ASIAN SUPER GRID

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Head of RE division
Ministry of Energy
Mongolia
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# Legislation

<table>
<thead>
<tr>
<th>No</th>
<th>Name of Documents</th>
<th>Approved</th>
<th>Update</th>
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<tbody>
<tr>
<td></td>
<td><strong>Legal Framework</strong></td>
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<tr>
<td>1</td>
<td>Energy Law of Mongolia</td>
<td>2001</td>
<td>2011</td>
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<td>3</td>
<td>Concession Law</td>
<td>2010</td>
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<td></td>
<td><strong>Development programs</strong></td>
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<td>4</td>
<td>“100000 Solar Ger” National Program</td>
<td>1999</td>
<td>Come to the end 2012</td>
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<td>5</td>
<td>Program on Integrated Power Energy System</td>
<td>2002</td>
<td>2007 and Update will be made in 2012</td>
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<td>6</td>
<td>National Renewable Energy Program</td>
<td>2005</td>
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<td>7</td>
<td>Millennium Development Goals Based Comprehensive National Development Strategy of Mongolia</td>
<td>2007</td>
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<td>8</td>
<td>New Construction and Mid-Term Goal Program</td>
<td>2010</td>
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<td>9</td>
<td>Southern Gobi Development Program</td>
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<td><strong>Government Policy Document</strong></td>
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Legislation

• In January 11, 2007, the Parliament was approved a Renewable energy law

• Feed-in tariffs (FIT) for renewable power sources

• Promotes, incentives and supports the production of energy from renewable sources by regulating generation, transmission

<table>
<thead>
<tr>
<th></th>
<th>Hydro up to 0.5 MW</th>
<th>Hydro from 0.5 to 2 MW</th>
<th>Hydro from 2 to 5 MW</th>
<th>Wind 0.08 - 0.095</th>
<th>Solar 0.15 - 0.18</th>
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<tbody>
<tr>
<td>Grid-connected</td>
<td>0.045 - 0.06</td>
<td>0.045 - 0.06</td>
<td>0.045 - 0.06</td>
<td>0.15 - 0.18</td>
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<td>Stand alone</td>
<td>0.05 - 0.06</td>
<td>0.05 - 0.06</td>
<td>0.045 - 0.05</td>
<td>0.10 - 0.15</td>
<td>0.15 - 0.18</td>
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Prices are given in USD per kWh
Legislation

• RE Law has been amended 2015 June by the Parliament of Mongolia
• New Encouraging(support tariff scheduled)
• FIT/ Cross subsidy
• Enables Small scale grid to connect to system
  Tariffs will apply by the Energy regulatory commision
Mongolia`s Renewable energy potential
Potential
Solar energy/IRRADATION

МОНГОЛ ОРНЫ НАРНЫ ЭРЧМИЙН НӨӨЦ

СЭРГЭЭГДЭХ ЭРЧИЙН ХӨКНИЙ УНДЭСНИЙ ТӨВ
Potential Wind Energy

МОНГОЛ ОРНЫ САЛХИНЫ ЭРЧМИЙН НӨӨЦ
Potential Hydro
Potential

There is a wide opportunity to cooperate in the renewable energy sector.

• Rich resources of Solar, Wind and Hydro in Mongolia:
  – Solar: 270-300 sunny days in a year, 4.3-4.7 kWh/meter or higher per day
  – Wind: 10% of the total land area can be classified as excellent for utility scale applications, Power density 400-600 W/m², the resource could potentially supply over 1100 GW of installed capacity.
  – Hydro: Theoretical potential 6.2 GW, more than 1 GW of these ahs been identified
Activities on ASG
Activities

• 2012 North east asian super grid conference under the President of Mongolia
• Accomplishment of Desertec/Gobitec research study by Energy Charter/2013
• Establishment of Ministerial task on Asian Super Grid
• Several meetings with Japan, South Korea
• 2015 Memorandum of understanding between Chinese RE association, Korea and Mongolia
• Meetings with Russian energy system
Proposed ASG
ASIA SUPER GRID (ASG)
Thank you

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