



Europe-China Eco-Cities Link
中欧低碳生态城市合作项目

Case Study / China

Promotion of Electric Vehicles (EV) in China

Problem to resolve: Air pollution is a serious problem in several Chinese cities – first of all Beijing. This is why combustion free vehicles, mostly electric, has been pushed in this country over the last decade.

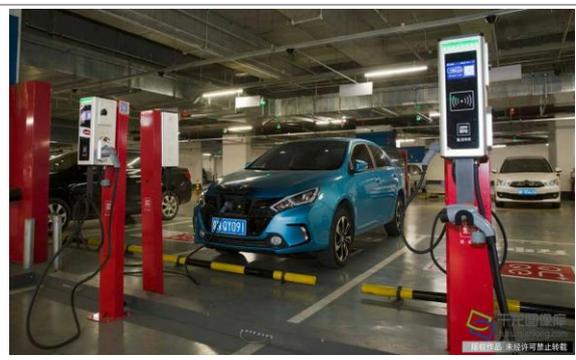
Counter strategy: EV deployment is considered capable of improving urban air quality by reducing on-road emissions for traffic-populated areas. Chinese policymakers are aware of the potential environmental benefits of EVs in lessening urban atmospheric pollution. Decade-long discussions regarding whether fleet electrification can deliver actual environmental benefits on a regional scale have been heated during recent years.

The Ministry of Transport sets forward an ambitious plan for electric vehicles in China. By 2020, 200,000 city buses and 100,000 Taxis shall be pure EVs, and the share of NEVs in public transport and city logistic shall be over 30%. Sales of electric vehicles have quadrupled in 2014 with 83,900 electric vehicles sold, compared to the previous year. Almost 110,000 electric vehicles in China have been approved. Official market forecasts suggest that the sales will increase 10 times by 2020.

Means: → Tool GT 3



Picture: E-Taxi in Shenzhen Photo: Daniel Bongardt



Asias's biggest e-car charging station¹



Examples for municipal Counter Strategies in China:

Resources and Tools 资源和工具:



Image: Dennis Zuev

Low-Speed EVs Are Driving High-Speed Urbanization In China²

As part of the effort to develop low-emission vehicles, national electric car manufacturers have enjoyed significant support from the Chinese government. Yet their sales are dwarfed by those of a pint-sized competitor: the low-speed electric vehicle. Despite the name, low-speed electric vehicles (LSEVs) aren't actually that slow. With a top speed of 60km/h, they're fast enough for getting around big and heavily congested cities. Most models are compact, resembling three-wheeled utility vehicles or golf buggies –a practical solution for the dire lack parking spaces that have become a significant problem more and more people take up driving in China.



Parking Guidebook for Beijing³

This guidebook provides detailed insights into Beijing's parking issues and offer recommendations to improve on-street and off-street parking policies and systems.

Parking Guidebook for Beijing. ITDP, 2015.



Case Study Beijing⁴ (Paul Barter, 2012)

This report is based on a case study of parking management in a residential compound in Beijing and offers suitable recommendations to parking management in Beijing. It highlights good parking management should be the first step to alleviate parking chaos even if there is a real parking shortage. It also offers six relevant parking policies which can be adapted to the local context in Beijing. Report for Beijing: Parking Management is Valuable.

Rapid International Review of Parking Decentralization and Governance Practice (as relevant to Beijing)

Paul A. Barter
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of the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) in China
and
the Beijing Transportation Research Center (BTRC).

Review of Parking Decentralization and Governance Practice for Beijing. (Paul Barter, 2012.)⁵

This report review of key issues in decentralization and metropolitan governance for large cities. It also reviews of some previous work on parking responsibilities for each level of government. In addition, it shows some insight on the balance of role between the private and public sectors in parking.



Parking Guidebook for Chinese Cities

Includes Chapter on Guangzhou

Parking Guidebook for Chinese Cities (ITDP, 2014.)⁶

This guidebook looks at international strategies from many regions and offers recommendations that can be adopted in any Chinese city experiencing increased motorization and perceived parking shortages. The guidebook offers eight strategies for cities to improve their parking situation. These recommendations illustrate how handling on-street and off-street parking in harmony with transportation policy objectives can help any city achieve its long-term goals. A special section focusing on Guangzhou serves as a case study of one particular Chinese city coming to grips with how to approach growing motorization and the seemingly unyielding demand for parking in the best possible way.



Parking Management Opportunities for Shenzhen

Parking Management Opportunities for Shenzhen.⁷

(Paul Barter, 2013.)

This report focuses on parking management for inner and central areas of Shenzhen. It discusses the approach to ease traffic congestion through parking policy is neither remove on-street parking nor build more parking spaces- first try parking management. It also mentioned price as a management tool to response to demand and pointed out the limitation of price cap in the local price control.



Parking Management for Shenzhen (Paul Barter, 2014)⁸

This report is a summary of feedback on Shenzhen parking reform in 2014. It includes the expert's comments on the results of the on-street parking pricing efforts so far, on the continuing discussion over the possible Off-Street Adjustment Fee, on certain other parking management questions that arose during the mission, as well as pointers to other relevant information resources.

Credentials:

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Sources

¹ Beijing: Largest Charging Station in Asia in Operation - Beijing LIVAT in Fengtai District. Source: <http://c.m.163.com/news/a/C6VOFS6C00964LDC.html?spss=newsapp&spsw=1>

² <https://cleantechnica.com/2017/01/06/low-speed-evs-driving-high-speed-urbanization-china/>

³ <https://www.itdp.org/wp-content/uploads/2015/03/Beijing-parking-ITDP-China.pdf>

⁴ <http://sustainabletransport.org/?wpdmdl=3084>

⁵ <http://sustainabletransport.org/?wpdmdl=3085>

⁶ http://www.itdp.org/wp-content/uploads/2014/07/Parking_Guidebook_for_Chinese_Cities.pdf

⁷ <http://sustainabletransport.org/?wpdmdl=3086>

⁸ <http://sustainabletransport.org/?wpdmdl=3006>