Current Situation of Chinese New Energy Vehicles and Related Policies

China Association of Automobile Manufacturers (CAAM)
Oct. 2014, Seoul
Part I: Related Policies on New Energy Vehicles
1. Development of New Energy Vehicles----Policies & Measures

A series of policies issued and implemented since 2009

<table>
<thead>
<tr>
<th>Year</th>
<th>Policies</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>Pilot works on new energy vehicle subsidy for private buyers</td>
</tr>
<tr>
<td>2012</td>
<td>Development Plan on Energy-Saving and New Energy Vehicles</td>
</tr>
<tr>
<td></td>
<td>Technical innovation project</td>
</tr>
<tr>
<td>2013-2014</td>
<td>Continuing to Carry out Popularization and Application of New Energy Vehicles</td>
</tr>
<tr>
<td></td>
<td>Guidance on Accelerating Popularization and Application of New Energy Vehicles</td>
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</tbody>
</table>
2. Objectives of “Development Plan”

Energy-Saving Vehicles

• 2015----Average Fuel Consumption for PC decrease to 6.9 L/100km; such figure for energy-saving vehicles should be below 5.9 L/100km
• 2020---- Average Fuel Consumption for PC decrease to 5.0 L/100km; such figure for energy-saving vehicles should be below 4.5 L/100km

New Energy Vehicles

• 2015----the accumulative sales and production of BEVs and PHEVs reach 500 thousand units
• 2020----the production capacity of BEVs and PHEVs will be 2 million units; and the accumulative sales and production should be over 5 million units
• Fuel Cell Vehicles should keep same pace with international development
3. Development of New Energy Vehicles----National Promoting System

Leader of the State Council

- **Vice Premier Ma Kai**
- **Members:** ministers of 18 ministries
  - **Meeting Office:** MIIT
- **Joint inter-ministerial meeting**
  - **Regular Meeting:** once a year
  - **Convener:** Minister of MIIT
  - **Members:** related department chiefs of 18 ministries
- **Liaison Meeting**
  - **Meeting System:** irregularly held
  - **Convener:** Liaison Meeting Office
4. “Guidance”

◆ Accelerating construction of charging facilities

◆ Leading innovation on business patterns

◆ Promoting popularization and application in the field of public services

◆ Further improving policy system

◆ Resolutely eradicating local protectionism

◆ Strengthening technical innovation and product quality supervision

◆ Further enhancing organizing and leadership
5. Progress of Policies & Measures

◆ In Recent

✓ Encouragement policies on construction of charging facilities

✓ Implementation of “New Energy Vehicle List on Exemption from Vehicle and Vessel Tax”

✓ Coordinating the implementation of exemption new energy vehicles from vehicle and vessel tax

✓ Improving subsidy policies on new energy buses and hybrid buses

✓ Continuing to carry out industrial technical innovation project

✓ Formulating access policy for new energy vehicle enterprises

◆ Mid-term

✓ Improving fuel consumption management system

✓ Research and implementation of long-effect mechanism to promote the development of energy-saving and new energy vehicles
Part II: Current Situation and Future Expectation of New Energy Vehicles
Since the implementation of policies like “Ten Cities, A Thousand Vehicles” and encouraging private purchase of new energy vehicles, the accumulative popularizing energy-saving and new energy vehicles reached **27.4 thousand units** in the 25 pilot cities by the end of 2012, of which:

1. Public Service: 23,000
2. Private Purchase: 4400
2. New popularizing targets settled by each region

On Sept 2013, a new round of popularizing policies on new energy vehicles had been launched. There were altogether 40 popularizing regions, covering 86 cities, planning popularizing over 330 thousand new energy vehicles.

<table>
<thead>
<tr>
<th>City</th>
<th>Year</th>
<th>Accumulative Amount</th>
<th>Targets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beijing</td>
<td>2017</td>
<td>200000</td>
<td>Private: 17 0000&lt;br&gt;Bus, taxi &amp; public service: 30000&lt;br&gt;Official car: 5000&lt;br&gt;Non-official: 195000</td>
</tr>
<tr>
<td>Shanghai</td>
<td>2015</td>
<td>13000</td>
<td>5000 private purchase new energy vehicles</td>
</tr>
<tr>
<td>Guangzhou</td>
<td>2014</td>
<td>10000</td>
<td>Public: 6000&lt;br&gt;Private: 4000</td>
</tr>
<tr>
<td>Shenzhen</td>
<td>2015</td>
<td>35000</td>
<td>Public: 19000&lt;br&gt;Private: 16000</td>
</tr>
<tr>
<td>Hangzhou</td>
<td>2015</td>
<td>6000</td>
<td>1650 for public-used, 4350 for private lease and others</td>
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</tbody>
</table>
3. New phase policies began to take effects

Sales of Energy-Saving and New Energy Vehicles

Unit: *10,000

<table>
<thead>
<tr>
<th>Year</th>
<th>New Energy Vehicle</th>
<th>Hybrid Vehicle</th>
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<tbody>
<tr>
<td>2009-2012</td>
<td>1.2</td>
<td>1.6</td>
</tr>
<tr>
<td>2013</td>
<td>1.8</td>
<td>1.5</td>
</tr>
<tr>
<td>Jan-Aug, 2014</td>
<td>2.9</td>
<td>0.8</td>
</tr>
</tbody>
</table>
4. Mainstream models on sale

ROEWE E50  BAIC E150  JAC iEV4

ROEWE 550  BYD e6  BYD Qin
5. Technical level constantly improved

◆ For **hybrid** buses, the fuel saving ratio can reach 30%, while such figure for hybrid cars could be 20.5-30%;

◆ For **BEV** buses, the longest operation mileage for single bus can be over 180,000km, and the power durability of BEV cars can be over 150,000km;

◆ For **fuel cell** cars, the hydrogen consumption could be 0.912kg/100km, and such figure for fuel cell buses in actual operation would be 9.8kg/100km.
5. Technical level constantly improved

◆ Constructing public performance testing platform for components and electric vehicles;

◆ Research & implementation of electric vehicle related standards, covering power battery, whole vehicle and fundamental facilities (75 standards in force, 77 standards under implementation or revision); participating in formulating international charging interface standard;

◆ Carrying out performance benchmarking test on typical electric models to build national electric vehicle data platform.
### 6. A complete industrial chain basically formed

Cultivating a batch of backbone enterprises producing key components

<table>
<thead>
<tr>
<th>Power Battery</th>
<th>Lishen, Wanxiang, BYD, BAK</th>
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<tbody>
<tr>
<td>Driving Motor</td>
<td>JJE, Shanghai Edrive, CSR Times, Broad-Ocean</td>
</tr>
</tbody>
</table>

- **哈尔滨**: 光宇、巨容
- **京津**: 盟固利、力神、国安、比克、普莱德、捷威
- **洛阳中航锂电, 新乡新太行**
- **深圳比亚迪、比克, 东莞新能德**
- **湖南科力远, 神舟**
- **江苏春兰, 上海万宏、恒动、奥维, 杭州万向**
- **北京**: 精进电机
- **上海**: 上海电驱动、上海大郡
- **湖南**: 南车时代
- **中山**: 大洋电机
- **深圳比亚迪、比克, 东莞新能德**

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图示: 电池企业、电机企业、产业集群
7. Charging facilities developed steadily

According to the plan of pilot cities, by 2015, 1549 charging stations will be built, as well as 238000 charging points.
8. China hopes to become the most important new energy vehicle market in 2025

Unit: 10000

- 2014: 5
- 2020: 50
- 2025: 300