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ENERGY, CLIMATE AND SUSTAINABLE DEVELOPMENT

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 :

IIM AHMEDABAD

CEPT UNIVERSITY

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

Transport & Environment

Energy Use and security

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

Climate Change

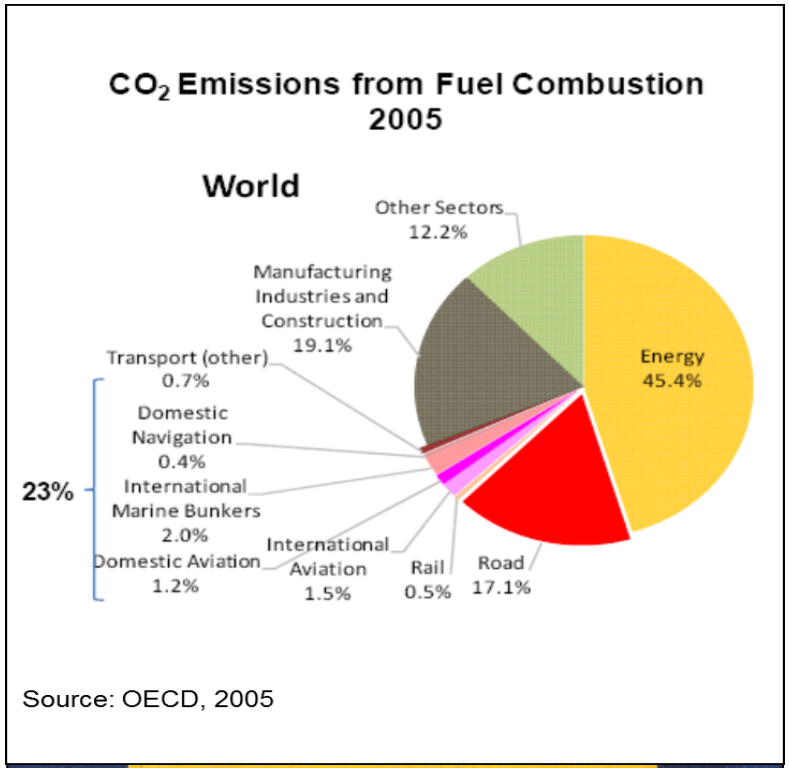
- Responsible for 23% global CO_2 emissions
- Fastest growing sector in GHG emissions, 2.5% yearly until 2020

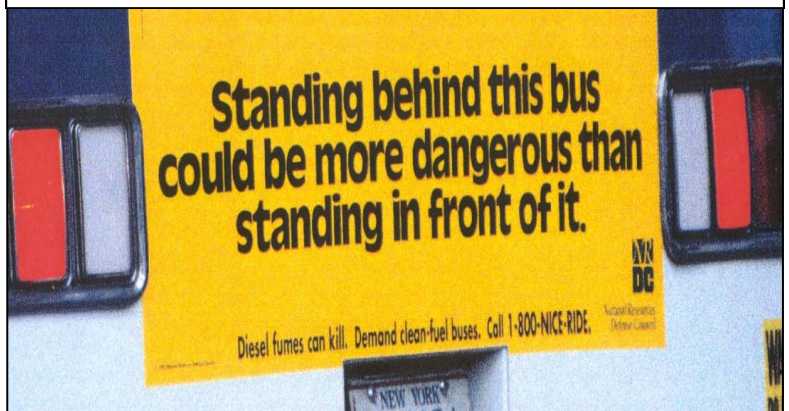
Noise pollution

- 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, CO_2
- **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

Environmental mandate

Sustainable Development

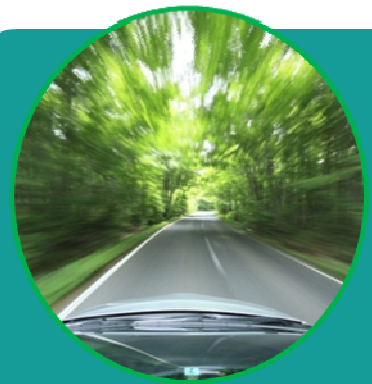
Climate Change

Green Economy

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

'Avoid'

'Shift'



'Improve'

Integrated Approach

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Cross-cutting integrated approach

Partnership for Clean Fuels and Vehicles

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

GFEI
GLOBAL FUEL ECONOMY INITIATIVE

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

SHARE THE ROAD
INVEST IN WALKING & CYCLING

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)

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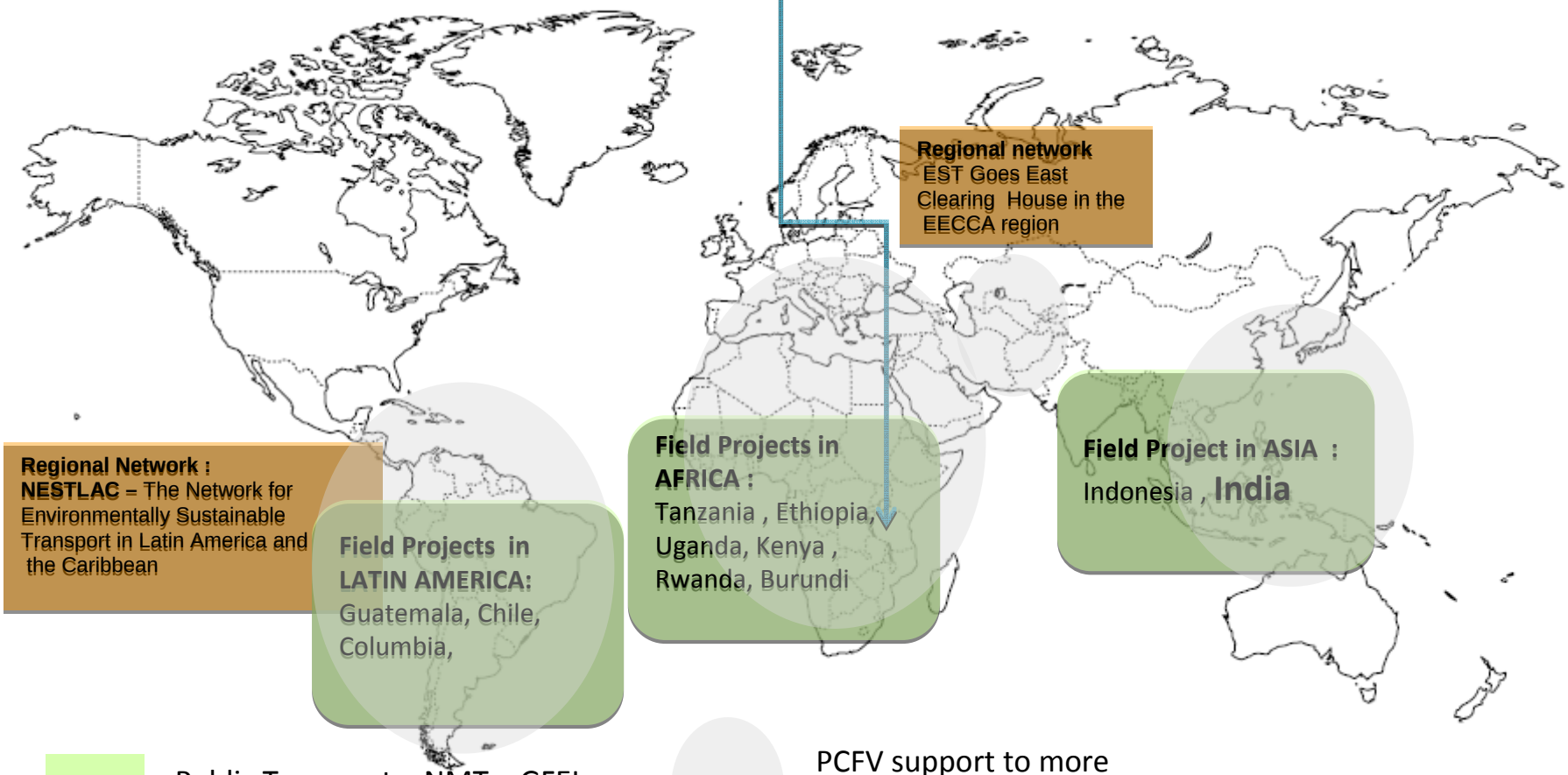
UNEP TRANSPORT UNIT, Nairobi



Regional network
EST Goes East Clearing House in the EECCA region

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

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

Field Project in ASIA :
Indonesia , **India**

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

Public Transport + NMT + GFEI

PCFV support to more than 120 countries

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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"

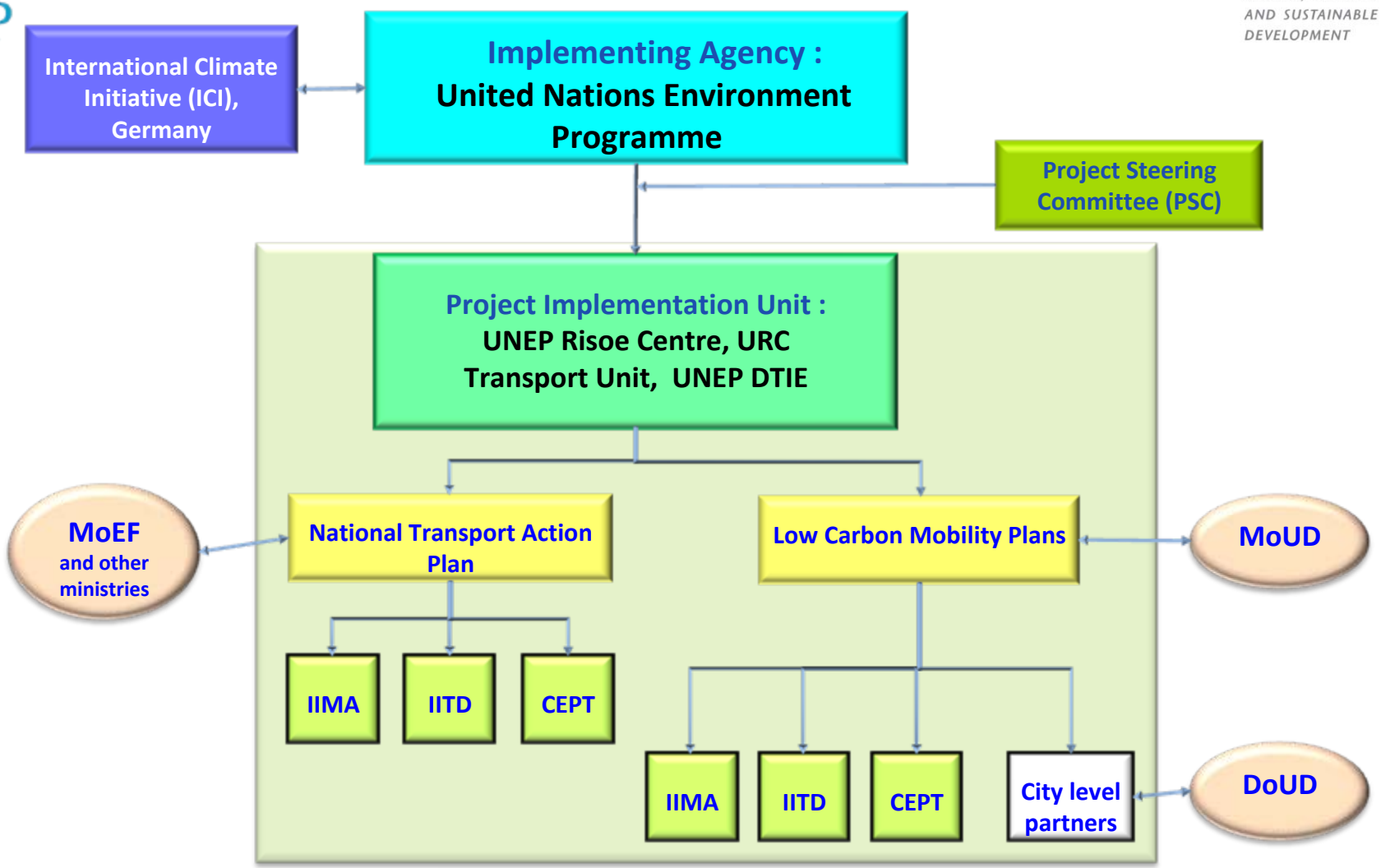
"The Govt is to set standards – we need guidance – sort of a roadmap on what improvements are required, what are barriers to certain policy"

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 CO_2 emissions.

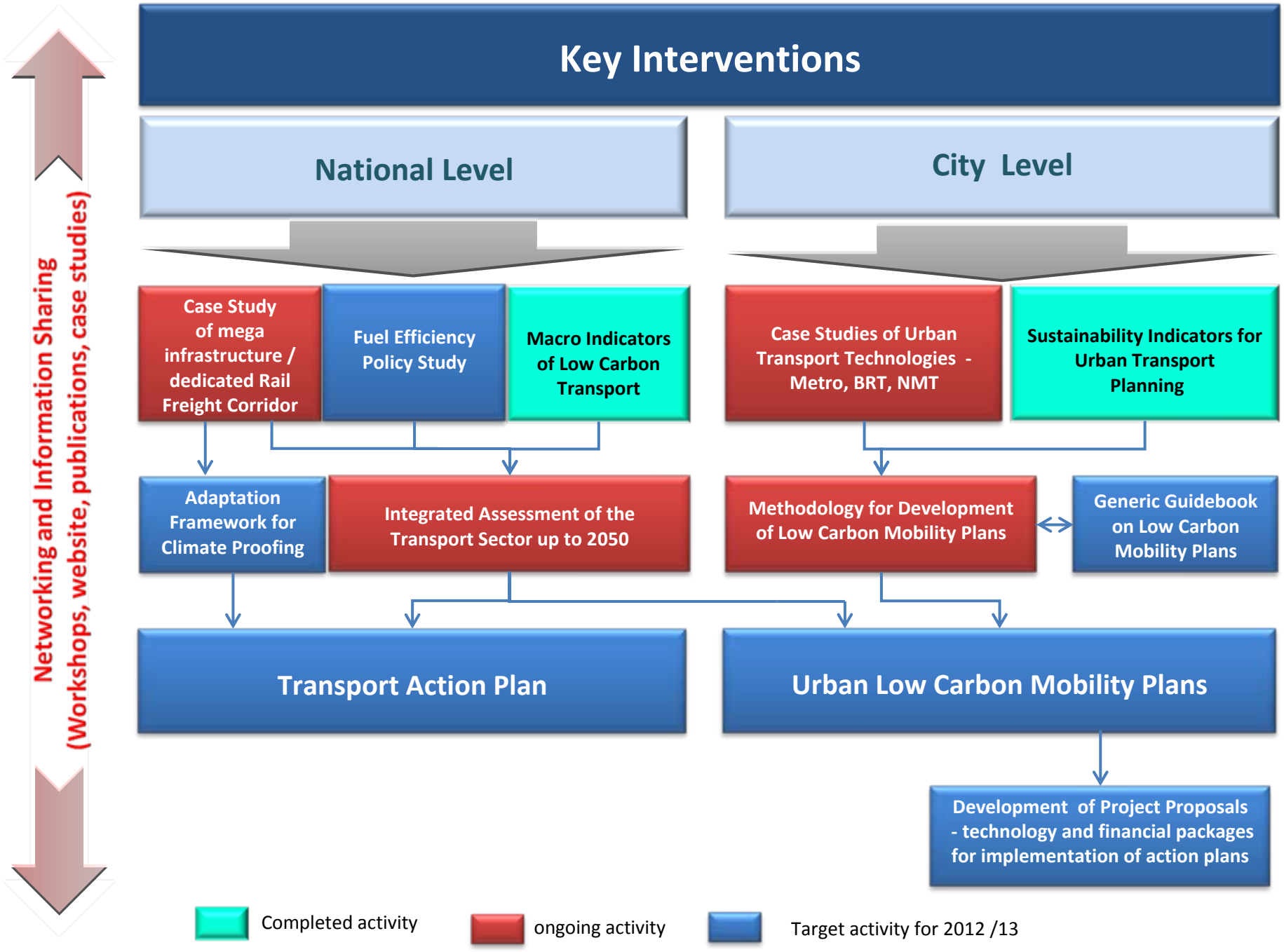
Institutional Structure



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)
Case Study of mega infrastructure / dedicated Rail Freight Corridor
Fuel Efficiency Policy Study
Macro Indicators of Low Carbon Transport
Case Studies of Urban Transport Technologies - Metro, BRT, NMT
Sustainability Indicators for Urban Transport Planning
Adaptation Framework for Climate Proofing
Integrated Assessment of the Transport Sector up to 2050
Methodology for Development of Low Carbon Mobility Plans
Generic Guidebook on Low Carbon Mobility Plans
Transport Action Plan
Urban Low Carbon Mobility Plans
Development of Project Proposals - technology and financial packages for implementation of action plans
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**

Publications

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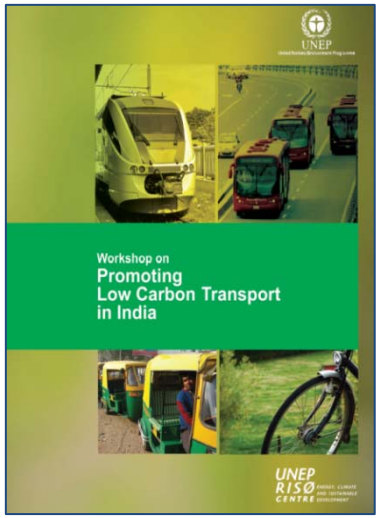

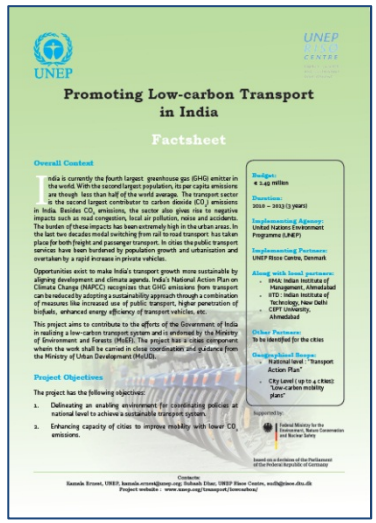

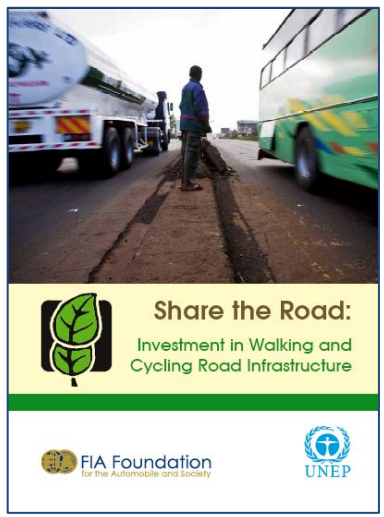

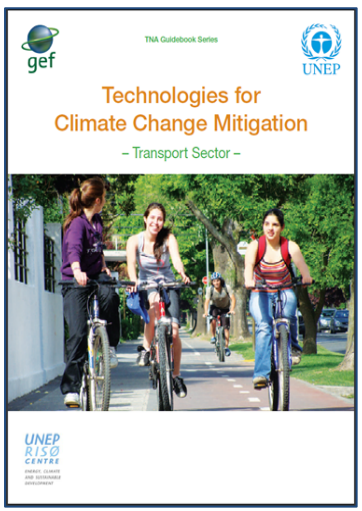

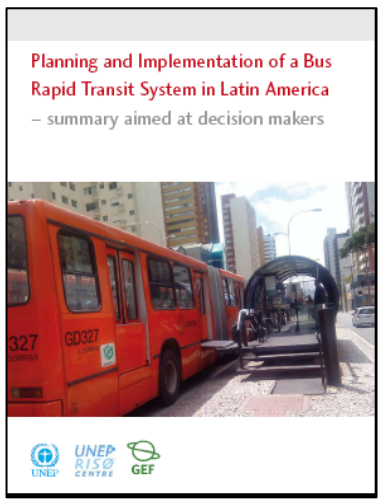

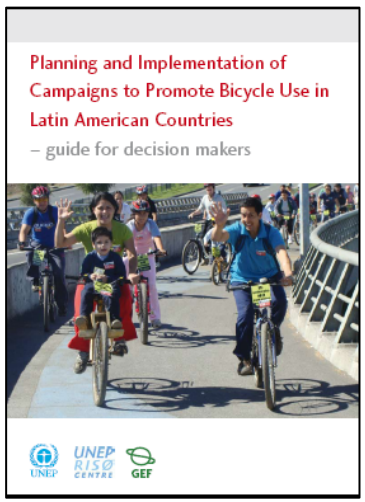

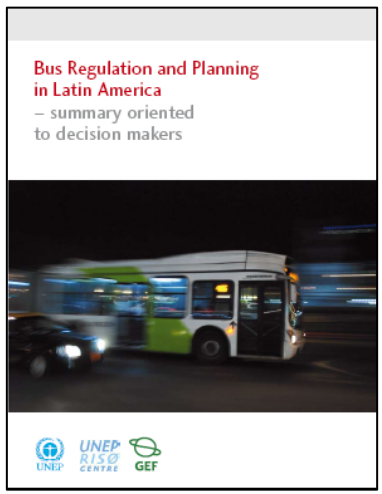

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Project Website :

www.unep.org/transport/lowcarbon