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RESEARCH INSTITUTE OF HIGHWAY MINISTRY OF TRANSPORT

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# Carsharing

## – A Contribution to Sustainable Urban Transport in China?

# 汽车共享

## – 助力中国可持续城市交通?

November 21, 2014  
2014年11月21日



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# Introducing Carsharing

## 什么是汽车租赁



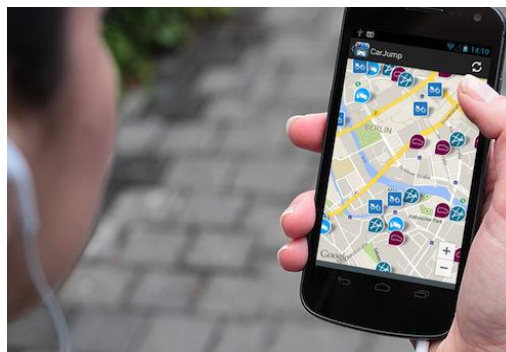
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# Introducing Carsharing

## 什么是汽车租赁

- ▶ Member-based mobility service  
会员制的汽车服务
- ▶ 24/7 on demand, 即时  
self-service, 自助  
instant access, 快速  
short-term 短期  
and pay-per-use vehicle access  
按使用付费的车辆使用





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## Station-Based Carsharing 固定站点汽车共享模式

- ▶ Designated carsharing stations  
专门的汽车共享服务站
- ▶ Round-trip usage  
需将车辆归还至初始租车点
- ▶ Booking via phone, internet or smartphone app  
通过电话、网络或智能手机客户端预约
- ▶ Pre-booking of vehicles  
可以对车辆进行提前预约
- ▶ Hour-/Distance-based billing  
按小时或里程计费





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## Free-Floating Carsharing 自由流动式汽车共享



RP-online

▶ Vehicles parked on public parking spaces within a defined service area  
共享车辆停放在指定的公共停放区

▶ One-way usage  
就近还车，无需归还至初始租车点

▶ Vehicle localization via smart phone app or internet  
通过智能手机客户端或互联网对车辆进行定位

▶ Short-term vehicle booking only (15-30 min)  
即时预约（提前15-30分钟）

▶ Minute-based billing (incl. parking fees)  
按分钟计费（包括停车费）

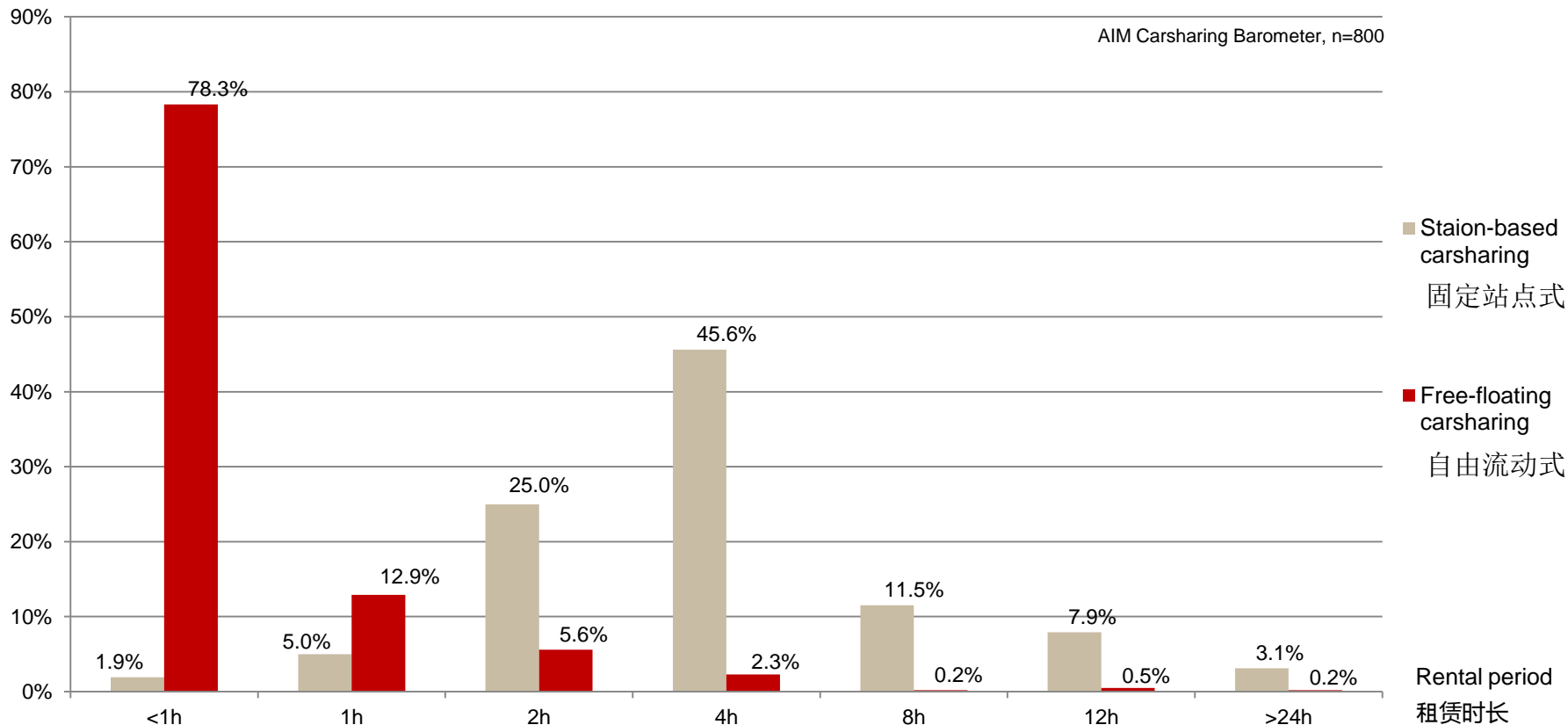


Berliner Morgenpost





## Station-Based OR Free-Floating? 固定站点 还是自由流动式?



**Station-Based AND Free-Floating! 两种模式同时需要!**



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## Carsharing Benefits – 汽车共享的益处

### Customers – 客户

- ▶ Shift from fixed costs to variable costs  
从固定成本转化为可变成本
- ▶ Cost savings below ~10.000 km annual mileage  
当客户的机动车行驶里程小于1万公里/年，汽车共享模式将更为经济
- ▶ Access to different vehicle types for different mobility needs  
可根据不同出行需求，使用不同汽车类型
- ▶ Avoiding to insure, maintain (and park) a vehicle  
无需对汽车保险、保养（以及停车）的投入

### Transport and Environment – 交通及环境

- ▶ Carsharing contributes to a reduction of private car ownership and VKT  
汽车共享降低了私家车拥有量以及机动车总行驶里程  
→ Impact on traffic volume, parking, space consumption and critical air pollutants  
对交通流量、停车、空间消耗和空气污染物的影响
- ▶ Positive impact > Negative impact  
积极影响 > 消极影响

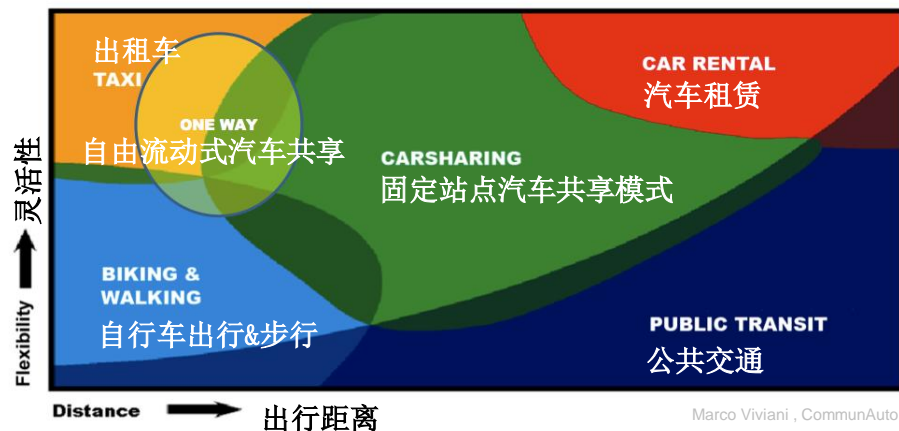


# Carsharing Does Not Work on Its Own!

## 汽车共享需要各方支持

- ▶▶ Carsharing can only work in combination with public and non-motorized transport  
汽车共享必须与公共交通和非机动车出行结合

- ▶▶ Carsharing users tend to shift their mobility behavior towards PT and NMT  
汽车共享会员通常会倾向于改变其出行行为，采用公共交通和非机动车出行

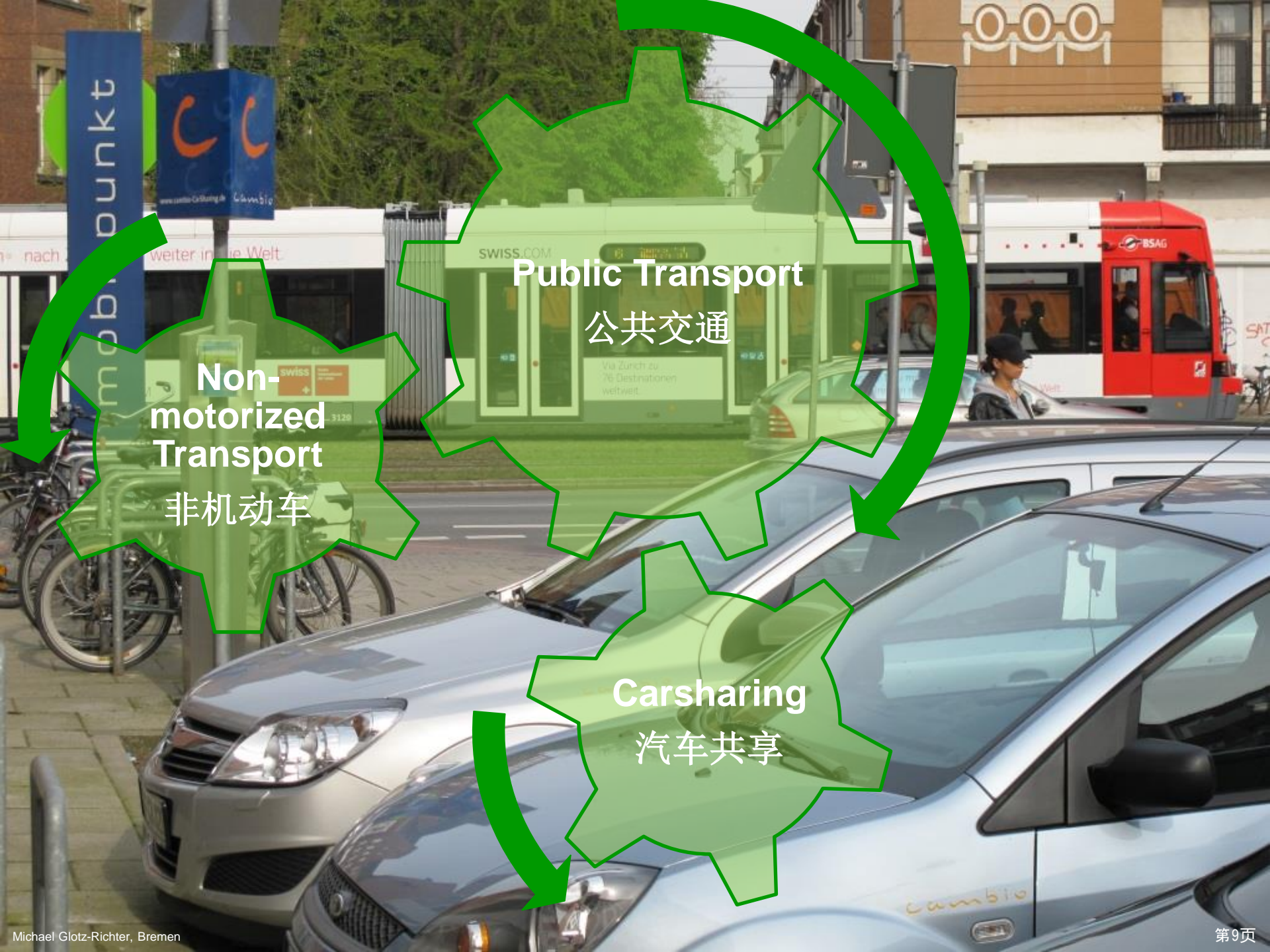


Marco Viviani, CommunAuto

- ▶▶ Carsharing facilitates a lifestyle without car ownership and rationalizes the understanding of mobility

汽车共享催生不以拥有机动车为目标的生活方式，并使人们产生对交通出行的理性思考





**Non-motorized Transport**  
非机动车

**Public Transport**  
公共交通

**Carsharing**  
汽车共享



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# Fruitful Conditions for Carsharing Systems

## 汽车共享租赁需要什么



# Fruitful Conditions for Carsharing Systems

## 汽车共享租赁需要什么

- ▶▶ High total cost of car ownership  
高额的车辆购置费用
- ▶▶ Well-developed public and non-motorized transport system  
成熟的公共交通和非机动车交通系统
- ▶▶ High utilization of public and non-motorized transport modes  
高比例绿色出行方式（地铁，公交，自行车，步行）
- ▶▶ Densely populated urban areas (with high demand for parking)  
城市人口密度过高（停车需求较大）
- ▶▶ Endorsement and support from governmental authorities  
政府的大力支持





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## Carsharing Related Policy Fields 汽车共享相关政策

### ▶▶ Parking management

停车管理措施



### ▶▶ Regulations and restrictions on individual transport

对私家车的限制和管理



### ▶▶ Business licensing

公司经营执照





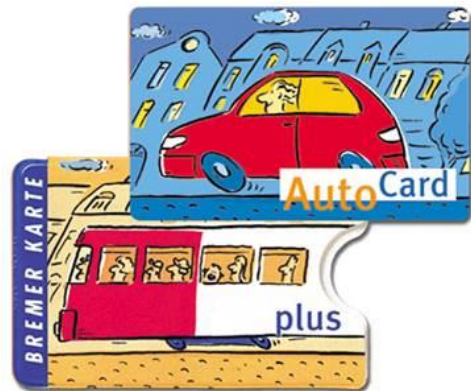


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## Governmental Support for Carsharing 汽车共享需要的政府支持

- ▶▶ Including carsharing in an overall transport and urban development strategy  
把汽车共享考虑进总的交通和城市发展战略
- ▶▶ Integrating carsharing in public transport system  
把汽车共享融合到公共交通系统
- ▶▶ Introducing supportive parking policies  
引进有效的停车政策
- ▶▶ Integrating carsharing in new urban real estate developments  
把汽车共享整合到新的城市房地产开发中
- ▶▶ Promotion and awareness raising  
宣传及意识普及



Michael Glotz-Richter, Bremen



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# Barriers 面临的障碍





## Differences of local regulations 地方性法规差异大

- ▶▶ In order to promote the development of car rental, all regions have to make their own local regulation about car rental.

纷纷制定地方性法规以规制各地汽车租赁市场。

- ▶▶ Not all the regions are on the same level, different regions have different standards, there is no uniformed standard.

由于各地区经济水平不一，立法者对汽车租赁立法的理解也不一致，这就导致各地制定出来的汽车租赁管理办法差异较大，没有形成统一体系。



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## Lack of supervising contents 监管内容缺失

- ▶▶ The carsharing regulation is not completed in China, the aim of supervising the market access is to refuse those applicants who do not qualify to meet the requirements.

而我国汽车共享法律体系不完善，市场准入的监管目的就是通过这一坚实的关卡，将那些不符合汽车共享服务的、可能会对承租人利益造成伤害的、会对这个行业有序发展造成危害的申请汽车共享行为的申请者拒之门外，以保证汽车共享高质量、高信誉。



## Lack of supervising contents 监管内容缺失

### Supervising of operation activities 经营活动过程的监管

- ▶▶ Operation activities supervising is continuously supervising the car rental enterprises' access into the market, mainly perform like confirmation of renting vehicles' security and legality.

市场经营活动过程的监管是监管部门对汽车共享企业市场准入后进行的持续性监督管理，主要体现在对租赁车辆的监管问题上。租赁车辆的监管主要表现为监管主体依法对租赁车辆的安全性和合法性进行确认。



## Lack of supervising contents 监管内容缺失

### Supervising of market cancellation 退出市场的监管

- ▶▶ At present, supervisory departments do not have exact legal basis to refer to those voluntary withdrawal or passive cancellation enterprises.

目前，对于主动退出和被动退出汽车租赁市场的企业，监管部门还没有明确的法律法规依据可以参照执行。



## Lack of credit system 信用体制缺失

- ▶▶ The current reality is that a thorough social credit system is not built yet, risk control problem of carsharing enterprises are relatively serious, for example:  
现实情况是，我国还没有建立完善的社会信用体系，在汽车共享企业风险控制方面，暴露出的问题比较严重，比如：
- ▶▶ Lessee do not pay the rental fee overdue.  
承租人逾期不支付租金问题
- ▶▶ The leasing car was detained because of the lessee carry out illegal activities during the leasing.  
租赁车辆在承租人使用期间被盗或因其实施从事不法活动被警方扣押问题
- ▶▶ Lessor is coerced to pay the penalty for the lessee.  
被迫代替承租人缴纳因其违反交通法规导致的违章罚款问题



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# Status Quo on Carsharing in China 中国汽车共享发展现状





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# Worldwide Carsharing Development

## 全球汽车共享的发展情况

### 北美

- 约15,800辆汽车
- 约909,000名成员

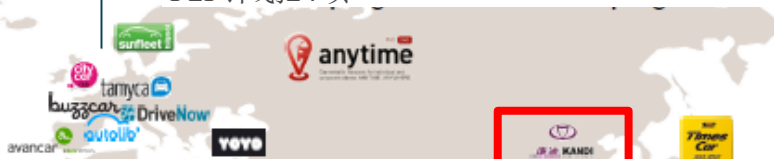
市场相对统一，2013年积极商业计划46项，P2P计划10项



### 欧洲

- 约20,500辆汽车
- 约692,000名成员

市场相对分散，2012年积极商业计划超过200项，P2P计划24项



### 亚洲

- 约6,200辆汽车
- 约161,000名成员



### 南美

- 约60辆汽车
- 约1,500名成员

汽车数量(2012年)      成员人数(2012年)



### 澳大利亚

- 约1,100辆汽车
- 约26,000名成员



来源: TSRC (伯克利); 弗若斯特沙利文公司; 德国汽车共享协会; 公司网站; 罗兰贝格



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## Carsharing Services in China 中国的汽车共享服务

### EduoAuto, Beijing

易多共享（北京）科技有限公司

- ▶▶ Station-based carsharing  
固定站点汽车共享
- ▶▶ First carsharing scheme in China (launch: 2009)  
中国的第一个汽车共享计划（于2009年推出）
- ▶▶ Cooperation with domestic car rental companies  
and car manufacturers facilitates expansion  
as of May 2013  
于2013年5月起与国内汽车租赁公司和汽车制造商  
密切合作，扩大汽车共享计划的规模。
- ▶▶ ~400 cars, 100 stations, 10 cities  
约400辆汽车，100个站点，10个城市
- ▶▶ [www.eduoauto.com](http://www.eduoauto.com)





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## Carsharing Services in China 中国的汽车共享服务

### China Car Clubs, Hangzhou 中国汽车俱乐部（杭州）

- ▶▶ Station-based carsharing  
固定站点汽车共享
- ▶▶ Initiated after the World EXPO 2010 in Shanghai (formerly known as EVnet)  
于上海2010年世博会结束后开始提供汽车共享服务  
(原名EVnet)
- ▶▶ ~140 cars, 80 stations, 6.000 members  
约140辆汽车，80个站点，6000名会员
- ▶▶ Tariffs for private, student and corporate customers  
私人、学生和公司客户须收取资费

▶▶ [www.ccclubs.com](http://www.ccclubs.com)





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## Carsharing Services in China 中国的汽车共享服务

**Wei Gong Jiao, Hangzhou**  
杭州微公交

- ▶▶ Based on a joint-venture between Kandi Electric Vehicles and Geely Holding Group  
康迪电动汽车有限公司与吉利控股集团成立合资企业，专门提供汽车共享服务
- ▶▶ Short-term car rental  
短期汽车租赁
- ▶▶ Launch: May 2013  
推出时间：2013年5月
- ▶▶ ~100 EVs, 3 stations  
约100辆电动汽车，3个站点
- ▶▶ [www.weigongjiao.net](http://www.weigongjiao.net)







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## Carsharing Services in China 中国的汽车共享服务

### car2share, Shenzhen 深圳戴姆勒Car2Share项目

- ▶ Station-based Corporate Carsharing  
固定站点企业汽车共享
- ▶ Launch: December 2013  
推出时间：2013年12月
- ▶ Operator: Daimler AG; Pilot partner: Tencent  
运营商：戴姆勒；试点合作伙伴：腾讯
- ▶ 30 Smart Fortwo mhd, 3 stations  
30辆Smart Fortwo MHD，3个站点
- ▶ [www.car2share.daihing.com](http://www.car2share.daihing.com)





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## Carsharing Services in China 中国的汽车共享服务

### GX Zuche, Yantai (Shandong Province) 山东烟台共享租车

▶ MIT Group launched the ever first carsharing pilot project in Yantai on 21<sup>st</sup> September 2014  
MIT集团于2014年9月21日  
在烟台发起首个汽车共享服务试点项目

▶ GX-Zuche provides 100 cars  
at 50 carsharing stations  
共享租车在50个汽车共享站点提供100辆汽车

▶ The launching event was followed by a workshop on carsharing in China with participants from:  
发布会在中国汽车共享研讨会结束之后举行，参与嘉宾来自：

Chinese Ministry of Transport

中国交通运输部

Chinese Road Transport Association

中国道路运输协会

Yantai Transportation Department

烟台交通运输局

Sinopec

中国石化

China Unicom

中国联通

GIZ China

德国国际合作机构北京办公室







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# GIZ Carsharing Activities

## GIZ汽车共享领域的项目活动



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## GIZ China – Carsharing Activities GIZ中国—汽车共享领域的项目活动

### Carsharing Study Tours

汽车共享考察

**August 2013**

**2013年8月**

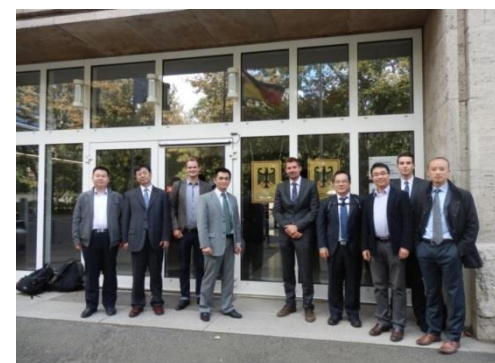
- ▶ Observation of best practice on carsharing concepts in Germany and the Netherlands  
考察德国和荷兰汽车共享的最佳实践
- ▶ Led by Chinese Ministry of Transport (MoT)  
由中国交通运输部组织



**September 2014**

**2014年9月**

- ▶ Observation of best practice on E-carsharing concepts in Germany and France  
考察德国和法国汽车共享的最佳实践
- ▶ Led by Chinese Ministry of Science and Technology (MoST)  
由中国科学技术部组织





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## GIZ China – Carsharing Activities GIZ中国—汽车共享领域的项目活动

### Corporate Carsharing 企业汽车共享 Pilot Project “VRent” 试点项目 “VRent”

- ▶ Corporate Carsharing implemented by Volkswagen New Mobility Services  
企业汽车共享项目由大众汽车新动力投资有限公司组织实施
- ▶ GIZ China joined in November 2013 as “Friendly User”  
GIZ中国于2013年11月作为“友好用户”加入企业汽车共享项目
- ▶ 12 months trial phase with 5 carsharing vehicles at Sunflower Tower Beijing  
项目试验阶段为期12个月，5辆汽车参与该阶段的汽车共享服务，试点区为北京盛福大厦
- ▶ GIZ employees can use the system for business and private trips  
GIZ员工可以将该系统用于公务出行和私人出行







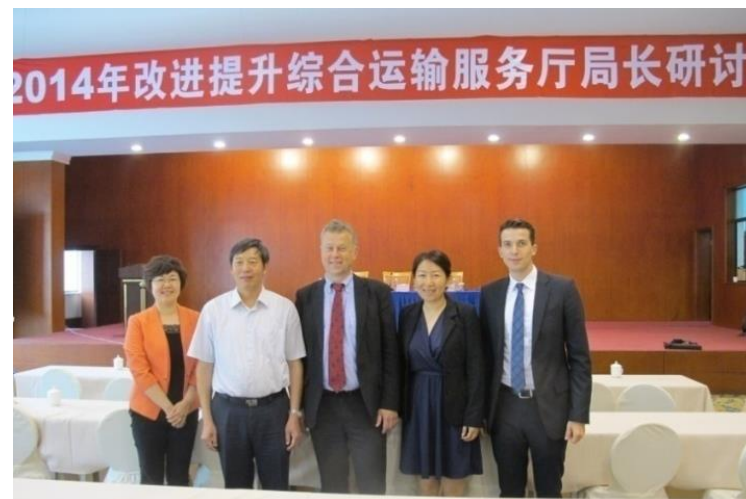
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## GIZ China – Carsharing Activities GIZ中国—汽车共享领域的项目活动

### Ministry of Transport Workshop 交通运输部研讨会

- ▶ 11 June 2014 in Zhenjiang, Jiangsu Province  
2014年6月11日于江苏镇江
- ▶ For the first time ever, the Chinese Ministry of Transport included carsharing its annual workshop  
中国交通运输部首次将汽车共享纳入年度研讨会
- ▶ Presentation on carsharing by Michael Glotz-Richter (Senator for Environment, Construction and Transport in Bremen, Germany)  
德国不莱梅市可持续交通处处长Michael Glotz-Richter在年度培训活动中就汽车共享作了报告
- ▶ 250 participants from MoT on provincial level and local level  
250名参会代表来自交通运输部与省市各级交通主管部门

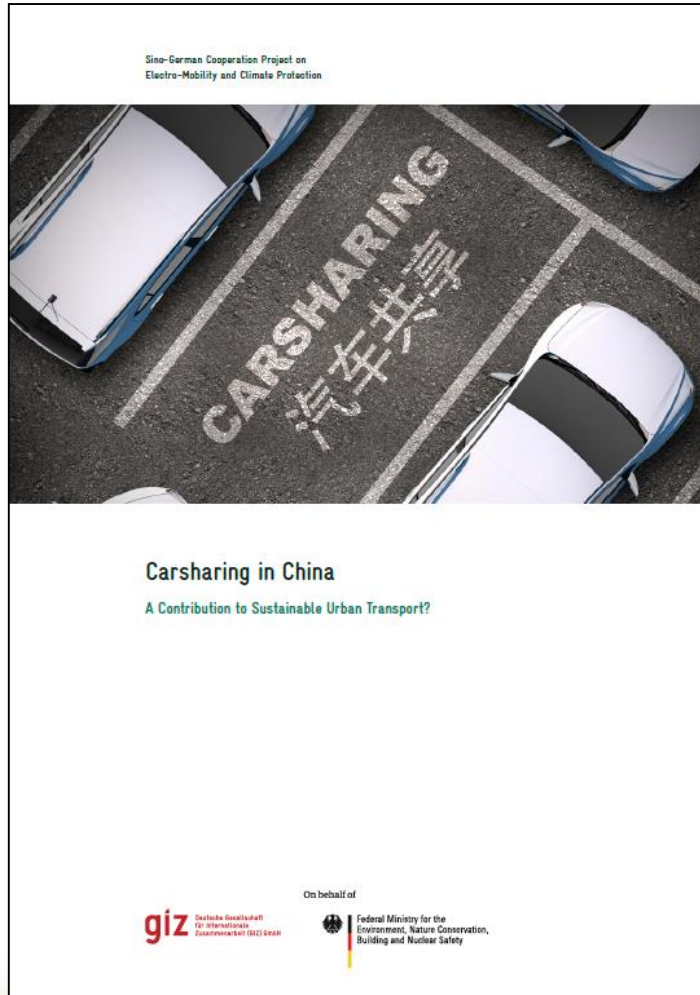




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## GIZ China – Carsharing Activities GIZ中国—汽车共享领域的项目活动



### GIZ Publication: GIZ出版物:

#### “Carsharing in China – A Contribution to Sustainable Urban Transport?”

“中国汽车共享—助力中国可持续城市交通？”

- ▶ Introduction to carsharing services  
介绍汽车共享服务
- ▶ Individual and social benefits of carsharing  
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# 谢谢! Thank you very much for your attention!

## ▶▶ Contact Details 联系方式

交通运输部公路科学研究院  
Research Institute of Highway  
(RIOH), Ministry of Transport

德国国际合作机构  
Deutsche Gesellschaft für Internationale  
Zusammenarbeit (GIZ) GmbH

**Wang Hao**  
Deputy Director  
h.wang@rioh.cn

**王浩**  
副主任

**Alexander Jung**  
Project Manager  
alexander.jung@giz.de

**杨阿里**  
项目经理

**Website 网址**  
[www.rioh.cn](http://www.rioh.cn)

**Website 网址**  
[www.electro-mobility.cn](http://www.electro-mobility.cn)  
[www.sustainabletransport.org](http://www.sustainabletransport.org)