ESCAP
Economic and Social Commission for Asia and the Pacific

Low Carbon Transport Financing Barriers and Challenges

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Introduction

US$ 2.6 Trillion annually
needed to achieve sustainable transport globally

US$ 1.56 Trillion annually
required to achieve sustainable transport in **Asia** and the **Pacific** (estimated based on population and urbanization rates)

Understanding the **barriers** and **challenges** in financing low carbon transport is crucial for sustainable development.





Barriers to Financing

The high initial costs and limited access to capital are major **financial** barriers for low carbon transport projects. Additionally, **policy uncertainties, lack of awareness and market challenges** hinder investment in sustainable transportation.

Barriers to Financing-Financial

Budget Constraints: National governments often have **limited financial resources,** and **competing priorities** may overshadow investments in low carbon transport. Funding constraints can hinder the implementation of ambitious projects and limit the scale of interventions.

Limited Access to Capital: National governments may face challenges **accessing affordable capital** for large-scale infrastructure projects, particularly in developing countries with underdeveloped financial markets or high borrowing costs.

Barriers to Financing-Financial

Fiscal Policy Challenges: Fiscal policies, such as fuel excise tax, can create disincentives for transitioning to low carbon transport. **Reforming these policies while maintaining fiscal sustainability** requires careful planning and political will.

Project Viability and Risk: Governments must assess the economic viability and manage the risks associated with low carbon transport projects, including technological uncertainties, demand forecasting, and regulatory changes. **Perceived risks can deter private sector participation and increase financing costs.**

Financial Instruments



Innovative **financial instruments** such as green bonds and carbon markets can provide the necessary capital for low carbon transport initiatives. **Public-private partnerships** and **investment incentives** can also play a crucial role in funding sustainable transportation projects.

Subsidies and Incentives



Countries with the highest EV ownership rates such as China and Norway successfully drove the adoption of EVs through a combination of **tax breaks, toll exemptions**, **incentives for manufacturers** and other **incentives such as free parking and access to bus lanes**. The governments' commitment to supporting EV infrastructure development has further facilitated the transition to low carbon transport.

Coalition Financing



The **ZEBRA** (Zero Emission Bus Rapid-deployment Accelerator) Partnership accelerates the deployment of zero emission buses in major Latin American cities and has secured more than **US$ 1 billion** from a **coalition of financers** and has **partnered** with a significant number of **manufacturers** to **ensure production** of enough buses to meet demand.

Innovative Financing



India's Faster Adoption and Manufacturing of Hybrid and Electric Vehicles (**FAME**) **scheme provides subsidies and incentives** for the purchase of electric vehicles including **e-rickshaws**. **Microfinance institutions and NGOs** offer loans and financing options to e-rickshaw drivers. This has expanded e-rickshaw fleets, providing affordable and environmentally friendly transportation options for urban residents.

Barriers to Financing-Policy

Policy and Regulatory Frameworks: Inconsistent or fragmented policies and regulations across different government agencies or levels of government can create **uncertainty** for investors and **hinder** the development of a s**upportive investment environment** for low carbon transport.

Political Priorities: Political considerations may influence government spending decisions, with short-term electoral cycles often **prioritizing projects** that yield i**mmediate benefits** or **garner popular support** over **long-term, sustainable investments** in low carbon transport.

Barriers to Financing-Policy

Institutional Capacity: Building and managing low carbon transport infrastructure require strong institutional capacity in areas such as **project planning, procurement, and implementation**. Many governments may lack the expertise and resources needed to effectively **deliver complex low carbon transportation and infrastructure projects**.

Policy Support

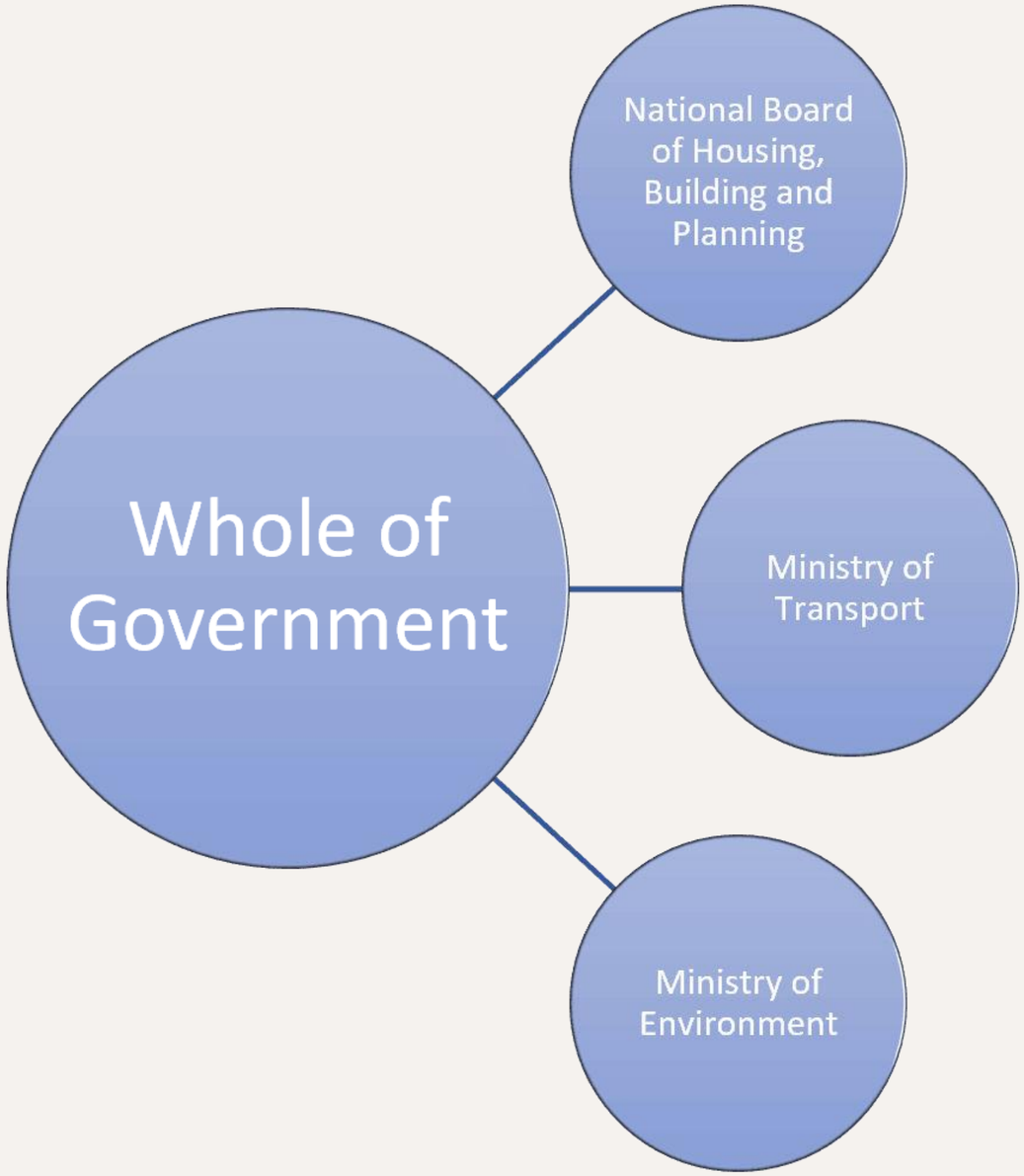
Strong **policy support** and **regulatory frameworks** are essential for creating an enabling environment for low carbon transport financing.

Policy alignment through **collaboration** between ministries enables cohesive planning and implementation of strategies. This synergy streamlines resources, avoids duplication, and ensures a unified approach towards common goals.



Whole-of-Government

Countries such as Singapore, Republic of Korea, Japan and Sweden adopt a **"whole-of-government"** strategy, promoting **collaboration among ministries** to jointly create sustainable planning policies **integrating transportation, housing, and environmental aspects for comprehensive and cohesive governance.**



Multi-Level Collaboration

The Netherland's **Interdepartmental Program for Sustainable Urban Development** coordinates policies related to urban planning, transportation, housing, and environmental sustainability. At the local level, **municipalities work closely with regional and national authorities** to develop integrated spatial plans that consider multiple policy objectives, such as promoting cycling, reducing car dependency, and enhancing public spaces.



Barriers to Financing-Market

Public Acceptance and Stakeholder Engagement: Building public support for low carbon transport policies and projects requires **effective communication, stakeholder engagement**, and addressing concerns related to affordability, convenience, and reliability.

Effective campaigns address concerns related to affordability, convenience, and reliability through effective communication and stakeholder engagement.

Effective campaigns include:

- Name and Theme
- Public Demonstration Events
- Educational Workshops and Seminars
- Partnerships with Schools and Universitie
- Media Campaign/Public Outreach

SWITCH DELHI

Delhi's #IrideEbus #SwitchDelhi selfie to win an iPad

Seoul's Green Bus, Clean City



CHISPA
CLEAN BUSES | HEALTHY NIÑOS
MARYLAND LEAGUE OF CONSERVATION VOTERS

Chispa's Clean Buses for Healthy Niños

Thank You!



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