



**Asia-Pacific
Economic Cooperation**


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Beijing New Energy Vehicle Demonstration Program


Purpose: Information
Submitted by: China



20th Automotive Dialogue
Beijing, China
22-25 April 2014



Asia-Pacific
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Beijing New Energy Vehicle Demonstration Program

(Information)

Beijing Electric Vehicle Co. Ltd

20th APEC Automotive Dialogue
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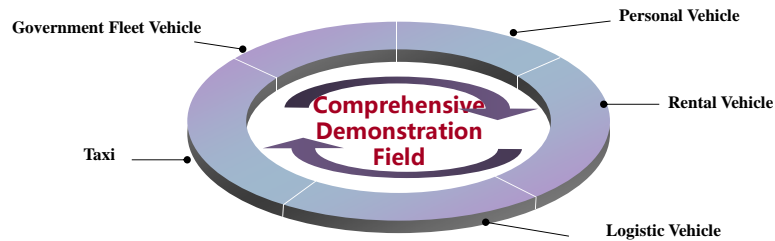
Outline

- I** General Information
- II** Different EV Applications
- III** Lessons Learned

General Information

Beijing local government has also introduced several action plans, including "Blue Sky Action Plan", "Clean Air Execution Plan", "Atmospheric Governance 863 Plan" and etc., to setup the detailed development plans, strategic plans and subsidy programs etc..

By the end of 2013, there were **6345** Electrical Vehicles running on the streets in Beijing, including taxi, logistic vehicle, government fleet vehicle and rental cars etc. The total running mileage is over **40million** km, the average daily mileage is over **80** km, and the maximum daily range reaches **330** km.



Different EV Applications-Taxi

General Info.

There are 1600 electrical taxis running at Daxin, Pingu, Miyun, Shunyi, Tongzhou and Changping surburn areas, total mileage is around 25M km, daily average mileage is 150km, maximum daily range is 330 km

Characteristics

- Because the limited electrical drive range, Taxi is running inside the defined area, slow charge is the most popular charging mode, with a few fast charging stations. Most customers travel within 3-5km, and the driver's income is guaranteed;
- Electrical taxi program does not provide the travel solution for local resident, but also save the energy and reduce the emission



Different EV Applications-Rental Vehicle

General Info.	<ul style="list-style-type: none"> By 2013, there are 344 electrical rental vehicles running at Beijing, with total mileage more than 5M km, and the daily mileage is around 46.5km.
Characteristics	<ul style="list-style-type: none"> Most rental customers are short-term user, the vehicle is used as the commute tool; At the beginning, the customers use charging station frequently, later, they shift to wall-outlet by understanding EV better. Vehicle rental program help the government and auto OEM to collect valuable data for the promotion of new energy vehicles, including personal use habits, infrastructure construction.



Different EV Applications-Personal Usage EV

General Info.	<ul style="list-style-type: none"> Since Oct. 2013, by the support of "Blue Sky Action Plan", there are 126 volunteer purchased Evs,. The total number of personal Evs reaches 970, with total mileage over 9M km, daily average range 37.3km.
Characteristics	<ul style="list-style-type: none"> The personal user has the charging concerns, they worry that their vehicle and charging equipment will be damaged during charging. There are several charging modes available for personal users, around 47% use charging stations operated by State-Grid, rest of them rely on wall-outlet, self owned charging posts and public charging infrastructure etc.



Different EV Applications-Other Applications

●Logistic Vehicle

General Info.

●By Mar. 2014, there are 189 electrical logistic vehicles running across Beijing area, with total mileage 360k km, daily drive range 22.3km, and maximum range over 150 km.

●Government Fleet Vehicle

General Info.

There are total 216 fleet vehicles operated by Beijing government, with total mileage more than 600K km.



Lessons Learned

●Customer Driving Profile Analysis

- Comparing to traditional vehicle, the EV end users care more about the electrical drivable range; they usually ignore the left-over electricity during the usage;
- The customers don't understand the battery performance is impacted by the environment , especially the low temperature, which will result the shorter electrical drive range;
- Because of the good acceleration of EV, the fresh EV users experience more sudden accelerate-sudden brake scenarios , which will impact the total electrical drive range.

Future Plan

Blue Sky Action Plan

Establish the innovation System for prevention and control of atmospheric pollution, strengthen early warning and forecasting atmospheric pollution in Beijing and its surrounding area.

By 2015, there will be 50K EVs running at Beijing, including 8000 buses, 10000 government fleet vehicles and taxis, and 30000 EVs for personal usage.

Clean Air Action Plan

From 2013 to 2017, the emission pollution prevention task has been decomposed as the index of motor vehicle. By adjusting the number and power-train of bus, taxi, sanitation trucks and personal car and so on, and prompting the new energy vehicles to 200000 units, to reduce the fuel consumption and emissions.

Atmospheric Governance 863 Plan

By 2017, Beijing plan to phase out 1M old traditional vehicle, and control the total number of vehicle below 6M units.

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Thanks

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