

RES DEVELOPMENT IN THE REPUBLIC OF KAZAKHSTAN

ASTANA 2017

RENEWABLES RESOURCE POTENTIAL IN THE REPUBLIC OF KAZAKHSTAN 3000 920 billion kWh a year billion kWh a year Sunny hours a year Wind energy Solar energy **Hydro energy**

MAIN PROVISIONS OF THE LAW ON RES SUPPORT IN THE REPUBLIC OF KAZAKHSTAN INVESTOR SUPPORT MECHANISM

- 1 purchase of the whole volume of RES electricity is guaranteed during 15 years
- 2 conditional consumers * act as buyers through the Accounting and Finance Center
- 3 exemption from paying for transmission service for RES electricity
- 4 priority dispatch of RES electricity
- financial settlement of RES related imbalances is carried out by the Accounting and Finance Center
- 6 investment preferences in accordance with the Commercial Code of the Republic of Kazakhstan
- * Conditional consumers are energy generating organizations that use coal, gas, sulfur-containing raw materials, oil products and nuclear fuel; participants of the electricity market that buy electricity outside of the Republic of Kazakhstan; hydro power plants with installations located in one hydro scheme with the total capacity exceeding 35 MW, except for those that were commissioned after January 1, 2016.

TARGET INDICATORS OF THE RES SECTOR DEVELOPMENT

2017

50 RES facilities

300 MW

Total capacity



WPP

100 MW



SPP

60 MW



HPP

140 MW

Target indicator 2020

1 700 MW

Total capacity



WPP

933 MW



SPP

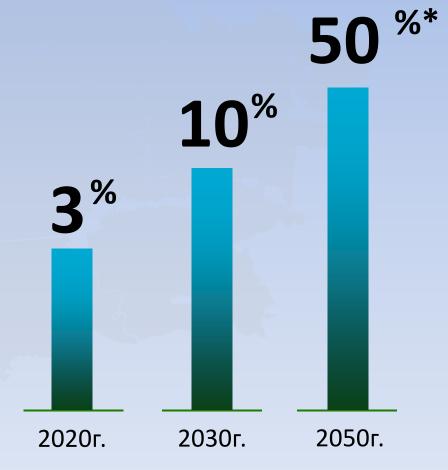
467 MW



HPP

290 MW

The share of RES in the total amount of electricity generation



* - taking into consideration alternative energy

RES SECTOR DEVELOPMENT INDICATORS

Technical specifications issued

4 800 MW

total capacity



WPP

2 300 MW



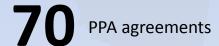
SPP

1900 MW



HPP

600 MW



1850 MW

total capacity



WPP

760 MW



SPP

 $810\,\mathrm{MW}$



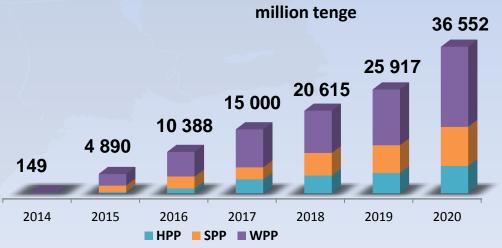
HPP

280 MW



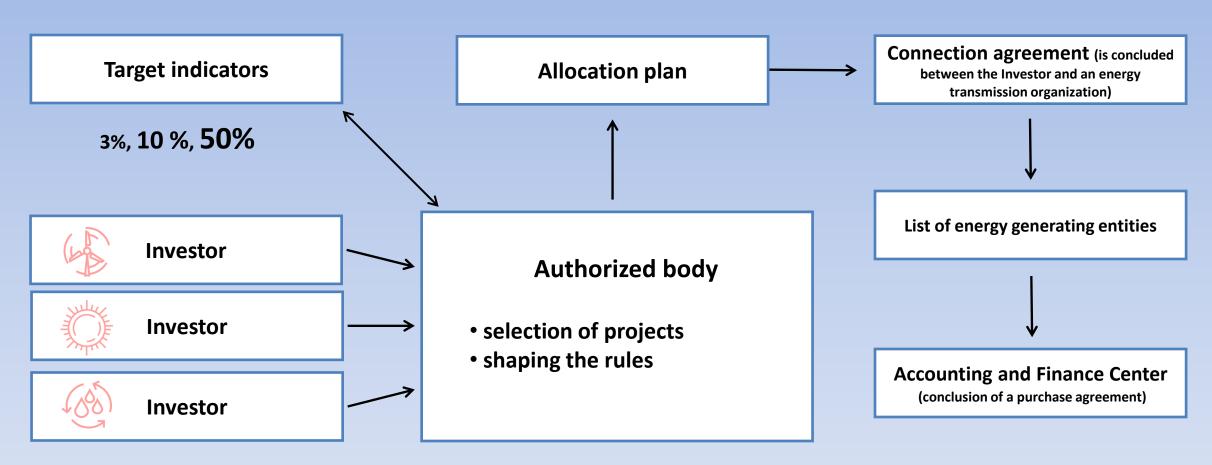


Costs associated with purchase of electricity from RES,



MECHANISM FOR SUPPORTING THE RES SECTOR PRIOR TO INTRODUCTION OF AUCTION TRADES

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Fixed tariffs

(USD exchange rate is 340 tenge / \$)

<u>WPP</u>

66,7 \$/ MW-h

SPP

101,8 \$/ MW-h

<u>HPP</u>

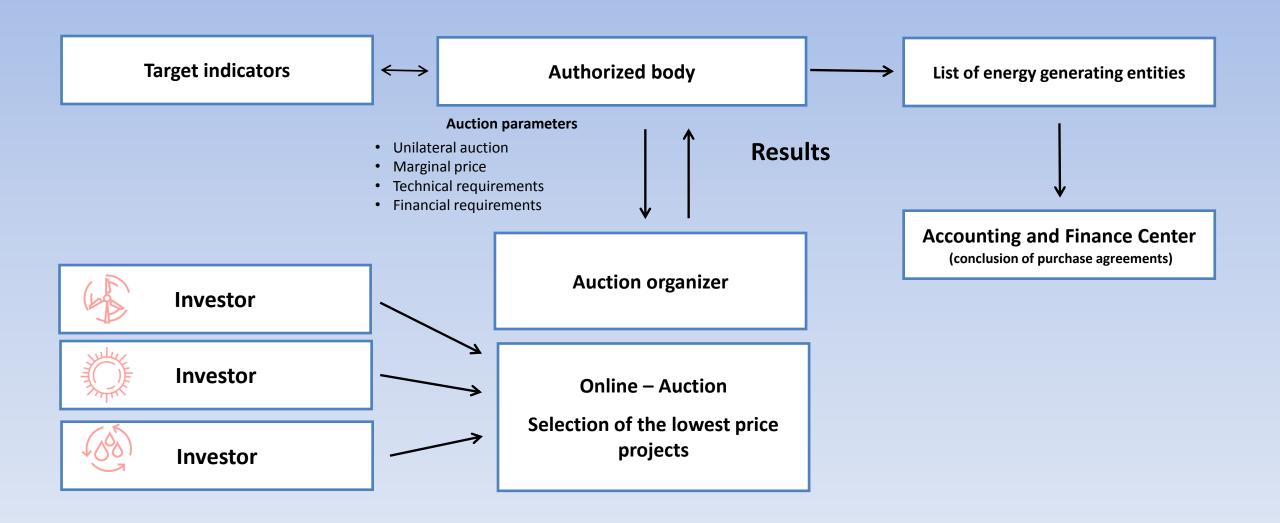
49,1 \$/ MW-h

Average tariff for centralized flows

23,6 \$/ MW-h

* The share of the center in the wholesale market was more than 26% in 2016

A NEW AUCTION BASED MECHANISM FOR SUPPORTING THE RES SECTOR



THANK YOU FOR ATTENTION!