

# Development of the regional market of centralized electric energy trading



06.10.2021 г.



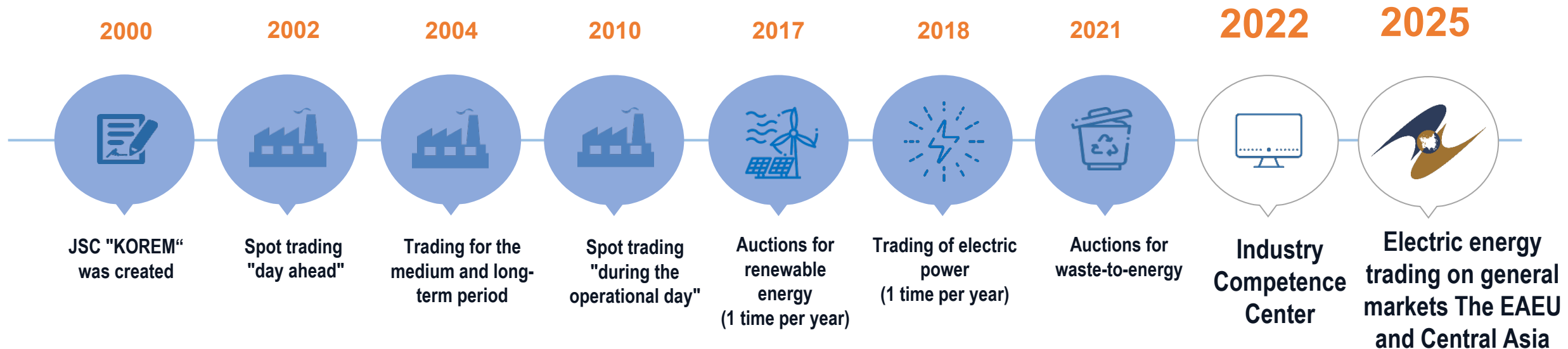
## Mission

The mission of JSC "KOREM" is the **introduction and expansion of mechanisms for the functioning of the centralized electric energy trading market**, providing high-quality digital services and tools to all market participants for effective functioning.



## Vision

In the long term, JSC KOREM is an **independent international energy platform** that provides customers with high-quality services for organizing and conducting electronic auctions of electric energy, electric capacity, as well as auctions for the selection of projects.





## Operator of centralized trading on the basis of JSC "KOREM"

The operator of centralized electric energy trade **should not build the process of its activity with an emphasis on profit-making**, due to the contradiction of the goals and objectives set. In this connection, the entire revenue part should be directed to the **maintenance and development of a centralized trading platform and digital services.**

## VALUE PROPOSITIONS OF JSC "KOREM"



### Trade operator

- 01** Operator of centralized electricity trading
  - development of competition
  - reduction of tariffs
- 02** Operator of centralized trading capacity
  - improving reliability
  - reducing tariffs
- 03** Trading Operator emergency replacement
  - ensuring reliable energy supply to wholesale consumers
- 04** Electricity Export Trading Operator
  - ensuring the transparency of export transactions
  - developing the export potential of market entities



### Auction Organizer

- 05** Organizer of auctions for the selection of renewable energy projects
  - RES development
  - reduction of tariffs
- 06** Organizer of auctions for the selection of maneuverable capacity projects
  - development of the UES of the Republic of Kazakhstan
  - reduction of tariffs
- 07** Organizer of auctions for the selection of waste-to-energy projects
  - development of alternative energy sources
  - reduction of tariffs
- 08** Organizer of auctions for granting subsoil use rights under CnH2n+2
  - ensuring transparency of mechanisms
  - increasing the cost of subscription bonuses



## Implementation of standards for the mandatory participation of all electric stations in the centralized bidding market

The implementation of paragraph 48 of the general national plan in 2021 will allow increasing the volume of centralized electric energy trading annually and reducing the concentration of the wholesale market.

**Current status:** the project draft of relevant amendments to the Law of the Republic of Kazakhstan on Electric Power Industry has been sent to the Parliament of the Republic of Kazakhstan for consideration.

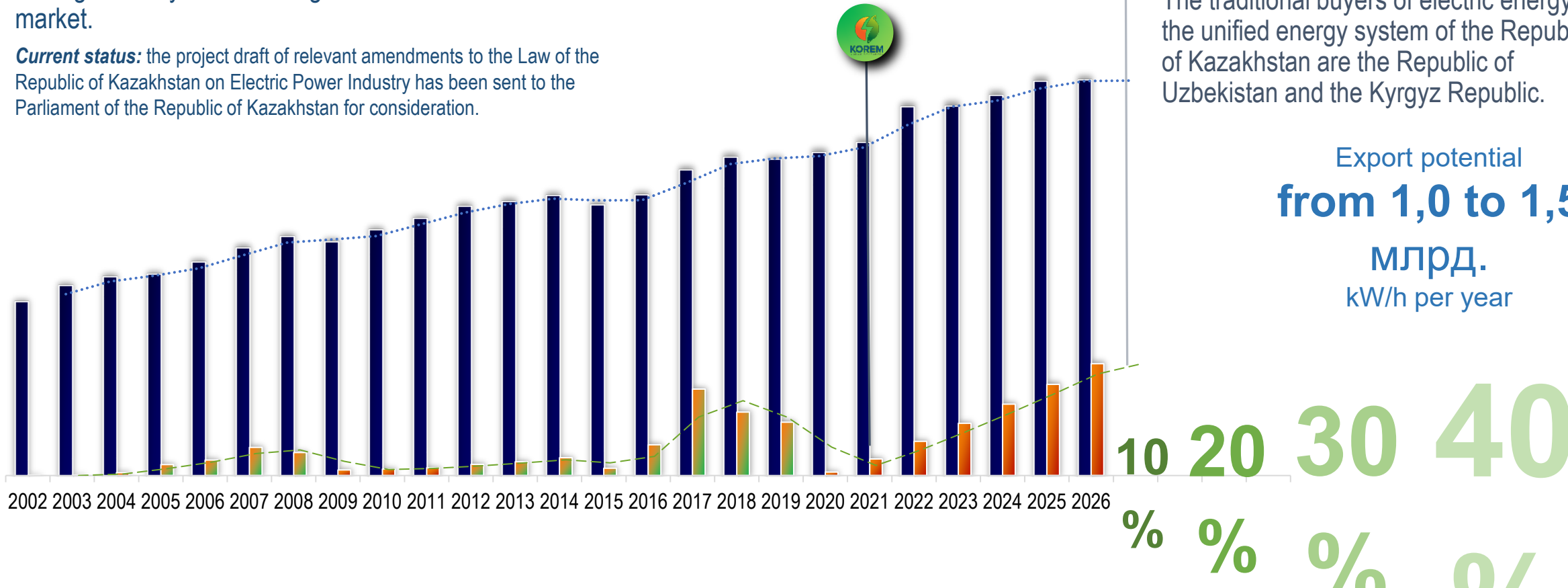
*Realization of general national plan 48.*



## Introduction of mandatory sale of electricity for export through centralized auctions

The traditional buyers of electric energy of the unified energy system of the Republic of Kazakhstan are the Republic of Uzbekistan and the Kyrgyz Republic.

Export potential  
**from 1,0 to 1,5**  
 млрд.  
 kW/h per year



# Development of the regional electricity trading market of Central Asian countries within the framework of the CAREM project



Meetings at the Ministerial level, Working Groups on technical, legal and market issues



- Assessment of the state of the power system
- Preparation of operational procedures
- Preparation of the institutional and regulatory framework
- Strengthening the coordination and dispatch center "Energiya"
- Training seminars, coordination of donor activities
- The market for the day ahead

- Power grid expansion plans
- Operational procedures
- Recommendations on changes in the institutional and regulatory framework
- Expanding the role and powers of coordination and dispatch center "Energiya"

- Parallel operation of the regional power system
- Approved market design and ready-made platform
- Adoption of new laws, electricity trade procedures

- **DEFINING A REGIONAL MARKET OPERATOR**
- A large number of bilateral agreements
- New market products, support services

- Functioning regional electricity market
- Connecting new members

*Roadmap of the CAREM project for the development of the electricity market in Central Asia*

2022

- Adoption of rules on access to interstate transmission services
- Adoption of rules for determining and distributing the capacity of interstate sections
- Adoption of rules for mutual trade of electric energy in the common electric power market
- **Defining an organization that carries out trade at the regional level**

2023

- Adoption of rules for information exchange in the common electric power market of the Union

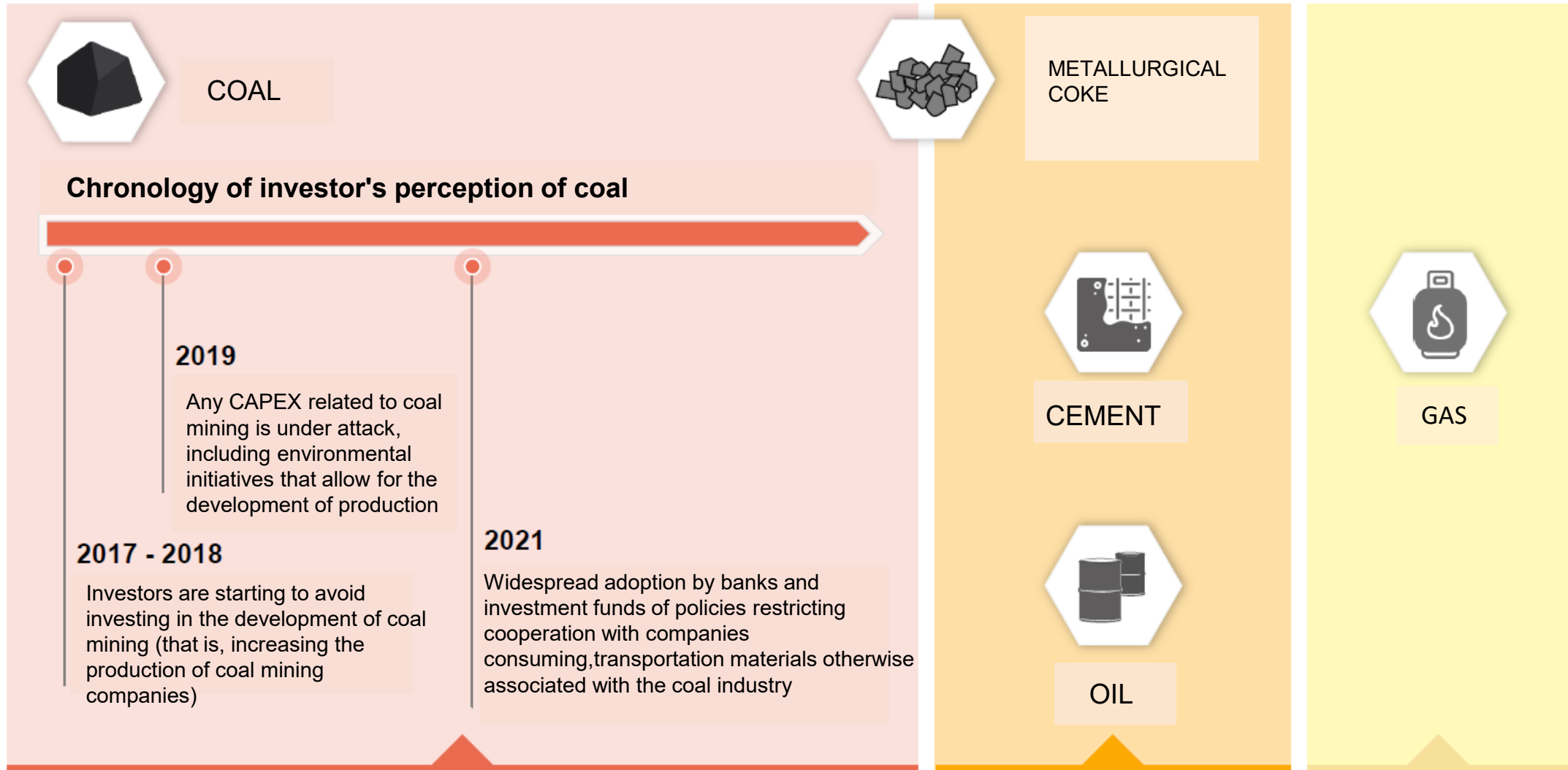
2024

- Approval of the form of the accession agreement, as well as standard forms of contracts and regulations provided for by the acts, in accordance with paragraphs 5-8 of the Protocol on the Common Electric Power Market of the Eurasian Economic Union
- Adoption of methodological guidelines for determining prices

2026

- Adoption of the regulation on the development of interstate electric networks
- Adoption of the procedure for monitoring the functioning of the common electric power market of the Union

## Industries losing access to capital markets

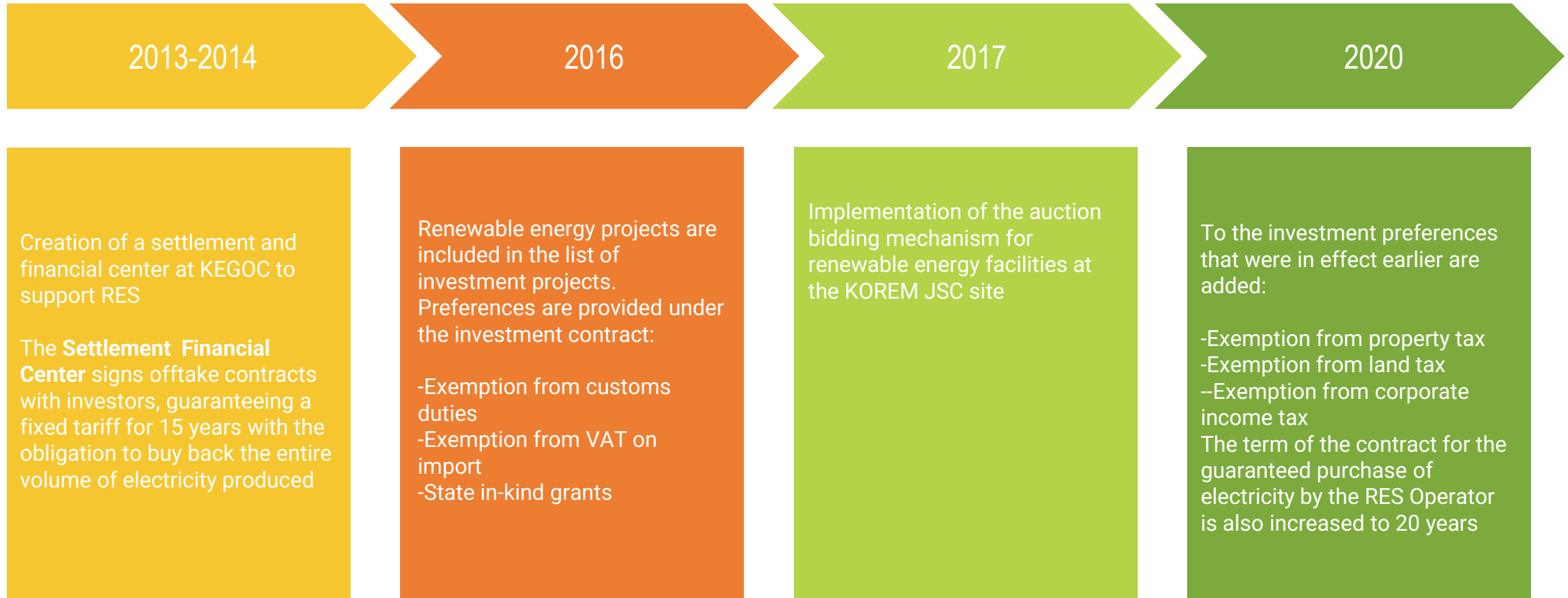


Already blacklisted by investors

BY A THREAD

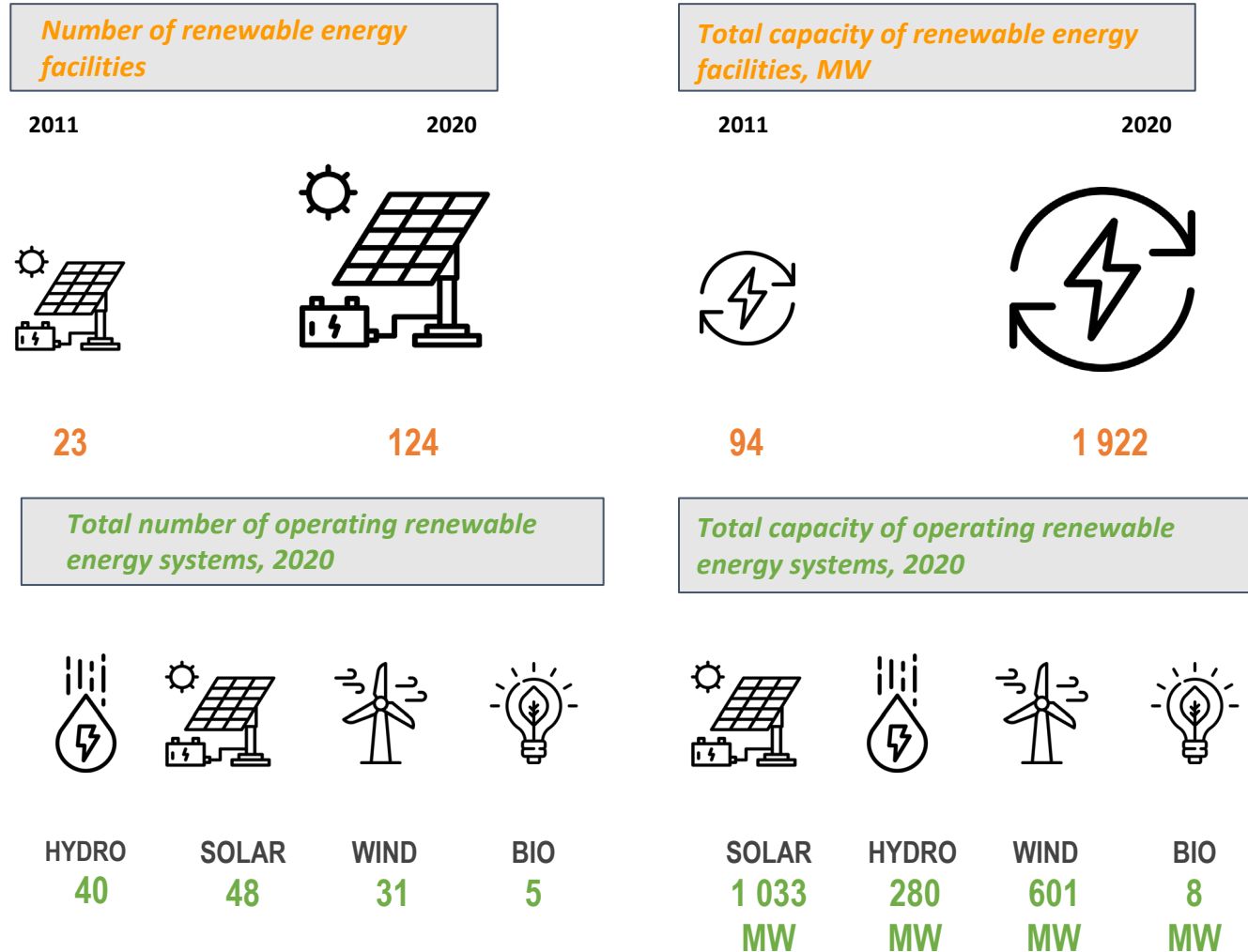
ACCEPTABLE

The law on Renewable Energy Support was first published in 2009, but only further improvements to this law, which occurred from 2013 to 2017, gave a truly tangible impetus to the development of renewable energy in Kazakhstan (1/2)





## Growth in the construction of renewable energy facilities



The state support measures introduced in 2013 have shown their effectiveness. Since the establishment of the **Settlement Financial Center** and the introduction of auctions, about **90** new renewable energy projects have been introduced, providing a cumulative average annual increase of **24%**.

At the same time, according to the auctions conducted, it is expected to introduce an additional **70** renewable energy facilities in the coming years.

The tariff continues to **decrease** from year to year as a consequence of the trend of cheaper cost of construction of renewable energy facilities

## 2018

Selected **857,93 MBT**  
from 1000 MBT



Ⓜ 32,23  
↓ 32,15

Selected **5 MBT**  
from 15 MBT



Ⓜ 34,61  
↓ 18,00

Selected **82 MBT**  
from 75 MBT



Ⓜ 16,71  
↓ 12,80

Selected **270 MBT**  
from 290 MBT



Ⓜ 22,66  
↓ 17,39

Selected **500,85 MBT**  
from 620 MBT

## 2019

Selected **212,89 MBT**  
from 255 MBT



Ⓜ 32,15  
↓ 32,13

Selected **10 MBT**  
from 10,4 MBT



Ⓜ 29,00  
↓ 9,90

Selected **86,5 MBT**  
from 80 MBT



Ⓜ 15,48  
↓ 15,43

Selected **65 MBT**  
from 7 MBT



Ⓜ 22,60  
↓ 19,27

Selected **100 MBT**  
from 108,99 MBT

## 2020

Selected **147,95 MBT**  
from 250 MBT



Ⓜ 32,15  
↓ 0,00

Selected **0 MBT**  
from 10 MBT



Ⓜ 16,97  
↓ 14,59

Selected **55 MBT**  
from 60 MBT



Ⓜ 15,48  
↓ 13,48

Selected **120 MBT**  
from 23 MBT

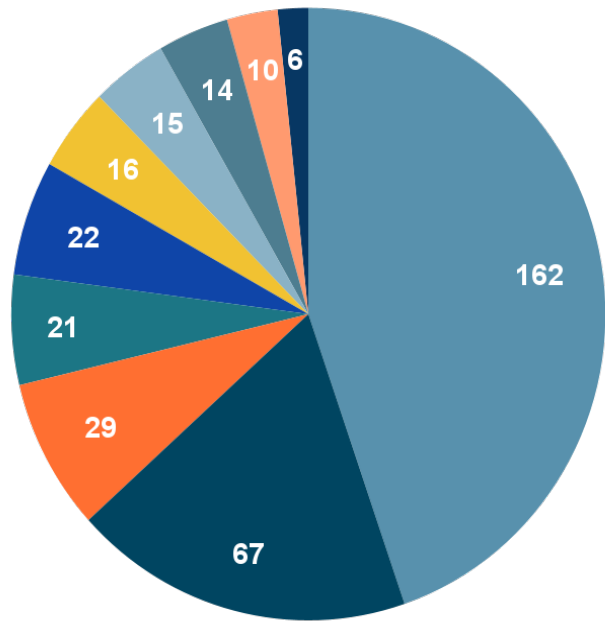


Ⓜ 21,69  
↓ 15,90

Selected **65 MBT**  
from 64,95 MBT

# The structure of financing the construction of renewable energy facilities

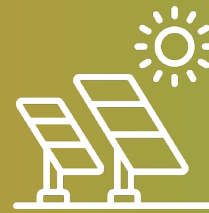
The volume of debt financing by types of RES in billion tenge, 2011-2020



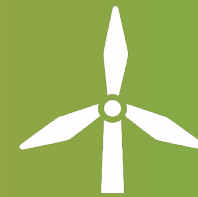
- EBRD
- DBK
- China Development Bank
- ADB
- DBK Leasing
- EDB FCT
- AiIB
- Green climate fund
- ICBC

Financing of renewable energy projects in Kazakhstan is most often handled by development banks

The amount of financing by types of renewable energy in billion tenge 2011-2020:



178 bln tg



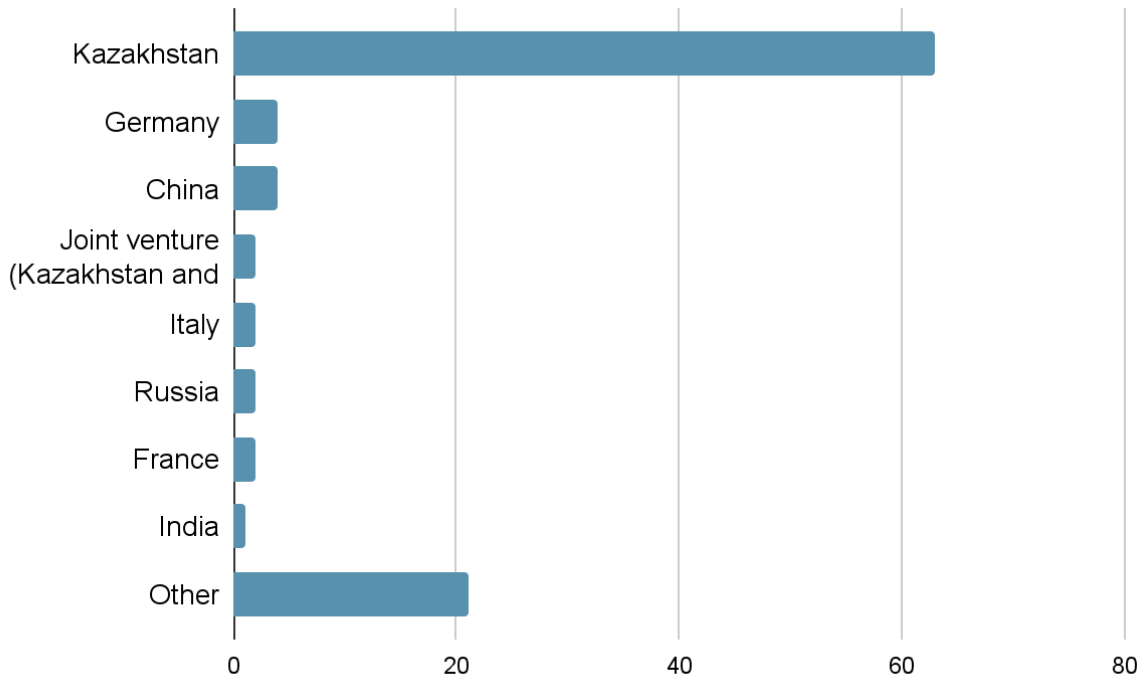
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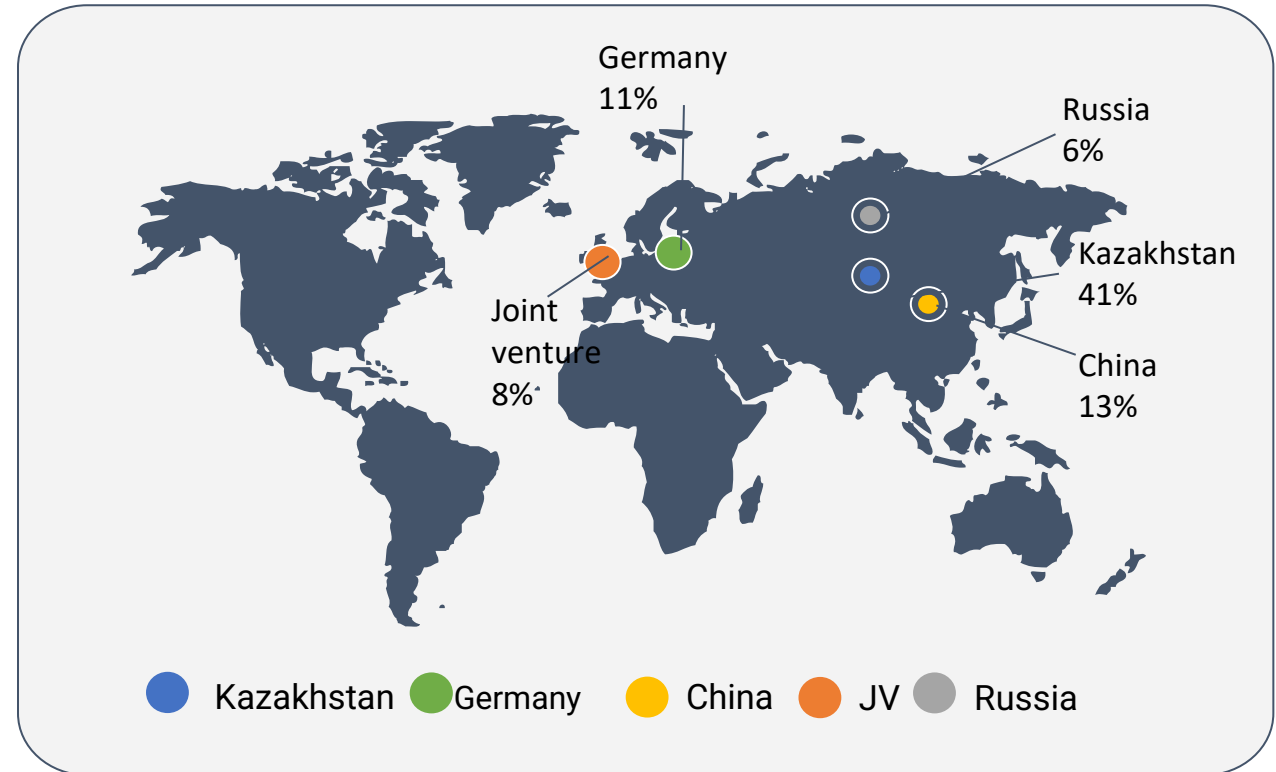
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The number of renewable energy projects with the participation of local investors amounted to **63%**, while the capacity of these projects was only **41%**

Number of renewable energy facilities by origin of investors, 2011-2020



The share of investors in the structure of generally installed renewable energy capacities, 2011-2020



**THANKS FOR ATTENTION**

October 2021

