South Korea
Offshore Wind Energy Development

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South Korea’s NDC target for 2030

2018 Emission: 727.6 million ton

Previous Target: 536.1 million ton (26.3%)

New Target: 436.6 million ton (40%)

2030 Emission: 436.6 million ton
Renewable Energy Target by 2030

- 2030 Target as of today: 6.6%
- 2030 Target Under Previous NDC: 12GW OSW, 20%
- 2030 Target Under New NDC: >12GW OSW, 30.2%
Offshore Wind Development

>12 GW
- offshore wind to be built by 2030 under the previous NDC target
- To be increased under the new NDC target

>9 GW
- Electricity business license awarded to 9,334 MW of offshore wind as of today

~40 GW
- of offshore wind being developed/planned as of today
Offshore Wind Development

- Site selection by private developer
- Consultation with local municipality and stakeholders

Site Selection (1~2 years)

- >1 year wind campaign before applying for electricity business license

Wind Assessment (1 year)

- Start of main development
- Securing grid connection

Electricity Business Licence

- EIA
- Ministry of Defence
- Ministry of Environment
- Ministry of Fisheries
- Various permitting authorities (9 government branches with 25 processes)

EIA & Surveys (2-4 years)

- 20 year fixed price SMP+REC bundle contract

Construction (12-36 mos.)

- Operations (20 yrs.)

Operations
Renewable Portfolio Standard

Renewable Energy Operator

RPS Obligor

SMP

REC

(20 year fixed price SMP+REC bundle contract)
## REC multiples and 20 year fixed bundle price

<table>
<thead>
<tr>
<th>Source</th>
<th>REC multiples</th>
<th>SMP+REC bundle price (KRW per MWh)</th>
<th>SMP+REC bundle price (USD per MWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solar</td>
<td>0.5 ~ 1.6</td>
<td>120k~140k</td>
<td>100~120</td>
</tr>
<tr>
<td>Onshore Wind</td>
<td>1.2</td>
<td>140k~170k</td>
<td>120~140</td>
</tr>
<tr>
<td>Offshore Wind</td>
<td>2.5 ~ 4.9</td>
<td>250k~350k</td>
<td>210~300</td>
</tr>
</tbody>
</table>
Challenges & Reformation

• One Stop Shop law
  → In discussion at National Assembly

• Guideline on Stakeholders’ acceptance
  → In preparation by government

• Local Content Requirement
  → Clear rule to be stipulated

• Grid Connection
  → Preemptive upgrade to be initiated