1. Backgrounds

(1) International Environment

Pressure of international climate negotiations
-- China, largest emitter currently
-- fast economy growth, main source of emissions growth in future

Joining formulation of international climate -
-- Gaining discourse right of low carbon development is the only way we can choose

-- CO₂ emissions (billion tons)
  CHN, 7.95
  MEX, 0.43
  EU, 3.54
  US, 5.29

-- CO₂ / capita (tons)
  CHN, 5.92
  MEX, 3.96
  EU, 7.04
  US, 16.94
1. Backgrounds

(2) Domestic Environment

- Transforming development pattern, shifting development model into low carbon
- Ensuring energy security, reducing fossil energy consumption
- Preserving ecological environment, relieving pressure of haze governance
1. Backgrounds

(3) Emission reduction goals

Nov, 2009, Copenhagen Conference:
“By 2020, China's carbon intensity (GHG emissions per unit of gross domestic product (GDP)) is to be decreased by 40% ~ 45% comparing to the 2005 level”

Nov. 12th 2014, APEC
《U.S.–China Joint Announcement on Climate Change》:

“China intends to achieve the peaking of CO2 emissions around 2030 and to make best efforts to peak early and intends to increase the share of non-fossil fuels in primary energy consumption to around 20% by 2030”.
1. Backgrounds

(4) Policy Package relate to Pilot and National ETS Building in China

October 2010, Foster and Develop the Strategic Emerging Industries, decision issued by the State Council, state to establish pollutant and carbon emission trading system

March 2011, National 12th five-year plan state to develop GHG emission accounting and calculating system, and gradually establish carbon market

Nov. 2011, Carbon Emission Pilot to be implemented, notification issue by national NDRC, approved 2 provinces and 5 cities as ETS pilot areas

May of 2013, Deepen Reform of the Economic System, issued by NDRC, state to expand the Emission Trading Scheme and research on establishment of national system.

Dec of 2014, Carbon emissions trading management Interim Measures, issued by NDRC, the first official document for national ETS.
2. Elements of Pilots System

(1) Overview
Population: 20%, Energy: 25%, GDP (Gross Domestic Product): 33%

- **Chongqing**
  - Population: 31.0 m
  - GDP: 1.15 trillion
  - Energy Consumption: 79.5 Mtce

- **Beijing**
  - Population: 19.6 m
  - GDP: 1.78 trillion
  - Energy Consumption: 69.9 Mtce

- **Tianjin**
  - Population: 14.1 m
  - GDP: 1.29 trillion
  - Energy Consumption: 76.0 Mtce

- **Shanghai**
  - Population: 23.8 m
  - GDP: 2 trillion
  - Energy Consumption: 112.7 Mtce

- **Hubei**
  - Population: 59.8 m
  - GDP: 1.78 trillion
  - Energy Consumption: 123.3 Mtce

- **Guangdong**
  - Population: 105.1 m
  - GDP: 5.7 trillion
  - Energy Consumption: 241.3 Mtce

- **Shenzhen**
  - Population: 10.5 m
  - GDP: 1.30 trillion
  - Energy Consumption: 54.3 Mtce
2. Elements of Pilots System

(2) Allowance Volume

- Pilot period: 2013-2015
- Total volume of allowances in the first compliance year of 7 Pilots is around **1.2 billion tons**
- Rank 2nd worldwide, behind EU ETS
## 2. Elements of Pilots System

### (3) Coverage

<table>
<thead>
<tr>
<th>Pilots</th>
<th>Covered sectors</th>
<th>Threshold (tons)</th>
<th>Covered entities</th>
<th>Percentage of covered emission, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shenzhen</td>
<td>Industrial sectors (Power, Manufacturing, etc);</td>
<td>3,000</td>
<td>635</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>Buildings</td>
<td>10,000 m²</td>
<td>197</td>
<td></td>
</tr>
<tr>
<td>Shanghai</td>
<td>Industrial sectors (Steel, Chemical, Petrochemical, Power, etc)</td>
<td>20,000</td>
<td>191</td>
<td>57</td>
</tr>
<tr>
<td></td>
<td>Non-industrial sectors (Airports, Ports, Hotels, etc)</td>
<td>10,000</td>
<td></td>
<td></td>
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<tr>
<td>Beijing</td>
<td>Power, Heat supply, Cement, Petrochemical, other industrial sectors, Service</td>
<td>10,000</td>
<td>415 (2013); 543 (2014)</td>
<td>49</td>
</tr>
<tr>
<td>Guangdong</td>
<td>Power, Cement, Petrochemical, Steel</td>
<td>20,000</td>
<td>184 (2013); 193 (2014)</td>
<td>50</td>
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<tr>
<td>Tianjin</td>
<td>Power, Heat supply, Chemical, Petrochemical, Steel, Oil and gas production</td>
<td>20,000</td>
<td>114</td>
<td>60</td>
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<tr>
<td>Hubei</td>
<td>Industrial Sectors</td>
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<td>35</td>
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<tr>
<td></td>
<td>(Comprehensive Energy Consumption)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Chongqing</td>
<td>Industrial Sectors</td>
<td>20,000</td>
<td>242</td>
<td>NA</td>
</tr>
</tbody>
</table>
2. Elements of Pilots System

(3) Coverage

Shenzhen: all 6 gases
Other 6 areas: CO₂
Thank you!

For more information, please contact:
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