FINANCIAL SETTLEMENT CENTER

RENEWABLE ENERGY PURCHASE/SALE SCHEME
POWER SYSTEM OF KAZAKHSTAN

21.7 GW
Total installed capacity

18.7 GW
Available capacity

102 bn. kWh
Generation in 2017

97 bn. kWh
Consumption in 2017

Structure of generating capacity 2017
- Natural gas: 8%
- RES: 1%
- Hydro: 12%
- TPP: 79%

Generation structure 2017
- Natural gas: 9%
- RES: 1%
- Hydro: 11%
- TPP: 79%
The costs are distributed proportionally

Conventional power stations sell electricity to consumers by ceiling tariffs which are set for 7 years.

The cost of renewable energy is included in the tariff

*1 = 325KZT

**AUCTION CEILING PRICES**

- Wind – $69.8/MWh
- Solar - $106.5/MWh
- Hydro - $51.4/MWh
- Biomass - $99.2/MWh
RE Sector Development Results

✓ Stable work of renewable energy purchase/sale scheme

✓ 100% payment for RES investors

✓ 1.1% share of renewable energy in total generation in 2017

✓ 22 new renewable energy objects:
  Big projects: Burnoe Solar 1 – 50 MW, Burnoe Solar 2 – 50 MW (May 2018)
  First wind electric station – 45 MW, Korinskaya Hydro Station – 28.5 MW

✓ Reserve fund is formed
  (3% of annual costs for electricity purchase)

✓ Annual indexation of tariffs for existing RES objects is carried out.
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**Installed capacity**

- **101 PPA**
- **2300 MW**

**RES objects**

- **28**
- **237 MW**

**Renewable energy purchase volume, GWh**

- **Wind**
  - 2014: 8.7
  - 2015: 203.6
  - 2016: 437.6
  - 2017: 600
  - 2018: 781
  - 2019: 948
  - 2020: 1256

- **Solar**
  - 2014: 0.46
  - 2015: 15
  - 2016: 32
  - 2017: 46
  - 2018: 63
  - 2019: 80
  - 2020: 112

**Renewable energy costs, millions $**

- **Wind**
  - 2014: 1010 MW
  - 2015: 920 MW
  - 2016: 359 MW
  - 2017: 11 MW
  - 2018: 118 MW
  - 2019: 55 MW
  - 2020: 64 MW
POWER PURCHASE AGREEMENT
GUARANTEES

15-year guaranteed purchase of all generated electricity

Annual auction price indexation
(30% of US$ exchange rate variation, 70% on inflation)

Prioritized dispatching
POWER PURCHASE AGREEMENT
SELLER OBLIGATIONS

Provide a financial guarantee.

Provide a notice of construction initiation in 12 months since PPA signing.

Launch the station with established deadlines
Solar – 24 months
Wind and Biomass – 36 months
Hydro – 48 months
## FINANCIAL GUARANTEE

### Bid bond

**Amount:** 2 million KZT per 1 MW of the installed capacity of the project

<table>
<thead>
<tr>
<th>Types</th>
<th>Return</th>
<th>Retention</th>
</tr>
</thead>
<tbody>
<tr>
<td>- bank guarantee</td>
<td>- participant didn’t win;</td>
<td>- auction winner</td>
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<tr>
<td>- standby letter of credit</td>
<td>- auction winner signed PPA</td>
<td>evaded signing PPA</td>
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</table>

### Performance bond

**Amount:** 10 million KZT per 1 MW of the installed capacity of the project

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</thead>
<tbody>
<tr>
<td>- performance bond</td>
<td>timely commissioning of renewable energy station (Solar - 24 months, Wind and Biomass - 36 months, Hydro - 48 months)</td>
<td>30% of the amount of performance bond - violation of the construction start; 100% of the amount of performance bond - violation of the commissioning date</td>
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<tr>
<td>- standby letter of credit</td>
<td></td>
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<tr>
<td>- cash</td>
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- Text of the bank guarantee/standby letter of credit is available on the website of the FSC [rfc.kegoc.kz](http://rfc.kegoc.kz)
- Financial guarantee is issued in KZT
Information for Investors on Renewable Energy Auctions in Kazakhstan is published on the Financial Settlement Center website in “Auctions” sector.
FREQUENTLY ASKED QUESTIONS

- The questions are collected according to the results of 4 seminars held
- More than 100 key questions are answered
- Sections are structured according to the types of questions

RFC.KEGOC.KZ  You can ask your question
THANK YOU FOR YOUR ATTENTION!

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