# Climate-Smart Development

Adding up the benefits of actions that help build prosperity, end poverty and combat climate change

Presented
by
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at

The CSE Anil Agarwal Dialogue March 12, 2015



# Objectives

- Develop a holistic, adaptable framework to show the multiple benefits of reducing emissions of several pollutants, including SLCPs
  - Help local and national policymakers, and others to better design and analyze policies and projects

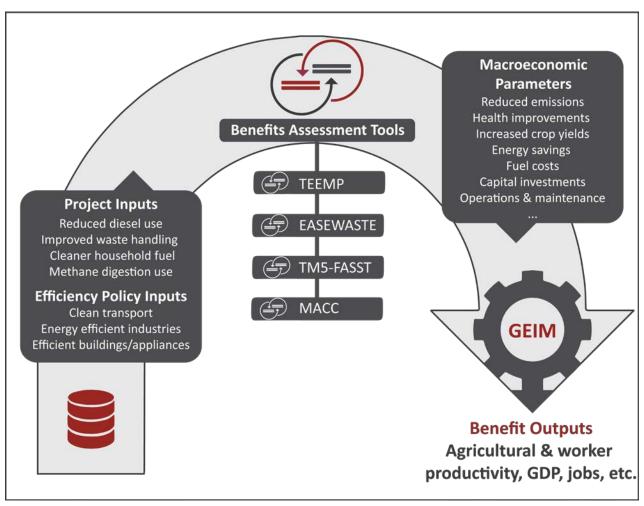
#### **KEY STEPS**

- Identify the full range of benefits
  - Local socioeconomic benefits
  - Global public goods benefits
- Identify appropriate benefits assessment tools
- Identify an appropriate macroeconomic tool
- Estimate significant benefits



## The Analytical Framework

#### Analytical Framework Used for the Policy and Project Case Studies





## Case studies

#### **Policies**

#### 1. Shift to Clean Transport



Improve efficiency and increased sales of EV/hybrids



Mode shifts to public transportation



Rubber to rail freight shift

#### 2. Energy Efficient Industry



Reduce carbon intensity in all sectors



Shift to cleaner fuels

#### 3. Energy Efficient Buildings



Improved energy intensity through electronics & appliances



Retrofits in commercial and residential



And in new construction

## **Projects**

#### 1. Sustainable Transport



1,000+ km of new bus rapid transit BRT in 20 cities In **INDIA**. Displaces more than 7% of current traffic

#### 2. Integrated Solid Waste Management



Finance mechanisms supported by the World Bank in **BRAZIL** could enable sanitary disposal of solid waste through sanitary landfills, composting, and biogas digestion

#### 3. Cleaner Cookstoves



A 20% public subsidy in **CHINA** for fuel-efficient, lower-emitting cookstoves and solar cookers helps to establish a robust and self-sustaining market for these products in rural households

#### 4. Biogas Digestion & PV in agriculture



Co-funding to support the increased demand for use of bio-digesters and photovoltaic systems to provide power at pig and dairy farms in **MEXICO** 

### Project Case Study: Sustainable Transport

## NDA TRANSIT PROJECT

Affordable, low emissions transportation connects people with jobs, education, and health care.

Well-designed bus rapid transit systems can also reduce congestion and pollution.

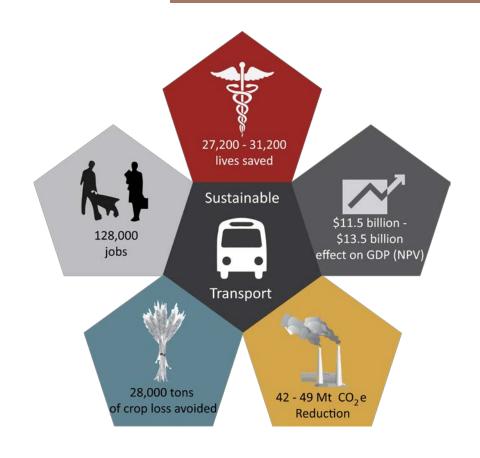
India has been building out public transit projects.

Using analysis of one project already underway,
the study looked at the impact of scaling up to
add 1,000 KM of new bus rapid transit lanes in 20
large Indian cities and displacing more than 7% of
traffic on those routes.



### Project Case Study: Sustainable Transport

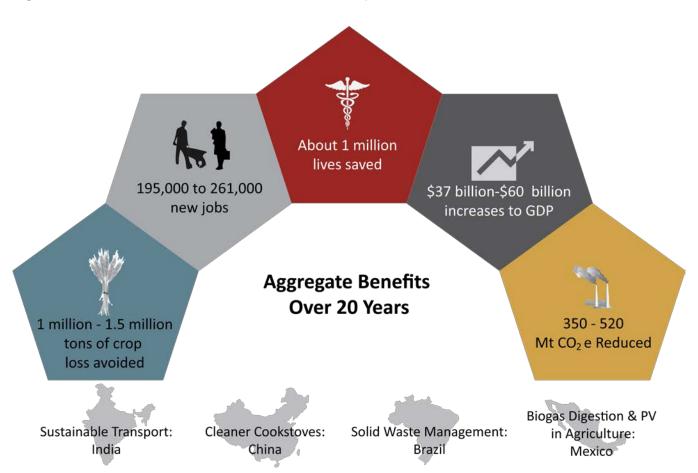
## INDIA TRANSIT PROJECT





## Project Case Studies: Overall Findings

Aggregate benefits estimated over 20 years of four development projects





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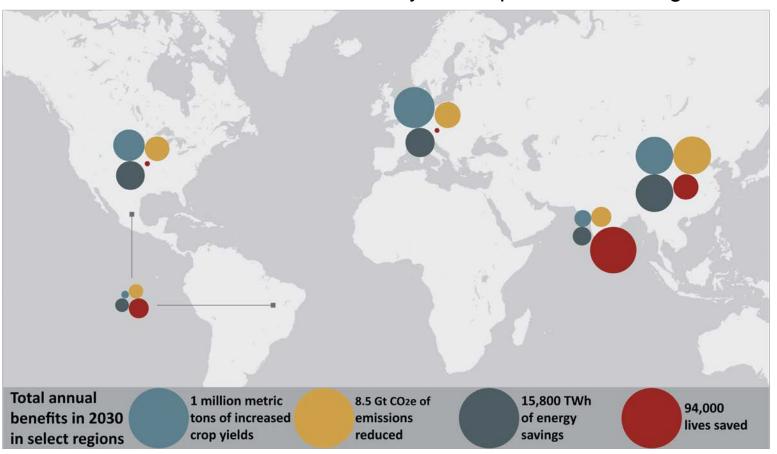
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## Policy Case Studies: Overall Findings

#### Total annual benefits in 2030 of key sector policies in six regions



Brazil and Mexico results are combined

# Summary

- Development projects, if implemented well, holds the promise of delivering multiple benefits, including economic growth and emission reductions.
- Similarly, policy actions that are aimed at reducing emissions can deliver health, agriculture and other socioeconomic benefits - that are integral to a broader development agenda.
- Quantifying and including these benefits, where possible, can reveal the broader value of projects and policies while enhancing the economic case for the intervention.
- Given the rising cost of inaction on climate change, it is imperative that the all benefits of project and policy interventions be included in economic analyses of projects and policies.
- This report shows that emission reductions and economic development can be complimentary to each other.







# Black Carbon Finance Study Group CCAC Finance Initiative





## **BCFSG** mandate

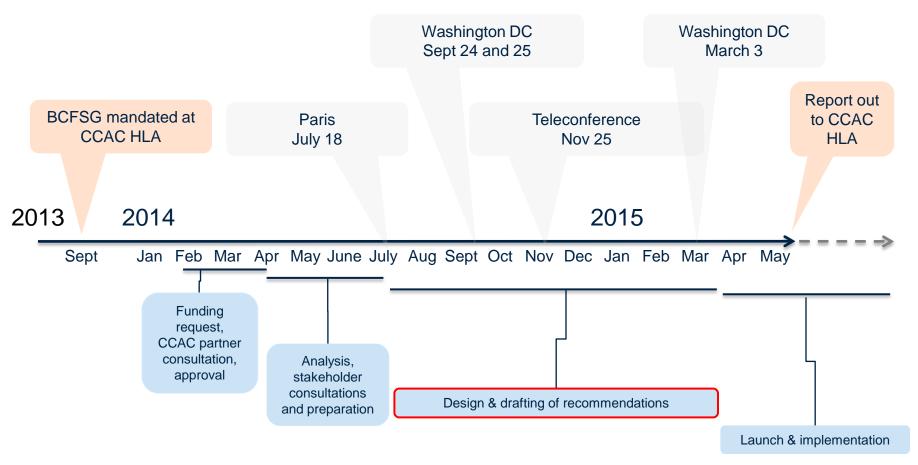
"To review potential strategies

for supporting financial flows

towards projects
that can significantly reduce
black carbon emissions"



## **BCFSG** timeline



The BCFSG is an activity of the CCAC Finance Initiative, led by the World Bank and UNEP FI.



## Key Messages

Finance for black carbon abatement (specifically) is urgently needed b/c BC unique in having a short-term impact on health and the climate.

BC does not behave like GHGs: approaches to financing BC abatement need to reflect that—by being context-specific, and by being developed specifically around the realities of BC.

Understanding of BC is sufficient both to justify and underpin immediate investment in a range of abatement activities.

Steps can be taken to build the foundations for scale-up over time.



## Report structured around 2 key opportunities

### Front matter

## Part 1:

Sector-specific / near-term

#### Near-term opportunity:

To direct financial flows to sectors where potential impact and momentum are high, to shift these to lower-black carbon emitting technologies in the near-term

Residential cooking

Diesel engines

Other priority sectors

## Part 2:

# Cross-cutting / longer-term

#### **Longer-term opportunity:**

To build the foundations for black carbon finance to unlock investment on a broader scale over time

Performance measurement

Development finance

## Thank You!

