

Work in Progress:

# NDC-Transport Initiative for Asia (NDC-TIA) Project

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FOR ASIA

## ABOUT NDC TRANSPORT INITIATIVE FOR ASIA

Globally, climate change is progressing and increasingly impacting the ecosystems and the livelihood of people. The transport sector has become a major source of air pollution around the world, especially in Asian countries. To reach the goals of the Paris Agreement, ambitious measures are needed to mitigate emissions.

The "Nationally Determined Contribution - Transport Initiative for Asia (NDC-TIA)" program, funded by the International Climate Initiative (IKI), is a joint project of seven organisations and will engage in China, India, and Vietnam. It aims at promoting a comprehensive approach on decarbonizing transport. The key project goal for the China component is to support the Chinese partners on national and sub-national levels in carrying out the essential technical research and capacity building needed for medium- and long-term emission reduction strategies and major emission

reduction policies for greenhouse gases (GHGs) and air pollutants in the transport sector. To achieve the goal, the China component provides capacity building, policy exchange and personnel training to Chinese policy makers and partners. With the strategic guidance from the Ministry of Ecology and Environment of the People's Republic of China (MEE), the China component will be jointly implemented by the World Resources Institute (WRI), the International Council on Clean Transportation (ICCT), Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, and Agora Verkehrswende, in close collaboration with the Department of Ecology and Environment of Guangdong Province, and Chinese domestic research agencies including the Vehicle Emission Control Center (VECC) and the National Center for Climate Change Strategy and International Cooperation (NCSC) of MEE.

## PROJECT OUTCOME

Since the start of the project, the China component of the NDC-TIA program has conducted in-depth collaboration with our local partners and has achieved fruitful results aligned with the development of China's mid- and long-term GHG and air pollutant emission reduction strategies and major emission reduction policies, and the demands of the MEE with regards to the project implementation and orientation of technical research and capacity building on both national and provincial levels.

### Research

Support was provided to Chinese partners on the technical research needed for future elaboration of major policy research on air pollutants reduction and GHG emission mitigation in the transport sector. Key deliverables as listed below:

#### Opportunities and Pathway to Decarbonize China's Transportation Sector during the Fourteenth Five-Year Plan Period and Beyond

Implementing organization: ICCT

The study quantifies the GHG emission reduction potentials of a suite of clean transportation strategies to meet China's near- and long-term carbon peaking and neutrality targets for the transportation sector. The multi-strategy analysis encompasses vehicle efficiency, emissions regulations, electrification, modal shift policies, fuel standards and more, so that each agency will benefit from this analysis to determine targets within their authority areas.



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#### Towards zero emissions: Overview on China's Climate Pathway and Implications to the Transport Sector

Implementing organization: GIZ

This paper provides a general description of the role of the transport sector in achieving China's carbon peaking and neutrality goals. In addition, it aims to foster debate on the policies, technologies, measures, and partnerships needed to achieve those objectives. This discussion is not exhaustive, however. It focuses on just a few approaches and measures that can help achieve China's targets.



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#### Decarbonizing China's Road Transport Sector: Strategies toward Carbon Neutrality

Implementing organization: WRI

This study examines how China's road transport sector might be decarbonized by modelling. This study aims to inform China road transport sector's emission reduction target setting, identification of cost-effective measures that deliver on the sectoral emission reduction targets and identification of decarbonization measures with air pollution reduction co-benefits.



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#### Zero-Emission Logistic Vehicle Promotion Challenges and Experiences: Beijing Case Study

Implementing organization: WRI

The study uses Beijing—a city that leads China's urban logistic vehicle electrification—as an example, and surveyed logistic service providers, to identify challenges for the purchase, operation, and maintenance of electric logistic vehicles and provide recommendations for promoting zero-emission logistic vehicles.



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#### The Evolution of New Commercial Vehicles in China: A Retrospective Evaluation of Fuel Consumption Standards and Recommendations for the Future

Implementing organization: ICCT

The study evaluates historical CO2 emissions trends for commercial vehicles in China at fleet, market segment and OEM levels. It shows that historical CO2 emission reduction has been limited and a future technology-forcing regulation will be vital to the decarbonization of commercial vehicles.



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#### Measures for Reducing GHG Emissions from Motor Air Conditioning in China

Implementing organization: ICCT

This study intends to support a near-term policy window in China to phase out high global warming potential (GWP) refrigerants. It provides a comprehensive review of technologies, costs, policies in major markets, and recommendations to China in reducing GHG emissions from the air conditioning systems — an important non-tailpipe source of GHG emissions from motor vehicles.



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For information about the NDC-TIA project, please visit the project website:

### Mobile Air Conditioning System Series: Market Status and a Case Study of Electric Buses in China

Implementing organization: ICCT

This study focuses on reducing air-conditioning-related GHG emissions from electric buses. It evaluates the real-world energy consumption of using A/C buses operated in representative regions and concludes that these vehicles have great potentials of further GHG emission reduction by using higher-efficiency, low GWP A/C systems.



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### Events

The China component established a multi-dimensional communication and exchange platform and cooperation mechanism, organizing regular meetings and workshops with all stakeholders were organized to support the Chinese partners with capacity building and to facilitate policy dialogue in communication of project progress and achievements, as well as the conduction of personnel training. Key deliverables as listed below:

#### 2021 NDC-TIA-China Kick-Off Meeting

With participation of the BMU, MEE, the German Embassy in Beijing and other relevant project key stakeholders, the event marked the start of the project implementation.



[See more of the event](#)

#### 2021 National Advisory Platform Kick-Off and 1st Annual Meeting

The event aimed to ensure that the project key findings and messages reach the most relevant policy makers and stakeholders and provide support and/or guidance of project implementation and outreach.



[See more of the event](#)

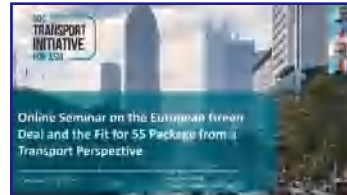
#### EVENT RECAP: 2021 NDC-TIA “Decarbonising Transport” Workshop Series in China

To better contribute international knowledge and best practice to the development of climate policies aiming to lower emissions in China’s transport sector, NDC-TIA project organized various workshops as part of the “National Determined Contributions Transport Initiative for Asia 2021 Event Series – Decarbonising Transport”. The event series took place from October to December 2021 and included following themes:

[See more of the event](#)



1. **“European Green Deal and the Fit for 55 Package from a Transport Perspective”**  
October 20, Beijing



2. Workshop on **“Climate Targets and Impacts in the Transport Sector in the European Union and China”**  
October 29, Beijing

3. **“Planning and Major Policies for Peaking Carbon Dioxide Emissions from Transportation and Carbon Neutrality”**  
November 23, Beijing



4. **“Provincial Transport Related GHG Decarbonization Experience Exchanges”**  
November 24, Beijing

## STAKEHOLDER PLATFORMS

The stakeholder platform at national and provincial level were respectively established in 2021 and used for developing the regulatory framework on GHG and transport-related air pollutant emissions.

### National Level Advisory Council

- DING Yan**, Chinese Research Academy of Environmental Sciences
- XU Honglei**, Transport Planning and Research Institute Ministry of Transport (TPRI)
- CHAI Qimin**, National Center for Climate Change Strategy and International Cooperation (NCSC)
- LIU Ying**, Beijing Transport Institute
- ZHAO Lijin**, China Society of Automotive Engineers (China SAE)
- ZHENG Tianlei**, China Automotive Technology and Research Center Co., Ltd.
- WU Ye**, Tsinghua University
- GONG Huiming**, Energy Foundation

### Provincial Level Advisory Council (Guangdong Province)

- GUO Jie**, Transport Development Center, China Academy of Transportation Sciences
- MA Dong**, Chinese Research Academy of Environmental Sciences
- ZENG Xuelan**, Guangdong Climate Change Center
- LIU Yonghong**, Sun Yat-sen University
- LIAO Cuiping**, Guangzhou Institute of Energy Conversion, Chinese Academy of Sciences
- LI Mengyue**, Guangdong Transport Planning Research Institute
- JIANG Jie**, Shenzhen Urban Transport Planning Center



TOWARDS ZERO EMISSION TRANSPORT IN CHINA

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