

ASEAN 10 Countries EV Forum & the 5TH International Electric Vehicle Expo
1-6 May 2018, Jeju, South Korea

ADB Transport Sector : e-Mobility Policy

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Sustainable Development and Climate Change Development

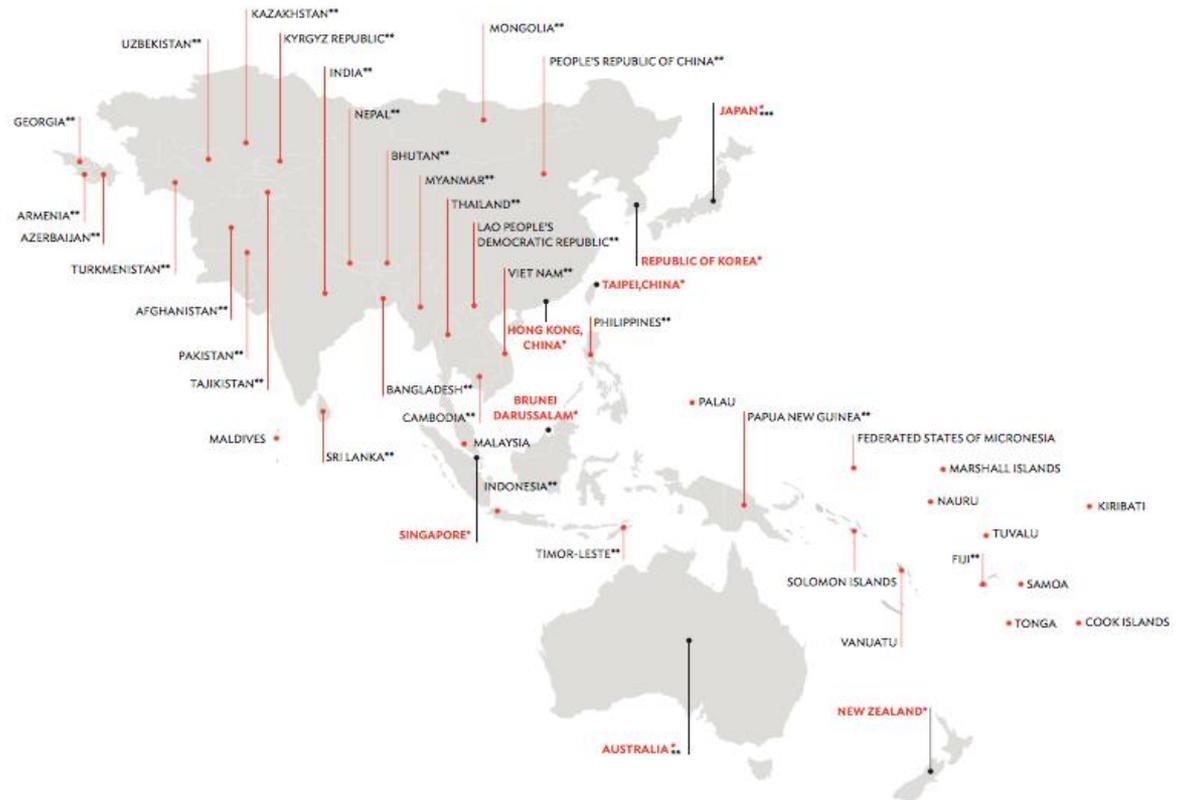
ASIAN DEVELOPMENT BANK

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Web Site: www.adb.org

The Asian Development Bank (ADB) is an international development finance institution dedicated to reducing poverty in Asia and the Pacific through loans, grants, research and technical assistance to its member countries, as well as investments in private companies.

67 members
of which 48 are from within
Asia and the Pacific and 19
outside.



Nonregional Members (19 countries)

Austria, Belgium, Canada, Denmark, Finland, France, Germany***, Ireland, Italy, Luxembourg, The Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom, United States***

* Advanced economies and/or graduated developing members.

** Resident Mission/Regional Office.

*** Representative Office.

ADB Policy Direction



SUSTAINABLE DEVELOPMENT GOALS



Goal 11.

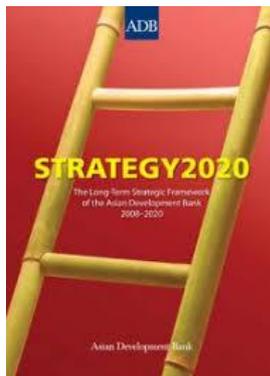
Make cities and human settlements inclusive, safe, resilient and sustainable

Goal 13.

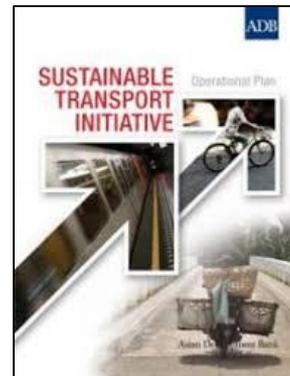
Take urgent action to combat climate change and its impacts



United Nations
Climate Change



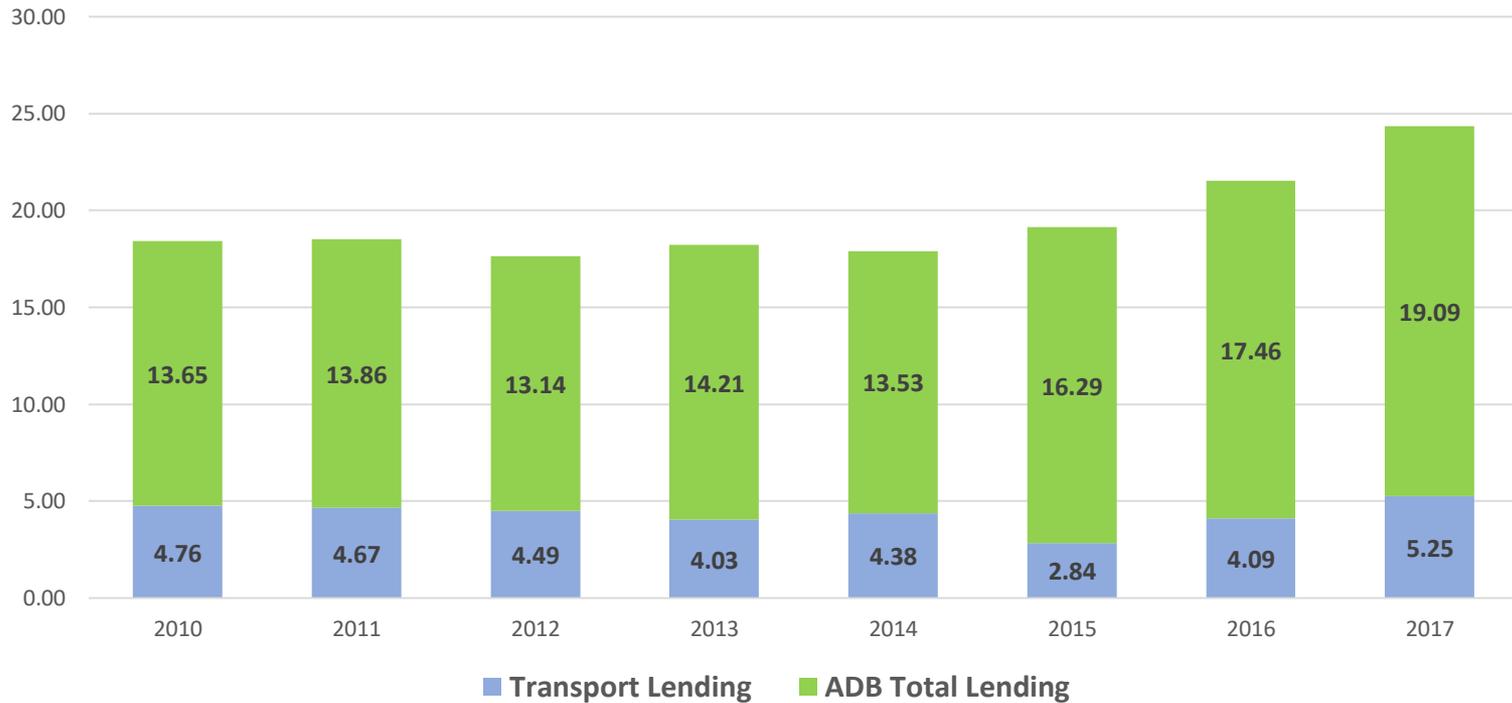
- Inclusive Economic Growth
- Environmentally Sustainable Growth
- Regional Integration



- Urban transport
- Addressing climate change
- Cross-border transport & logistics
- Road safety & social sustainability

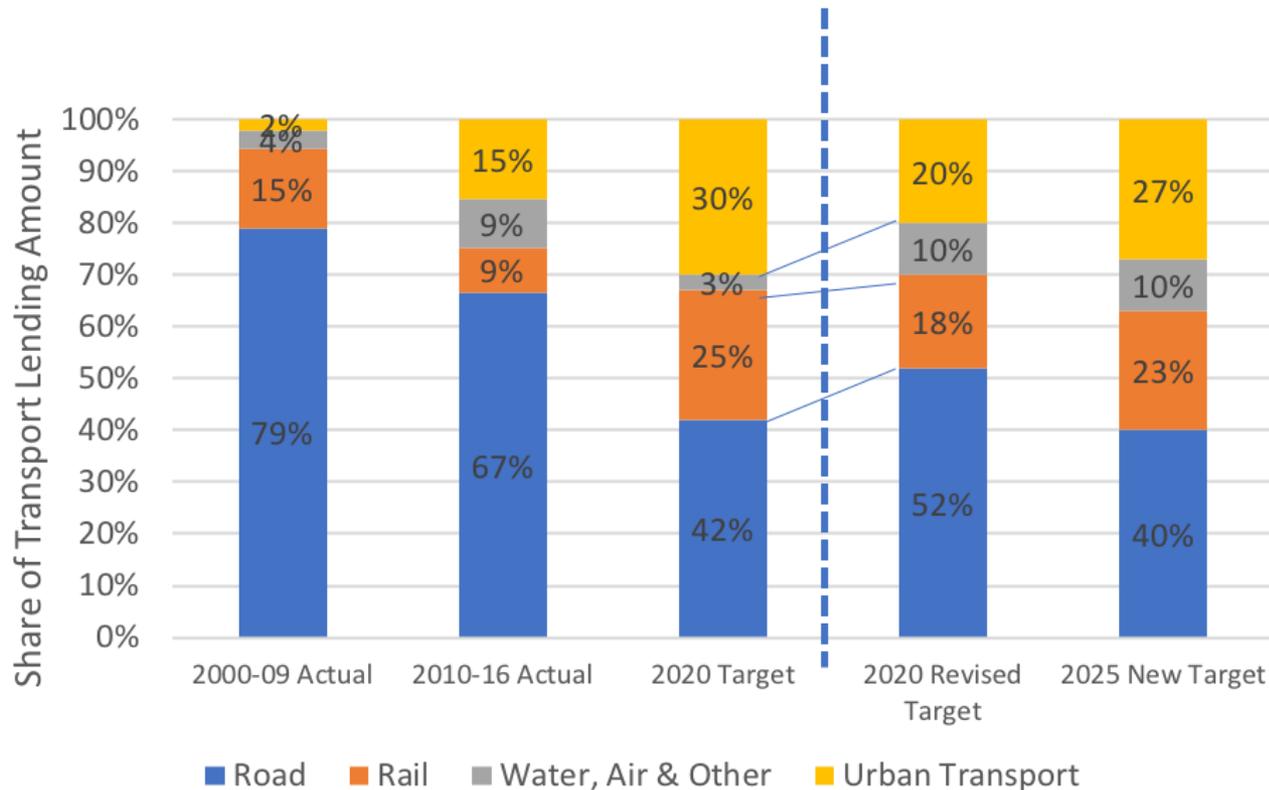
ADB Operation Amount

**ADB Lending 2010-2017
(Billion, US\$)**



Progress vs Targets(STI-MTR 2010-2016)

- 2010–16: generally good overall progress but more to do
- STI-OP MTR provides 2018-2020 STI-OP Targets and Directions

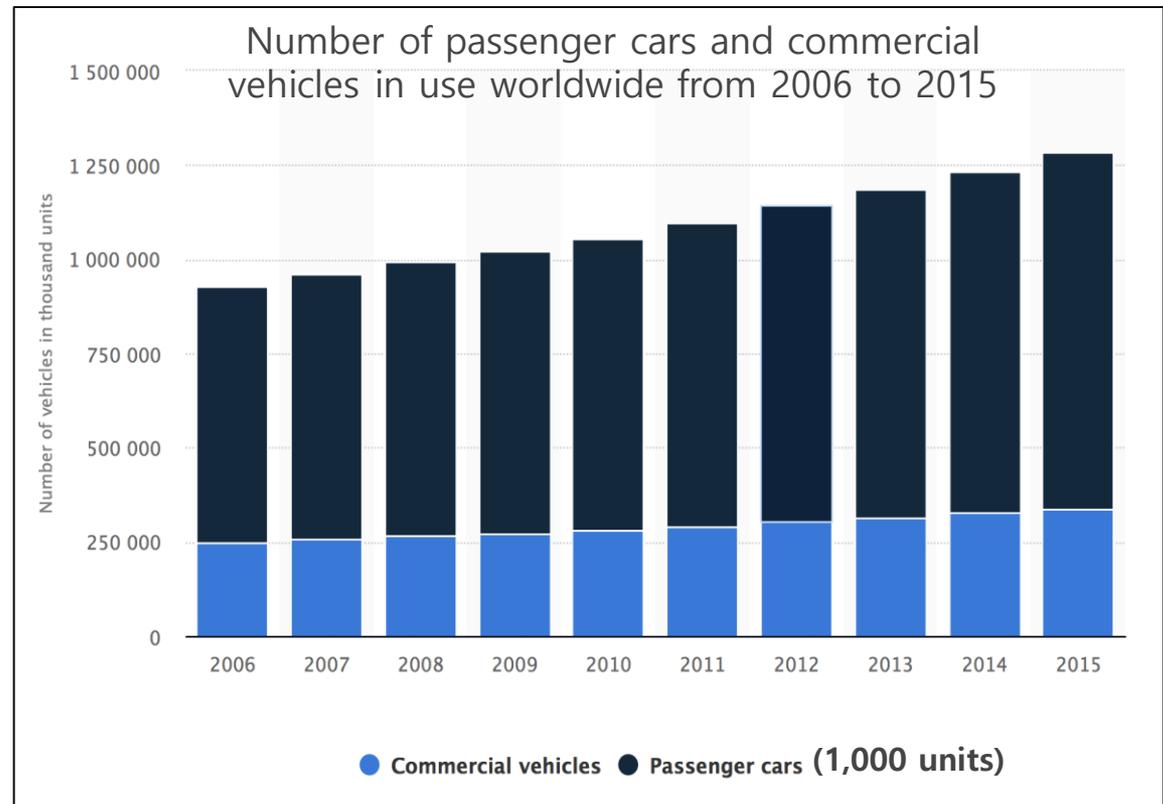


Motorization in the World

In 2015, around 947 million passenger cars and 335 million commercial vehicles were in operation worldwide.

The number of cars worldwide is set to double by 2040

Rapid increase in Developing Countries in ASIA



- **Strategy for Low Carbon Commercial Vehicles in Bhutan**

TA-8572 Action on Climate Change in South Asia 2017

- **NAMAs: Nationally Appropriate Mitigation Actions : Mongolia, Dhaka**

Negotiations pursuant to the Bali Action Plan concluded at COP 18 in Doha. As a part of the agreed outcome, developing country Parties will take **Nationally Appropriate Mitigation Actions (NAMAs)** in the context of sustainable development.

- **Greening Fiji's Bus Fleet With bus renewal and scrappage plan**

Part of ADB's support COP 23 for Fiji

- **Melaka, Malaysia, Smart City Study : e-bus operation plan**

Improving Clean Bus Operations and Management in China (ADB TA : GEF Grant) 2017-2018

This report is produced has as target to improve selection, management, and operation of New Energy Buses¹ (NEBs) through a guidebook for selection and operations (including bus dispatch and maintenance) of NEBs.

PART I : NEW ENERGY BUS SELECTION

1. NEBs in Chinese Cities: Impact and Scope for Improvement
2. Cities Report on Improving Clean Bus Operations and Management Project
3. Evaluation Report on Popularization and Application of NEBs in China

PART II : BUS SCHEDULING AND DISPATCHING

4. Improving Clean Bus Operation and Management in 5 Chinese Cities
5. Evaluation report on Improving Clean Bus Operations and Management in China

PART III : BUS OPERATIONS AND MAINTENANCE

6. Improving Bus Maintenance Management
7. Improving Clean Bus Operations and Management

- **PRC: LOAN PROGRAM FOR CLEAN BUS LEASING - FAR EAST HORIZON LIMITED**
\$100 million loan to the financial intermediary for procuring clean buses
- **PRC: Shandong Spring City Green Modern Trolley Bus Demonstration**
220 trolleybus and infrastructure procurement
- **PRC : Jiangxi Fuzhou Sustainable Urban Transport : GEF grant for clean energy buses**
- **PRC : Jiangxi Jian Sustainable Urban Transport : : GEF grant for clean energy buses**
- **MON: Urban Transport Infrastructure Development Investment Program : Clean Bus procurement**

TA-9420 (REG): Implementation of Sustainable Transport for All (E-mobility)

Tasks and Outputs

- Review of global e-vehicle deployment;
- Preliminary assessment of EVs potential use in Asia and the Pacific;
- Design EV penetration scenarios and develop EV business models;
- Undertake sustainable impact analysis;
- Propose policy recommendations.

Report Outline

- The Environment
- The Market
- The Economics
- Energy Impact
- Policies and Business Strategies
- Stars
- Preliminary Assessment of EVs Potential in Asia and the Pacific
- Country Case Studies

Next Step : 2018-2019

In depth study and government support for e-mobility policy and financial support

- **E-Mobility is the trend in transport : supporting GHG and pollution emissions**
- **E-Mobility financing will grow : Governments and MDBs**
- **Technology : still need to cover larger vehicles**
- **Consumer reaction : Policy support and financial model**
- **Limitation of subsidy : Short-term subsidy, long-term market economy**
- **Business models : shared e-mobility, e-vehicle/charging station/battery**
- **Coupled with renewable energy development**



ADB TRANSPORT

Thank you.

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