissions, the sector also gives rise to negative impacts such as road congestion, local air pollution, noise and accidents. The burden of these impacts has been extremely high in the urban areas. In the last few decades road stretching from all forms of transport has taken place for both freight and passenger transport. To cater the public transport services have been hampered by population growth and urbanization and overtake by a rapid increase in private vehicles.

Opportunities exist to make India's transport growth more sustainable by signing development and climate agenda. India's National Action Plan on Climate Change (NAPCC) recognizes that GHG emissions from transport can be reduced by adopting a sustainability approach through a combination of measures like increased use of public transport, higher penetration of hybrids, enhanced energy efficiency of transport vehicles, etc.

This project aims to contribute to the efforts of the Government of India in making a low-carbon transport system and is advised by the Ministry of Environment and Forests (MoEF). The project has a close alignment with the work that will be carried in clean mobility and guidance from the Ministry of Urban Development (MoUD).

Project Objectives

1. Delivering an enabling environment for contributing towards national level to achieve a sustainable transport system.
2. Enhancing capacity of cities to improve mobility with lower CO₂ emissions.

Along with local partners:

- IITM, Indian Institute of Management, Ahmedabad
- IITC, Indian Institute of Technology, New Delhi
- CEPT University, Ahmedabad

Other Partners to be identified for the cities:

- National level "Transport Action Plan"
- City level up to a "Green Low-carbon mobility plan"

Supporting by:

- United Nations Development Programme, New York
- Danish Ministry of Environment, Copenhagen
- Danish Agency for Development Cooperation, Copenhagen

Contacts:

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Project website: www.aarj.org/transport/india/

Share the Road:
Investment in Walking and Cycling Road Infrastructure

FIA Foundation
for the Automobile and Society

Technologies for Climate Change Mitigation
– Transport Sector –

UNEP RISO CENTRE

Planning and Implementation of a Bus Rapid Transit System in Latin America
– summary aimed at decision makers

UNEP RISO CENTRE GEF

Planning and Implementation of Campaigns to Promote Bicycle Use in Latin American Countries
– guide for decision makers

UNEP RISO CENTRE GEF

Bus Regulation and Planning in Latin America
– summary oriented to decision makers

UNEP RISO CENTRE GEF

50BY50
GLOBAL FUEL ECONOMY INITIATIVE
www.50by50campaign.org

Making Cars 50% More Fuel Efficient by 2050 Worldwide

FIA Foundation for the Automobile and Society



Project Website :

www.unep.org/transport/lowcarbon