

LEDS Global Partnership

Transport Readiness for Climate Finance

What conditions are needed to access financing for sustainable transport

Dr. Benoit Lefevre
blefevre@wri.org

Director of Transport and Climate Program, CEP – EMBARQ, WRI

www.LEDSGP.org







Presentation Contents

- 1. The basics of climate finance for transport
- 2. Sources of funding
- 3. Seven components of readiness
- 4. Evaluating performance
- 5. Conclusions



Increased Investment is Needed

23%

Share of source energy emissions from transport

2.5

Factor increase by 2050

,1

Trillion dollars of global annual transport investment

3

Trillion dollars of investment needed to mitigate emissions growth



What is "Readiness"?

Climate Financiers

Status Quo

Recipient Country/City

Climate Financiers

"Readiness"

Recipient Country/City



Presentation Contents

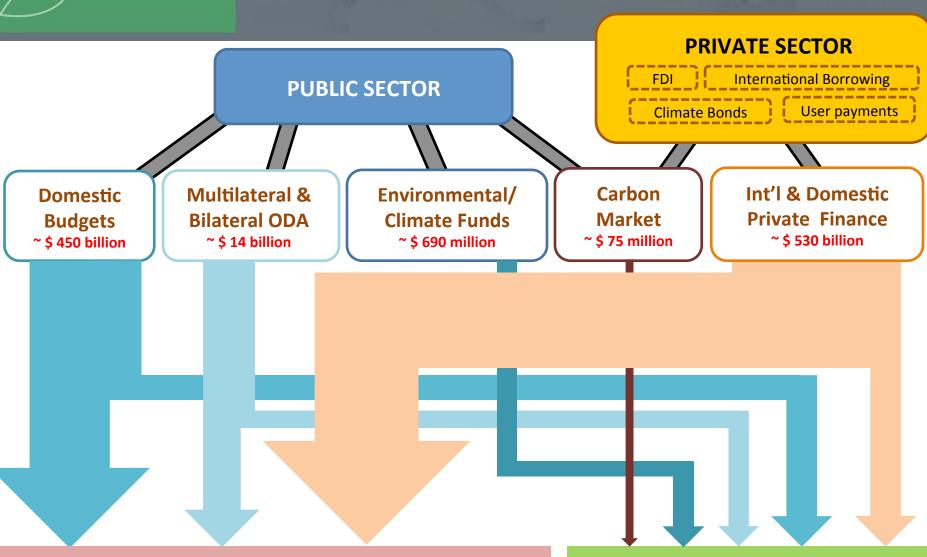
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Global Transport Spending

Sources: WRI; OECD CRS, 2010; CPI, 2012; UNFCCC, 2007; IMF GFS, 2011; OECD Stat.

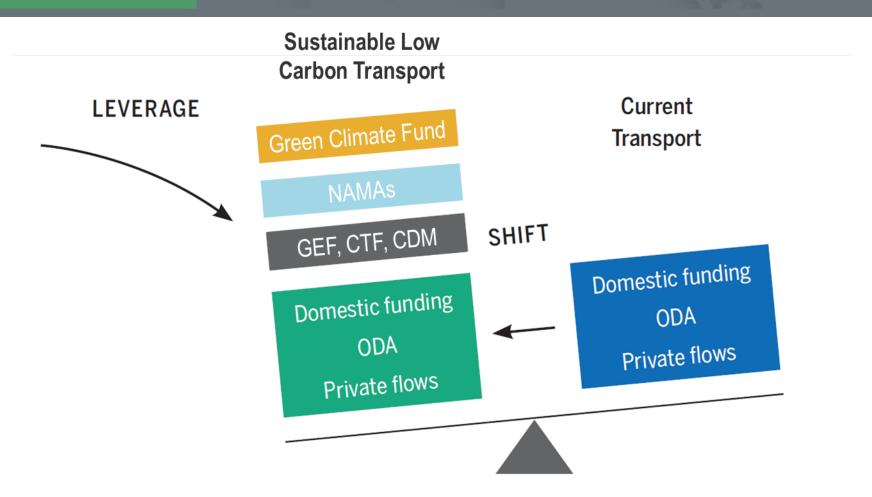
Sustainable Transport



Transport



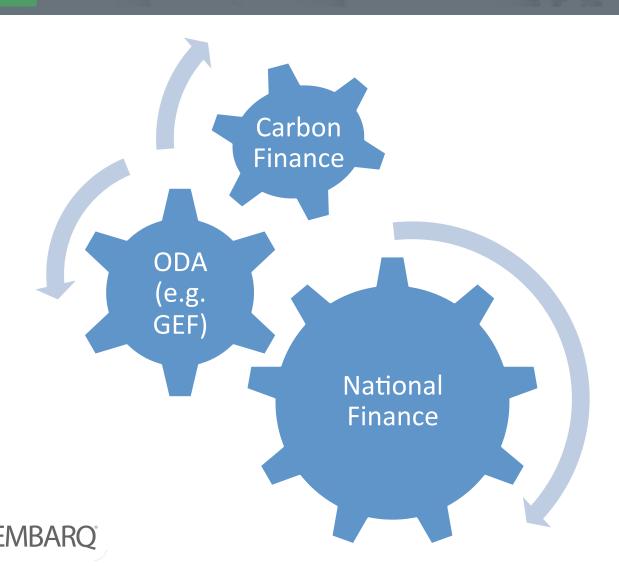
The Big Picture







Carbon finance as an incentive not as a silver bullet!

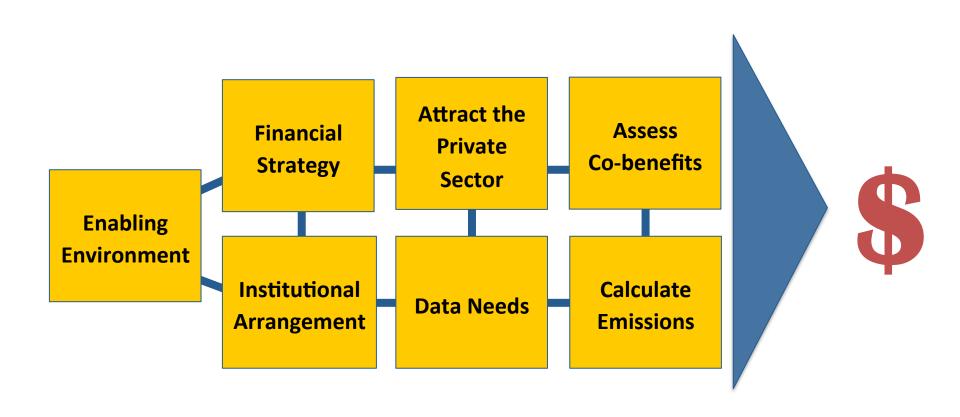




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Enabling Environment

- Low-Carbon
 Mobility or
 Transport Plans
- Binding emissions targets

Laws & Policies

Institutional & Market Capacity

- Managerial and technical skills
- Infrastructure and communications
- Mature project development and financial markets

- Fuel efficiency standards
- Safety standards
- Financial protections

Regulation

Economic Policy

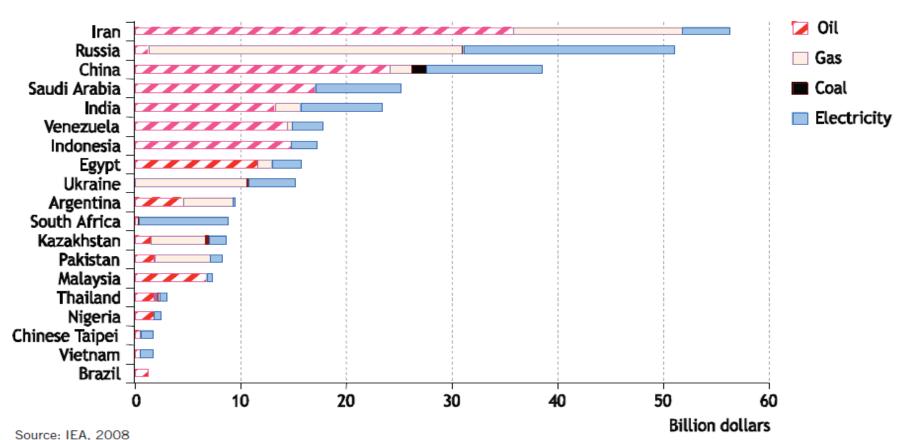
- Stable fiscal and monetary policy
- Reduced fossil fuel subsidies



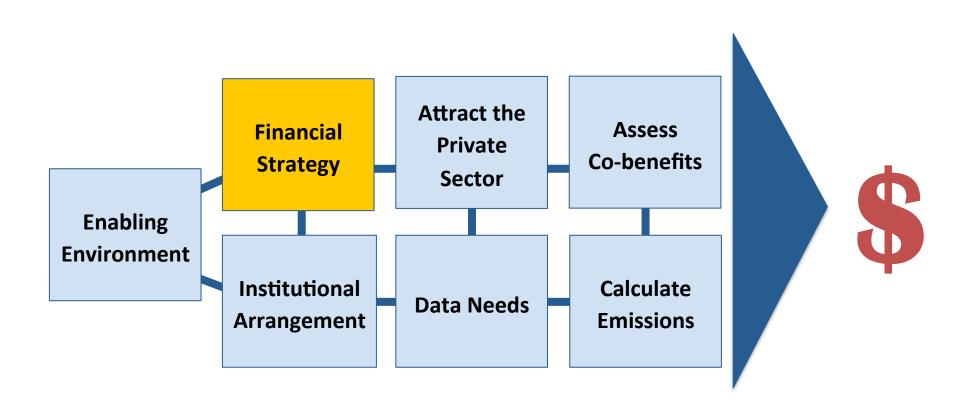
Enabling Environment (EXAMPLE)

ANNUAL FUEL SUBSIDY BY COUNTRY (2008)

\$300 billion fuel subsidies prevent 6% global GHG reduction

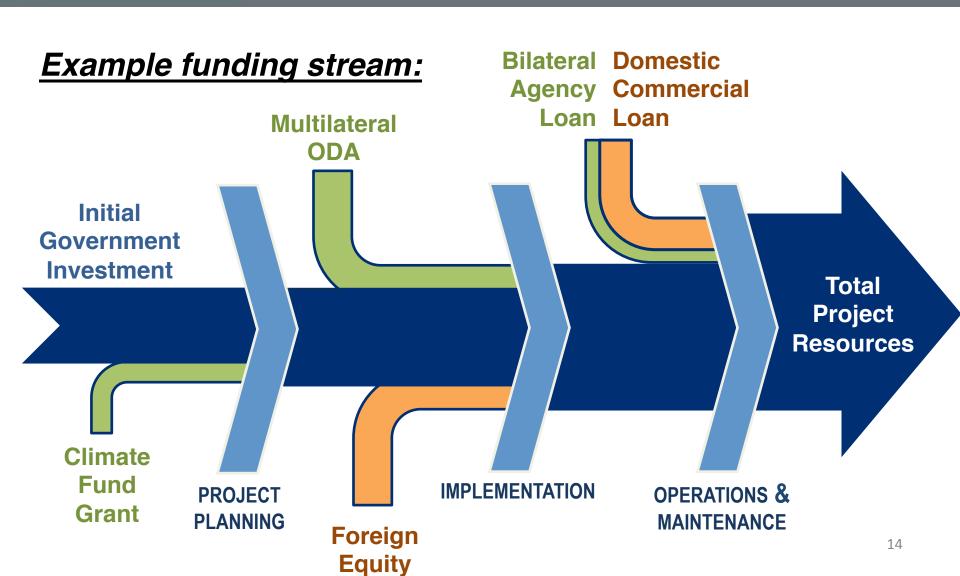




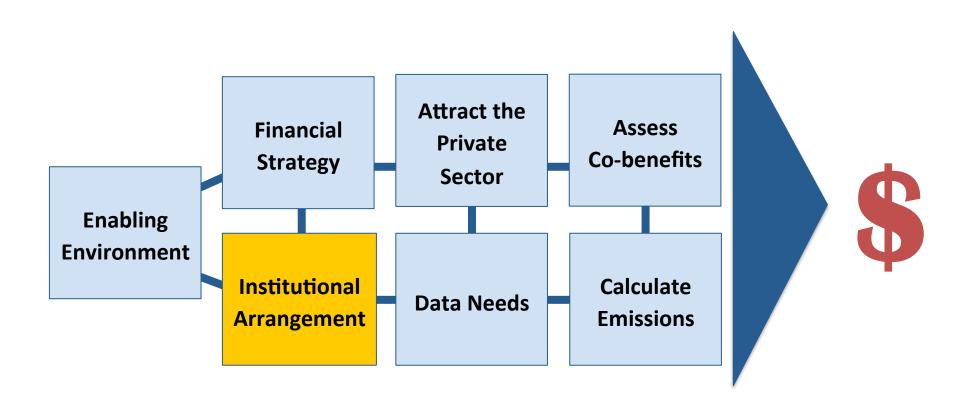




Financial Strategy



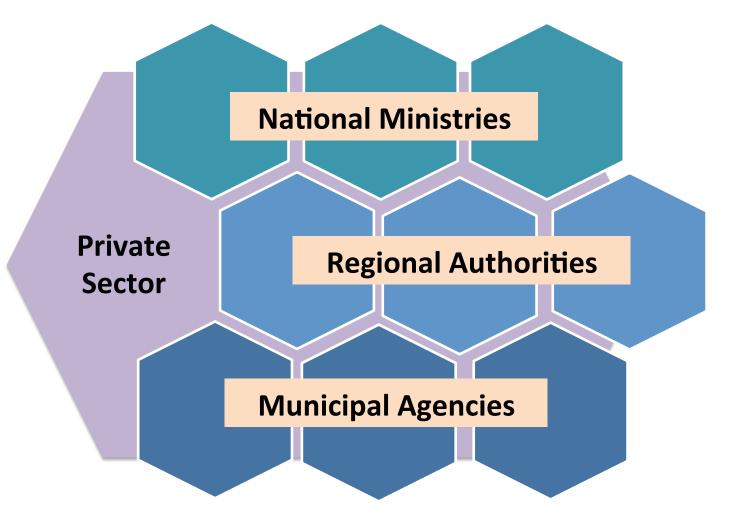






Institutional Arrangement

Coordination, Collaboration, & Knowledge-sharing across sectors and political jurisdictions



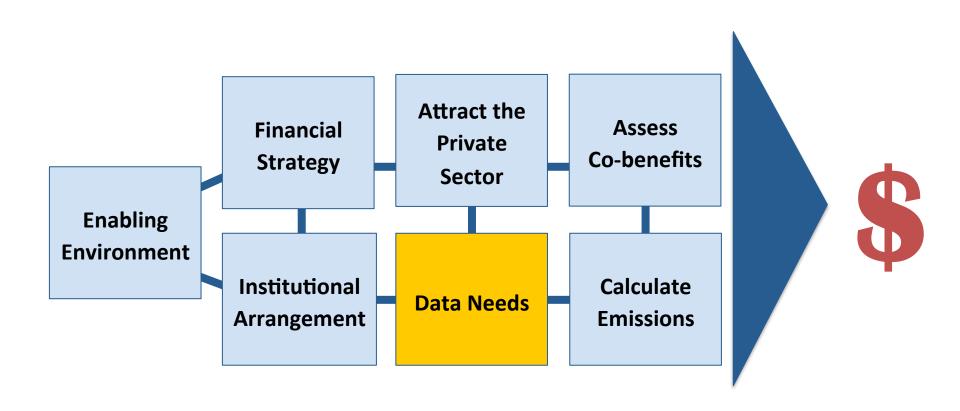


Institutional Arrangement (EXAMPLE)

Data-sharing for Bogota's Transmilenio







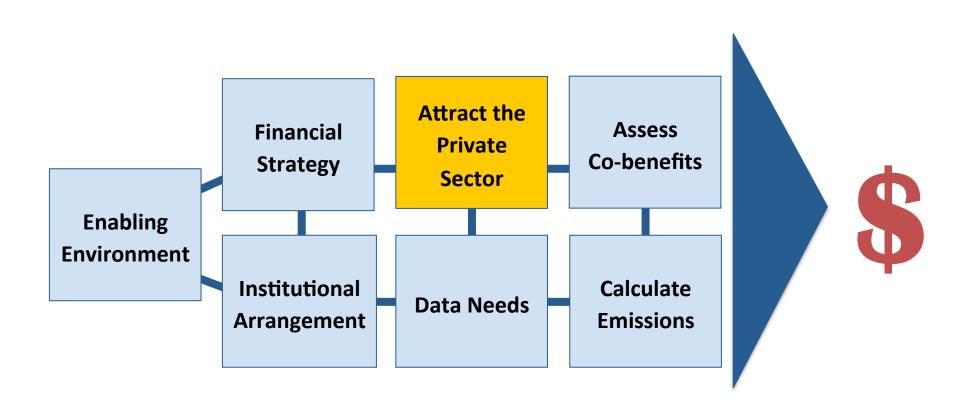


Data Needs

Source: WRI, forthcoming, "Greenhouse Gas Protocol: Policies and Actions Accounting and Reporting Standard."

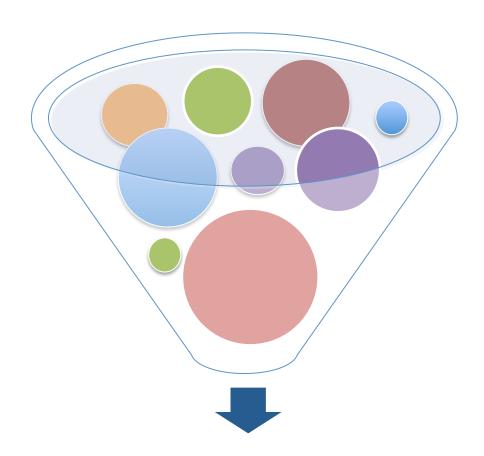
Approach	Important data	Direct Data Sources	Alternative Data Sources
Top-down	Total fuel consumption and by fuel type	Fuelling station data	Aggregate fuel sales
		Agency energy statistics	
	Total fuel consumption by vehicle type	Fuelling station data (uncommon)	Estimated national fuel sales
Bottom-up	Vehicle stock	Local vehicle registration records	National or international averages
	VKT by vehicle type	Vehicle inspection records	Estimate from regional or national averages
		Household and/or Commodity survey	Extrapolate from simplified survey
		Traffic counts	
	Fuel efficiency by vehicle and fuel type	Public survey	IPCC default values
		Fuel consumption databases	
	Emission factor	Local default values	IPCC default values







Variation in private investment vehicles not so varied in objective



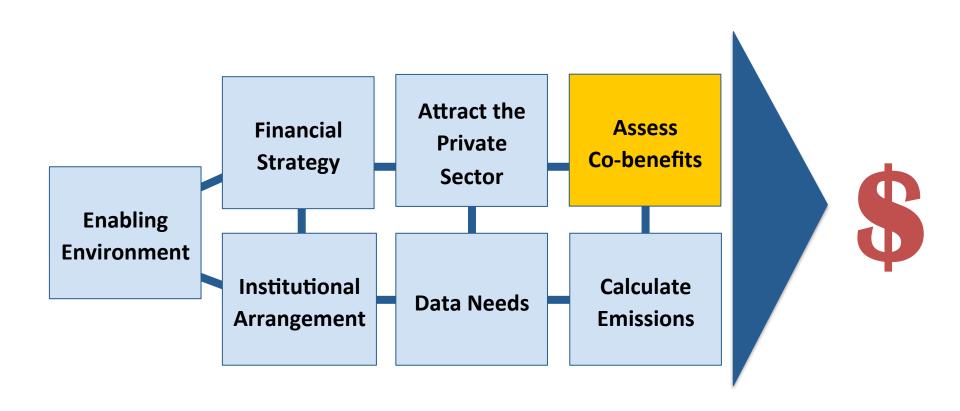
Minimize cost; Maximize return



Attract the Private Sector

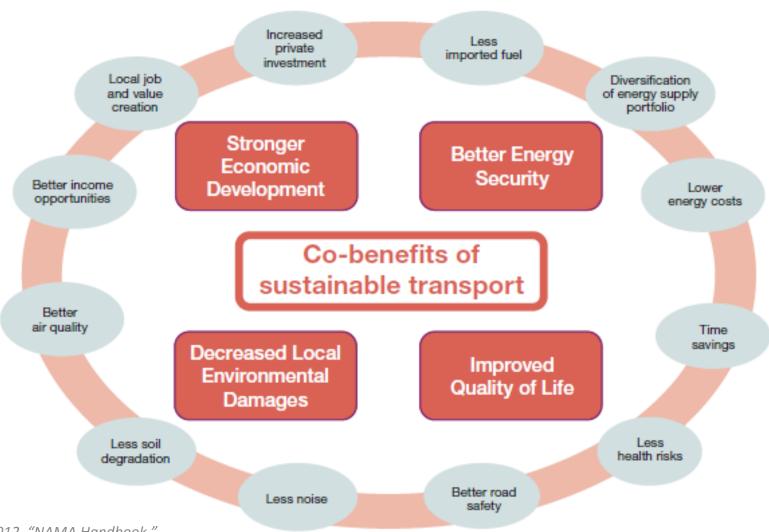






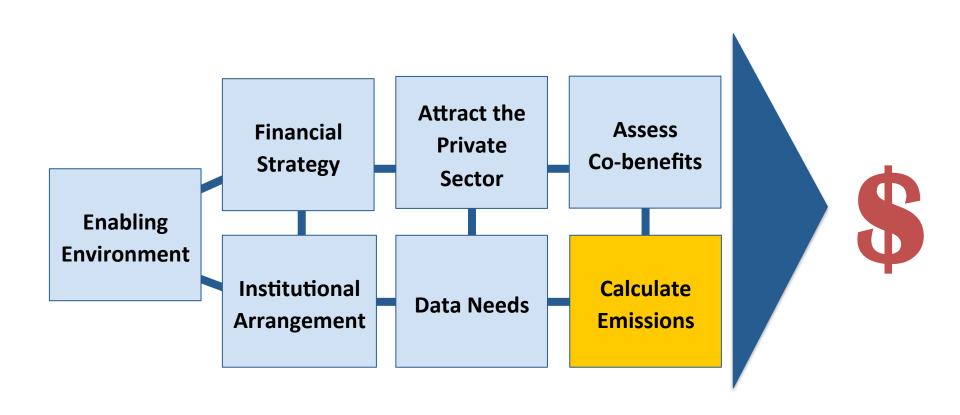


Assess co-benefits



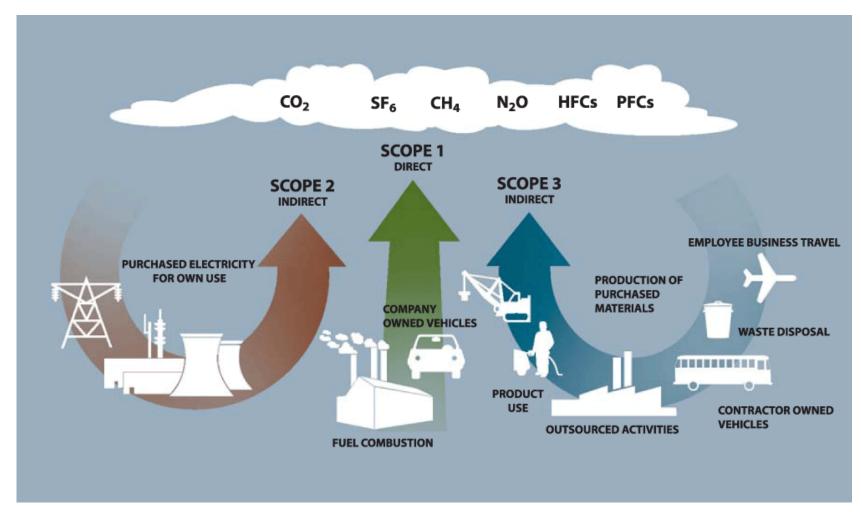
Source: GIZ 2012, "NAMA Handbook."







Calculate Emissions





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What and how to measure?

MRV Plan

- 1. Establish goals, capacity, baseline, boundary, data sources
- 2. Measure, Report, & Verify
- 3. Ex-ante and Ex-post

Outcomes vs. Outputs vs. Process

Direct Indicator (Outcome)	Indirect Indicator (Output)	Process Indicator
 Tons of CO₂e gasses abated by new transport fuel or system. 	Changes in mode shareNumber of new registrations for more efficient vehicles	Policy or regulation passedNumber of people trained in capacity-building effort

Methodology selection: WRI/WBCSD, CDM, IPCC, etc.



Putting the "V" in MRV

Verification of climate finance

Assess process as well as outcomes/outputs Third party That which actually can be verified

Evaluate the MRV methodology itself

Effectiveness
Difficulty
Data gaps
Completeness





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5 Most Important Readiness Actions

Attract the private market with de-risking instruments and stable local market characteristics

Focus on institutional capacity through gap analysis and dedicated public resources

Plan early and upstream across political levels and institutions

Develop a financial strategy combining public and private resources, climate finance and ODA, and local, regional and international funding

Gather good data and organize the processes of data sharing ex-ante and data collection ex-post



MERCI!

Benoit Lefevre, PhD

blefevre@wri.org

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Domestic Budgets

PRIVATE SECTOR FDI International Borrowing **PUBLIC SECTOR** User payments Climate Bonds Carbon Int'l & Domestic Multilateral & **Environmental/ Domestic** Market **Private Finance Bilateral ODA Climate Funds Budgets** ~ \$ 75 million ~ \$ 530 billion ~ \$ 450 billion ~ \$ 14 billion ~ \$ 690 million

Transport

Sustainable Transport



Domestic Budgets

Leading transport programs:

JnNURM (India)

Budget: ~US\$ 2.1 billion in 2013

- Jawaharlal Nehru National Urban Renewal Mission
- Financing/TA for urban infrastructure in 63 cities

PROTRAM (Mexico)

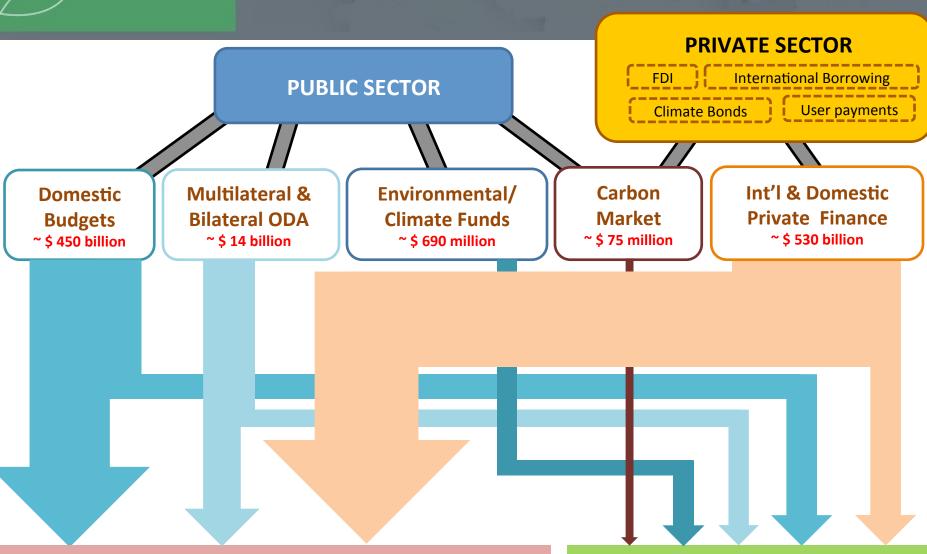
Budget: ~US\$ 9 billion in 2013

- Federal Mass Transit Program
- Loans/Grants for mass transit activities in cities of 500,000+



Global Transport Spending

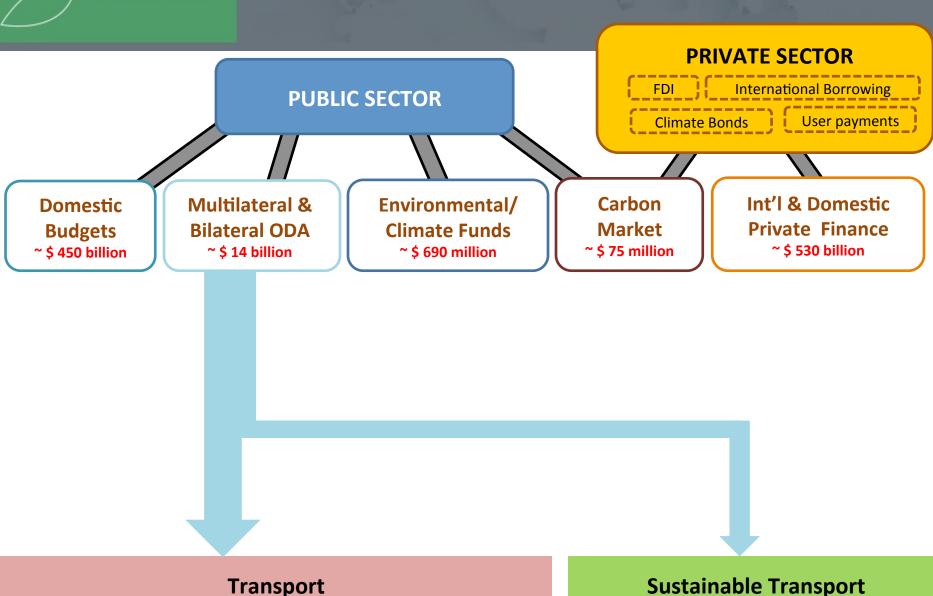
Sources: WRI; OECD CRS, 2010; CPI, 2012; UNFCCC, 2007; IMF GFS, 2011; OECD Stat.



Transport Sustainable Transport



Official Development Assistance (ODA)





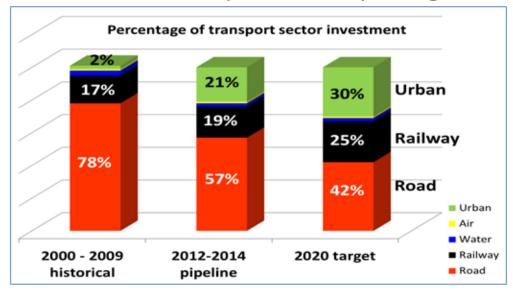
Official Development Assistance (ODA)

- Transport spending is usually non-sustainable, but there is movement toward sustainable modes:
 - ADB (graph at right)
 - \$175 billion Rio commitment
 - STAR framework (below)

Rating Levels:

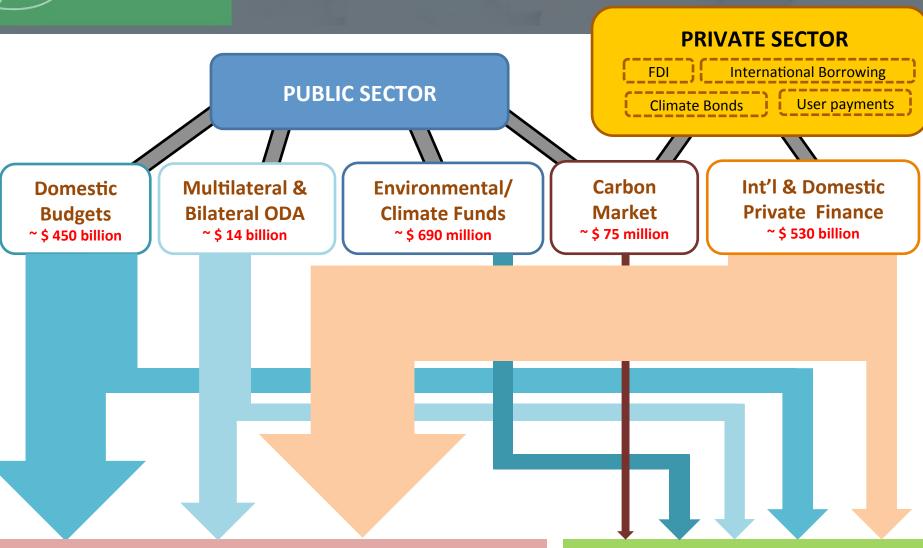


Asian Development Bank Spending





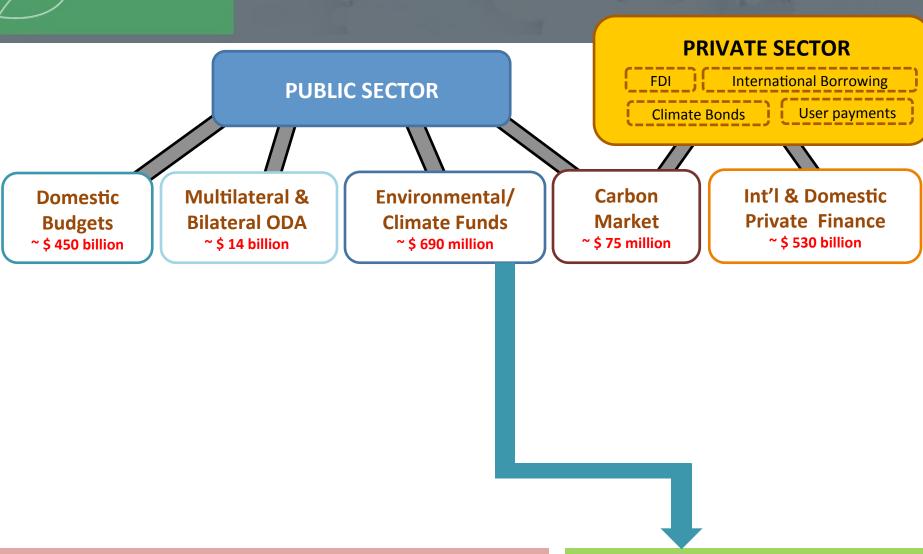
Sources: WRI; OECD CRS, 2010; CPI, 2012; UNFCCC, 2007; IMF GFS, 2011; OECD Stat.



Transport



Environmental/Climate Funds



Transport



Environmental/Climate Funds

*Estimated. Sources: GIZ, 2010; 2012 annual reports and related publications from each fund.

Name	Acronym	Year Created	Admin	Total Spending Approved	Total Spending on Transport	Proportion
MULTILATERAL						
Global Environment Facility	GEF	2010*	WB	\$452 million	\$292.5 million	6.5%
Clean Technology Fund	CTF	2008	WB	\$2.3 billion	\$256.4 million	10.9%
Global Climate Change Alliance	GCCA	2007	EC	\$368 million	\$10 million	2.7%
IDB Sustainable Energy and Climate Change Initiative	SECCI	2007	IDB	\$58.7 million	\$5.2 million**	8.9%
Nordic Development Fund	NDF	1989	Nordic Countries	174.9	10.7	6.1%
ADB Climate Change Fund	CCF	2008	ADB	\$50.1 million	4.7 million*	9.4%
ADB Clean Energy Fund (Partnership Facility)	CEF(PF)	2007	ADB	\$72.3 million	\$2.9 million	3.1%
Partnership for Market Readiness	PRM	2012	WB	\$5.25 million	\$3million	2.7%
BILATERAL						
International Climate Initiative	ICI	2008	BMU	\$900 million	\$20.49 million	2.3%
Japan Fast Start Fund Initiative (8 projects)	n/a	2009	JICA	\$10.8 billion	\$1.4 billion	13%



New Funding Channels

Fast-Start Finance (FSF)

- Pledge from UNFCCC Copenhagen Accords in 2010
- 36 developed countries to quickly put up \$30 billion
- Funds to be distributed through any funding source.
- Example: Japan's Fast Start Fund

Green Climate Fund (GCF)

- Goal of sufficient and predictable funding for mitigation/adaptation
- Public and private sector focused
- Aims to be operational in 2013
- Expected total budget of \$100 billion by 2020

Nationally Appropriate Mitigation Action (NAMA)

- Aims to encourage more mitigation action
- Flexible and reduces time/resource barriers to mitigation action.
- 3 types: unilateral, supported, and credited
- NAMA Facility (\$90 from UK and Germany to support NAMA activities)



How to access funds and facilities?

Climate Finance Options www.climatefinanceoptions.org

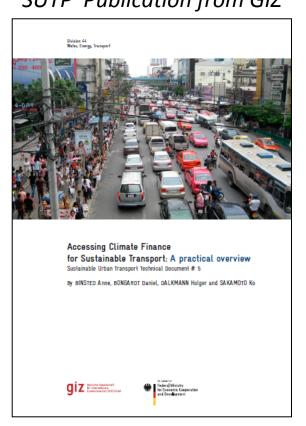
Climate Investment Funds www.climateinvestmentfunds.org

Climate Funds Update www.climatefundsupdate.org

World Bank Carbon Finance Unit www.wbcarbonfinance.org

UNFCCC Finance Portalwww.unfccc.int/financeportal

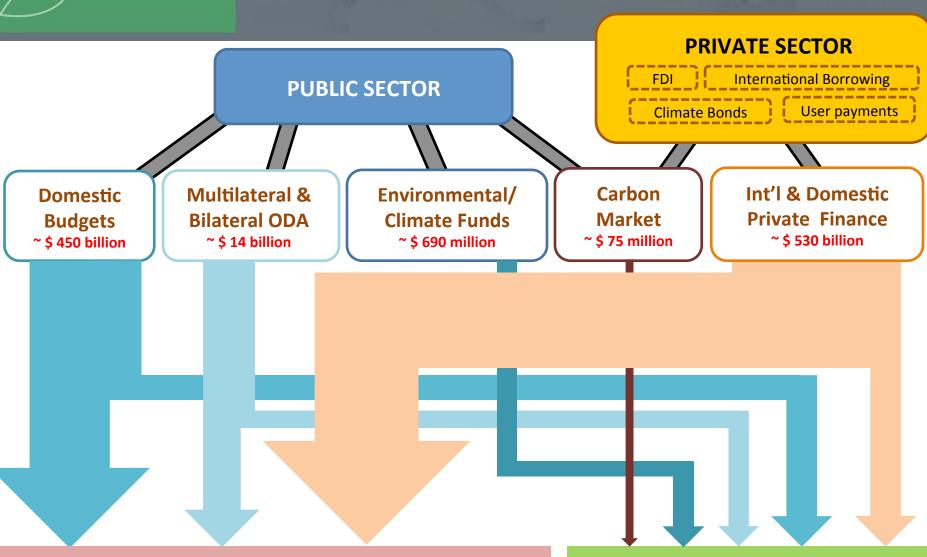
Accessing Climate Finance for Sustainable Transport SUTP Publication from GIZ





Sources: WRI; OECD CRS, 2010; CPI, 2012; UNFCCC, 2007; IMF GFS, 2011; OECD Stat.

Sustainable Transport



Transport



Carbon Market

PUBLIC SECTOR

PRIVATE SECTOR

FDI International Borrowing

Climate Bonds User payments

Domestic Budgets ~ \$ 450 billion Multilateral & Bilateral ODA ~ \$ 14 billion

Environmental/ Climate Funds ~ \$ 690 million Carbon
Market
~ \$ 75 million

Int'l & Domestic Private Finance ~ \$ 530 billion



Carbon Market

Clean Development Mechanism (CDM)

Annex I offset emissions by financing projects in Annex II
Carbon savings is monetized - depends on strong and accurate MRV
0.016% of the CDM supports low-carbon transport

Program of Activities (PoA)

To reduce transaction cost and difficulty of filing CDM projects Allows groups of projects to be evaluated and submitted together

Joint Implementation (JI)

Annex I countries buying offsets in other Annex I Very small and rarely transport-focused

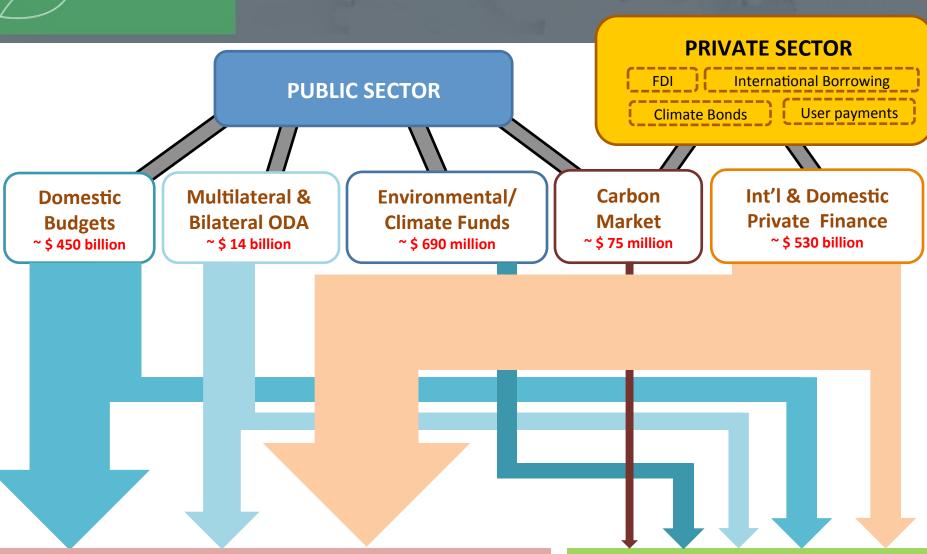
Voluntary Offsets and Emissions Trading

54 million tons of CO₂e traded in 2008

Unpopular for transport projects in Annex II countries



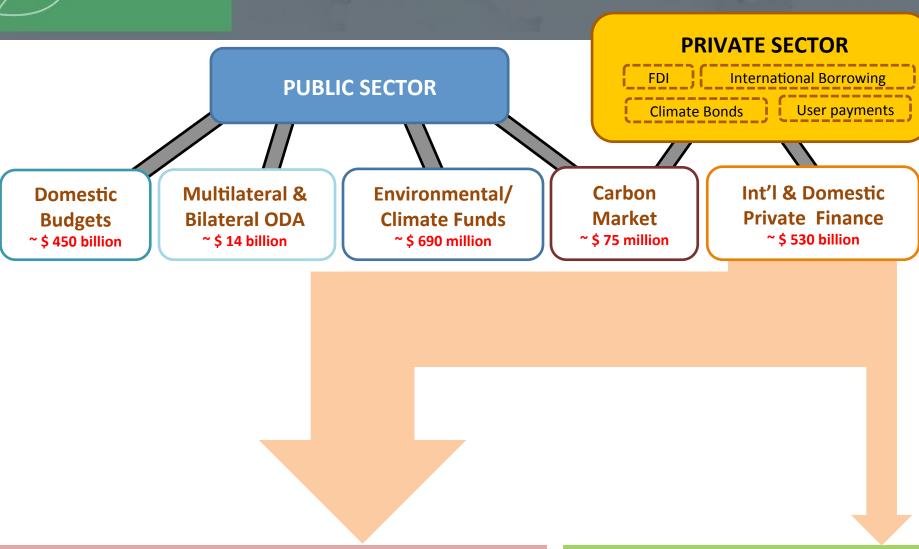
Sources: WRI; OECD CRS, 2010; CPI, 2012; UNFCCC, 2007; IMF GFS, 2011; OECD Stat.



Transport



Sources: WRI; OECD CRS, 2010; CPI, 2012; UNFCCC, 2007; IMF GFS, 2011; OECD Stat.



Transport



Private investment

DEBT

Commercial Banks
Cheapest debt available

Climate Bonds

\$174 billion per year (80% corporate), but only 3% in developing countries

EQUITY

Several are sustainability- or infrastructure-focused

Investment Funds

Venture Capital

Assume share of company

Institutional Investors

\$60 trillion is assets looking for low-risk investments

OTHER

Insurance CompaniesVested interest in

mitigation/adaptation

Local Users

Everyday transit riders often serve as primary payback mechanism