Energy Efficiency Standards (EES) in China: Achievements and Challenges

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Part One

**Current situation of EES**

- Starting from the end of 1980s, **64 national mandatory EES** have been developed so far.

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appliances: 18</td>
<td></td>
<td>Refrigerators, Room air-cons, Washing machines, TV, Water heaters, Microwave ovens, Electric rice cookers, Induction cookers, Electric fans, Ventilating hoods, etc.</td>
</tr>
<tr>
<td>Industrial equipment: 18</td>
<td></td>
<td>Electric motors, Pumps, Boilers, Blowing machines, Distribution transformers, etc.</td>
</tr>
<tr>
<td>Lighting equipment: 13</td>
<td></td>
<td>Fluorescent lamps, High-pressure sodium vapor lamps, Metal-halide lamps, LED lamps, etc.</td>
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<tr>
<td>Commercial equipment: 9</td>
<td></td>
<td>Water chillers, Unitary air-cons, Multi-connected air-cons, Refrigerated display cabinets, etc.</td>
</tr>
<tr>
<td>Office equipment: 6</td>
<td></td>
<td>Computer monitors, Copier machines, Printers, Fax machines, etc.</td>
</tr>
</tbody>
</table>
Implementation of EES:

**Part Two**

64 energy efficiency standards

- 18 for household appliances
- 13 for Lighting equipment
- 9 for commercial devices
- 18 for industrial equipment
- 6 for office equipment

Minimum allowable values of energy efficiency (MEPS)

Energy efficiency grades

Evaluating index for energy saving product

Phasing out low efficient products

Energy Labeling Program

Certification scheme for energy saving products
Achievements of EES

By 2012, 20 energy efficiency standards reach accumulative energy savings of 900 TWh, equaling to the output of 9 Three-Gorges hydropower station in 2012.

By 2012, After 7-year implementation, China Energy Label Program was estimated to reach accumulative energy savings of about 420 TWh, equaling to 30 million tons of CO2.
Part Four

Challenges

Regulatory alignment:
Energy label differs in members both in patterns and energy grades.
Part Five

Suggested solutions to the global inconsistency of EES

• Encourage to adopt ISO/IEC testing methods in EES to promote consistency of testing methods in members.

• Conduct benchmark analysis among the EES in different members to promote regulatory alignment.

• Promote mutual recognition of laboratory test result by conduct roundrobin test among energy efficiency labs and enhance the lab capacity.

• Strengthen information communication of EES, energy efficiency label, etc.

• Promote the application of electronic label such as QR code in energy efficiency label to facilitate global trade of efficient products.

• Promote capacity building regarding EES development and implementation in developing members.
Thank you for your attention!

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