ESCO development in China
---drivers and barriers

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China ESCO Industry Association (EMCA)
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Contents

1. National policies, regulations, programs

2. China ESCO development
1. China EE Policies & regulations

- Energy structure in China
1. China EE Policies & regulations

- Chinese President Xi Jinping: Actively promote energy production and consumption revolution

<table>
<thead>
<tr>
<th>Energy consumption revolution</th>
<th>Energy supply revolution</th>
<th>Energy technology revolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Control total consumption</td>
<td>• Clean coal efficiency</td>
<td>• Promote technology, industry commercial innovation</td>
</tr>
<tr>
<td>• Prioritize energy conservation</td>
<td>• Develop renewable energy</td>
<td>• Energy technology and industry training to lead the industry’s development</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Energy system revolution</th>
<th>Increase international cooperation</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Return to market properties, let market form the energy price</td>
<td>• Cooperation internationally for energy consumption and production</td>
</tr>
<tr>
<td>• Form new energy system</td>
<td></td>
</tr>
</tbody>
</table>
1. China EE Policies & regulations

- **Energy development strategy (2014-2020)** -- 2014.11.20

By 2020:

- Total non-renewable energy consumption < 4.8 billion tce
- Coal consumption < 4.2 billion tce
- None fossil energy to non-renewable energy ratio up to 15%, natural gas ratio >10%, coal consumption
1. China EE Policies & regulations

**National**
- MoHURD: Five year plan for building EE, green building program
- Energy conservation law
- Energy conservation emission reduction twelfth 5 year plan
- Regulation on accelerating energy saving and environmental protection development
- 2014-2015 Energy conservation emission reduction low carbon development plan

**Ministry**
- MIIT : Five-year plan for industry EC & further strengthening work of industrial EC
- energy-saving products for public EE leadership program
- Fiscal, taxation, price policies

**Regional**
- Beijing
- Shanghai
- Fujian

- Thousand enterprise, tens of thousand enterprise low carbon plan
- National Ministry Regional Thousand enterprise、tens of thousand enterprise low carbon plan
- Energy conservation emission reduction twelfth 5 year plan
- Regulation on accelerating energy saving and environmental protection development
- 2014-2015 Energy conservation emission reduction low carbon development plan
1. China EE Policies & regulations

- Industry: 20 to 50 big ESCOs
- EE system: including ESCOs, standard development, investment mechanism, M&V etc.

First of the seven national New strategic industry

Positioning

Goal
2. China ESCO development

- **1996-2002**: Introduce EPC & Pilot ESCOS
- **2003-2009**: Establishment of EMCA
- **2010-2015**: National support policies
- **2016---**: Build-up ESCO system

Steps:
- Upgrade
- Develop
- Promote
- Pilot
China ESCO development

- Total energy service industry GDP: 2003 - 17.67 billion, 2013 - 2155.62 billion, growth: 122 times
- Industry employment: 2005 - 1.6 million, 2013 - 50.8 million, growth: 32 times
China ESCO development

- East: 59.20%
- Middle: 26.70%
- West: 14.10%
- Industrial: 70%
- Construction: 21%
- Transportation: 9%
China ESCO development

1. Listed companies
2. Foreign
3. Joint-venture
4. Private
5. State-owned
Drivers and barriers

Drivers

Government
PUSH

Market
DRIVE

Economic
DRIVE

提升节能意识
增强契约精神
National supportive policies for 12th five-year

1. Direct financial award
2. Tax incentives
3. Public accounting system
4. Green financing policy
Market drivers

- National 5-year plan: EE target
- National program: thousands enterprises EE program, mandatory EE standard for buildings etc.
- Energy pricing: based on time & quantity of energy consumption
- Economic drive: ESCO industry as new strategic economic growth
Customer demand

- State-owned enterprises – practice social responsibility and keep key competitive advantages
- Private enterprise – reduce cost and energy consumption to avoid close-down
- Public buildings - municipal regulation
Drivers for ESCO business

- EE products/technology - new business models
- Investment - new green market with great and sustainable potentials
- Energy consumers – less consumption more efficient
- Public facilities – professional energy management
National public service platform-EMCA

ESCO Service Platforms

EMCA节能服务产业公共服务平台
Thank you

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