

## More Climate Finance for Sustainable Transport

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Actions to reduce greenhouse gas (GHG) emissions to stabilize warming at 2°C, as agreed by the international community in 2009, will fall short if they do not include the transport sector. Transport is responsible for around 23% of global carbon dioxide emissions and emissions are expected to rise without further action to curb emission growth and invest in low carbon transport modes. Investment needs are estimated at around \$3 trillion to increase the sustainability of existing and new transport systems and to mitigate climate change over the 2015–35 period. This is in addition to existing annual investments estimated at \$1–2 trillion. Public sector financing while an important catalyst will not be sufficient to meet needs. The actions taken today to send the right policy signals, and establish the enabling institutions and regulations to attract the necessary private finance will be critical to support this transformation. Significant investment opportunities exist in public transport systems, vehicle efficiency improvement, and reducing the need for travel through demand management, regional development policies, and land use planning. As the international community embarks on the road towards CoP 21 in Paris, there is a case to be made for more climate finance flowing towards transport.

**\$553 million**



The amount of approved sustainable transport projects supported by CIF

GHG emissions are growing faster in transport than in any other sector. On-road passenger and freight activity can be expected to increase worldwide, by 2050 to more than two and a half times the level of activity in 2015, driven principally by urbanization and economic growth in developing countries without strong mitigation action to decouple growth and emission trends.

Large investments are urgently needed to increase the sustainability of existing and new transport systems and mitigate climate change. Making the right choices in transport is all the more important to avoid lock-in to unsustainable growth patterns in the future—today's fossil-fuel based investments

help lock-in a carbon intensive development path for the long term. Change will require financing from all available sources—public, private, bilateral and multilateral. So far, international climate finance flows to the transport sector has been small relative to other sectors, such as energy.

### Incentives for Investment

The multiple benefits that accrue with investments in low-carbon transport systems – such as improved health, air quality, congestion, and jobs – must be factored into decision-making processes. Focusing solely on the high costs of achieving GHG abatement through changes in transport technol-

ogy, like investments in fixed energy infrastructure, fails to recognize the local and global development benefits associated with improved transport systems. Accounting for these benefits sharply increases the incentives to invest into complex transport projects.

For example, policies mandating fuel-efficient vehicles, plus widespread adoption of electric and hybrid vehicles, public transport, more advanced biofuels, and more-efficient freight transportation in the European Union, Brazil, China, India, Mexico, and the United States are estimated to yield the following benefits by 2030<sup>1</sup>:

- Eliminate 2.4 billion tons of CO<sub>2</sub> emissions per year
- Save 20,000 lives
- Save 4,700 terawatt-hours of energy
- Yield inflation-adjusted (2010) monetized benefits of \$456 billion

Quantifying the development benefits associated with comprehensive demand-side transport developments at the project and program level is data intensive and requires complex measurement methodologies and frameworks to account for behavioral change and changes in energy consumption associated with millions of mobile emission sources.

Work is needed to develop the economic tools and measurement systems to better account for climate risks and opportunities, and reach consensus on a common framework for sustainable transport. This will help to better inform project developers about green solutions and finance opportunities and harness the gains from building a transport system that is low carbon and resilient.

## Opportunities for Climate Finance

**Nationwide.** National policies influence the speed of transition to a low-carbon, climate resilient transport system. Opportunities to shift investment to lower carbon pathways include reducing

harmful fuel subsidies and introducing pricing for auto use that induces shifts to low-carbon modes. Further gains will come from regulatory simplification; advancing new vehicle technology standards; and implementing maintenance and renovation programs to improve energy efficiency and safety in the existing vehicle fleet.

**Cities.** Around 70% of the global population will live in cities by 2050 and more than 90% of the increase will be in developing countries, so getting urban transport systems right is critical to avoid locking-in of unsustainable development patterns in the future. This can be supported through investments in improved public transport, urban planning, and car ownership and use. Most generally, funding must move away from focusing solely on a project-based approach to embrace a policy-based measures. This should include “avoid” strategies that reduce the need to travel.

**Countryside.** In many rural areas of developing countries, building all-weather roads increases incomes, work opportunities, agricultural production, school attendance, and health facility access, thus reducing poverty and mortality rates. Investments are needed to improve the resilience of road networks to short- and long-term climate change.

**Freight.** Maintaining economic growth while lowering the demand for on-road (and typically fossil-fuel based) freight transport is especially difficult. Emissions can be reduced by investing in industrial node and corridor development to create more efficient supply chains; shifting to rail, waterborne, and multimodal transport; raising efficiency standards on heavy-duty vehicles; and introducing voluntary green-freight approaches such as the U.S. Smartway system. “Avoid” strategies can also reduce the need to travel.

### ► For more information on this topic:

SLoCaT Climate Finance Transport Database:  
<http://www.slocat.net/news/1447>

CIF website:  
<http://www-cif.climateinvestmentfunds.org/>

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<sup>1</sup> World Bank and ClimateWorks Foundation, 2014, Climate-Smart Development, Adding up the benefits of actions that help build prosperity, end poverty and combat climate change.

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