



## GIZ China Sustainable Transport Programme

**“Our mission is to foster climate-friendly sustainable transport in close cooperation with our partners in China.”**

Established in 2010, the Sustainable Transport team of GIZ in China cooperates with Chinese institutions on behalf of the German government to support their quest for the sustainable, low carbon development of the transport sector. In China, transport accounts for a significant share of total carbon emissions, contesting its sustainable development. Recognising the challenge of rapid urbanisation and motorisation, China is committed to limit the growth of its greenhouse gas (GHG) emissions. Implementing low carbon transport policies, China aims to achieve additional sustainability benefits, such as better air quality, reduced congestion and improved road safety. GIZ follows the Avoid-Shift-Improve (A-S-I) approach to promote alternative mobility solutions and develop sustainable transport systems: **Avoid** or reduce the need to travel, **shift** to or maintain the share of environmentally friendly modes and **improve** the energy efficiency of vehicles or lower the carbon content in fuels. In China, we mainly work in four areas:

1. Climate change mitigation strategies
2. Electro-mobility and alternative fuels
3. Green logistics
4. Urban transport

Within these areas, we cooperate with our Chinese partners on the design and implementation of measures, strategies and universal standards for energy efficiency,

environmental protection, and climate change mitigation in China's transport sector. An important cross-cutting theme in our work is the quantification of greenhouse gas emissions and the assessment of emission reduction potentials of policies and measures.

The basis of our cooperation is to assess problems and develop solutions jointly with our Chinese counterparts and with the help of international experts. GIZ thus facilitates a continuous expert exchange between Chinese, German and international experts to discuss scenarios for China's future development. The sustainable transport programme engages in policy dialogues with decision makers of the Chinese and German government as well as local transport authorities. In partnership with our Chinese counterparts we develop policy recommendations based on scientific research, best practice reviews and expert discussions. We host workshops and arrange study tours to identify feasible solutions and encourage mutual learning.

### Follow us

- » [www.sustainabletransport.org](http://www.sustainabletransport.org)
- » <https://twitter.com/@giztransportCN>
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- » WeChat-ID: sustainabletransport

## Climate Change



Climate change is a global challenge. It requires determined action from stakeholders in all parts of the world, but in particular from those responsible for the largest past and present greenhouse gas emissions. The transport sector contributes more than a quarter of global energy-related CO<sub>2</sub> emissions. While many other sectors have begun to level out or reduce their emissions, global transport emissions continue to grow at a rapid pace and an absolute peak is not yet in sight. Especially in China unprecedented economic growth and urbanisation have led to mind-boggling growth rates of individual motorised transport, as well as freight transport. Over the last five years, the growth rate of private vehicle ownership averaged 28% per year. As key actors in the global economy and community of nations, China and Germany cooperate to develop a sustainable low carbon transport sector. GIZ supports Chinese national and local authorities and policy institutes in developing mitigation strategies and policies based on emission quantification and policy analysis.

### » We offer technical expertise and support on:

- Developing holistic sector strategies based on scientific analysis
- Developing national transport scenarios
- Designing urban transport mitigation policies and measures
- Accounting past, present and future GHG emissions at the city level



“The cooperative development of transport emission scenarios for China between German and Chinese researchers and local planners provides an improved knowledge base for China’s decision makers. It is an important element in the Sino-German cooperation on climate change.”

**Jiang Kejun**  
Director, Energy System Analysis and Market Analysis Division, Energy Research Institute

## Electro-mobility



China’s continuously growing traffic volume, especially in individual transport, not only causes environmental concerns, it also puts pressure on China to address its strong dependence on oil imports. The Chinese government promotes the development of electro-mobility and alternative fuels as a means to decrease this dependency and increase energy efficiency in the transport sector. With zero tailpipe emissions electric vehicles also have strong potential to improve urban air quality. To be sustainable electro-mobility needs to be both environmentally friendly and safe. This is not only about electric vehicles (EVs). It also means fostering renewable energies in the national grid and designing integrated strategies for charging and maintaining electric vehicles. Innovative recycling plans and new mobility concepts can enhance the environmental impact of electric vehicles over their life cycle.

### » We offer technical expertise and support on:

- Scenario development for environmental and climate accounting
- Strategies to integrate EVs into sustainable urban transport systems
- Integration of EVs into fuel economy standards
- Concepts for battery recycling

[www.electro-mobility.cn](http://www.electro-mobility.cn)



“GIZ and CATARC have been working together in the field of electric mobility, charging infrastructure and further research on sustainable transport. The results are fruitful. I believe that our deep and broad cooperation has made very positive contributions to the development of electric mobility both in Germany and China, as well as worldwide.”

**Wu Zhixin**  
Vice President, China Automotive Technology and Research Center

## Green Logistics



China's rapidly growing economy has led to an extensive expansion of freight transport in the last decades. At the same time, freight transport has become a large emitter of both CO<sub>2</sub> and local pollutants. To reduce these emissions but at the same time ensure an optimal supply with goods and services to sustain economic growth is a major challenge for China. Yet, mitigation of the environmental impact in the freight and logistics sector is essential for a sustainable future.

There is great potential for enhancing logistics management, upgrading vehicle fleets and integrating information technology with logistics. Recognising this potential, the Ministry of Transport actively promotes efficiency improvements in the freight and logistics sector. GIZ introduces new concepts and standards to decision makers through trainings and other capacity development measures. Understanding policy requirements and innovation potentials of green logistics, organisations can review existing procedures and improve them regarding their climate impact and efficiency.

### » We offer technical expertise and support on:

- Cooperation concepts for logistic companies
- Establishing environmentally friendly standards
- Carbon foot printing and environmental assessments in logistics
- Promoting intermodal freight transport



“GIZ plays a very active role in promoting the Sino-German exchange and cooperation in the field of green logistics and urban transport. It provides strong support in drawing conclusions from German experience, promoting the environmentally sound transformation of the Chinese freight transport industry and thereby the efficiency of the sector.”

**Xu Yahua**  
Deputy Director General, Department of  
Road Transport, Ministry of Transport

## Urban Transport



China's economic growth and urbanisation over the past three decades have lifted millions out of poverty and improved the choices and wellbeing of many. At the same time, these processes have led to a massive increase in transport volume, making air pollution, congestion, traffic accidents and noise nuisance sad characteristics of Chinese metropolises that affect the newly gained quality of life. In addition, much of the growth in transport GHG emissions is generated in cities and urban growth is bound to continue for the next decades to come. Reducing GHG emissions from urban transport is therefore a necessity for sustainable development not only in Chinese cities but in the whole country and the world. Neither the provision of additional road infrastructure nor the development of new car technologies is sufficient to overcome local and global challenges. Technical solutions need to be complemented by implementing Transport Demand Management (TDM) – a strategy that includes a comprehensive set of measures to promote walking, cycling and public transport, while discouraging the use of private cars.

### » We offer technical expertise and support on:

- Building up emission inventories and GHG accounting in urban transport
- Transport Demand Management strategies
- Approaches to integrate urban and transport development
- Financing sustainable urban transport

[www.tdm-beijing.org](http://www.tdm-beijing.org)



“GIZ supports us to quantify the emissions of Beijing's transport sector in accordance with international standards. Adapting the methodology of the European HBEFA enables us to identify the most effective measures to reduce Beijing's transport emissions.”

**Guo Jifu**  
Director, Beijing Transport Research Center

## Our Services

- » We facilitate international dialogue:  
Exchange among government officials, workshops, conferences, study tours
- » We develop capacity:  
Trainings, joint assessments and studies, cooperative strategy development and access to key international experts
- » We build localised decision-making tools:  
Databases and emission models
- » We provide technical expertise:  
Policy consultancy and tool development
- » We guarantee high quality:  
Tailor-made solutions, effective implementation, transparent and internationally approved quality management



“ Colleagues from GIZ Sustainable Transport provided Chinese mayors with a unique learning opportunity on low carbon urban development in Germany. Efficient and smooth organisation tailored to the mayors’ needs.”

**Meng Fei**  
Programme Officer, Sustainable Cities,  
Energy Foundation

## Areas of Expertise

- » Carbon accounting and emissions evaluation
- » Climate protection and energy efficiency strategies
- » Electro-mobility and alternative fuels
- » Green freight and logistics
- » Sustainable urban transport

## Our Partners in China

- » National Development and Reform Commission (NDRC)
- » Ministry of Transport (MoT)
- » Ministry of Industry and Information Technology (MIIT)
- » Ministry of Science and Technology (MoST)
- » Urban transport authorities
- » Transport research institutes
- » Private sector

## Our Publications

- » International good practice reviews
- » Assessments of Chinese transport developments
- » Discussion papers and technical factsheets
- » Available at: [www.sustainabletransport.org](http://www.sustainabletransport.org)



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Registered offices  
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Sunflower Tower Room 860  
37 Maizidian Street, Chaoyang District  
100125 Beijing, P.R. China  
T +86 10 8527 5589-409  
F +86 10 8527 5591  
E [transport-china@giz.de](mailto:transport-china@giz.de)  
I [www.sustainabletransport.org](http://www.sustainabletransport.org)