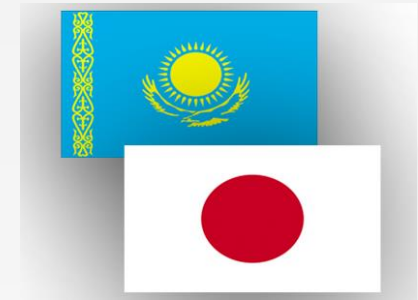




MINISTRY OF ENERGY OF THE REPUBLIC OF KAZAKHSTAN

**November 1, 2023
Tokyo, Japan**

SUCCESS ROJECTS IN KAZAKHSTAN



KASHAGAN

Kashagan is a participant in a Large-scale project. In 2002, **INPEX** entered into an oil and gas project at the Kashagan field.



ATYRAU REFINERY

The project "Reconstruction of Atyrau Refinery" was implemented by a group of Japanese companies "Marubeni Corporation" and "JGC Corporation" on a turnkey basis.

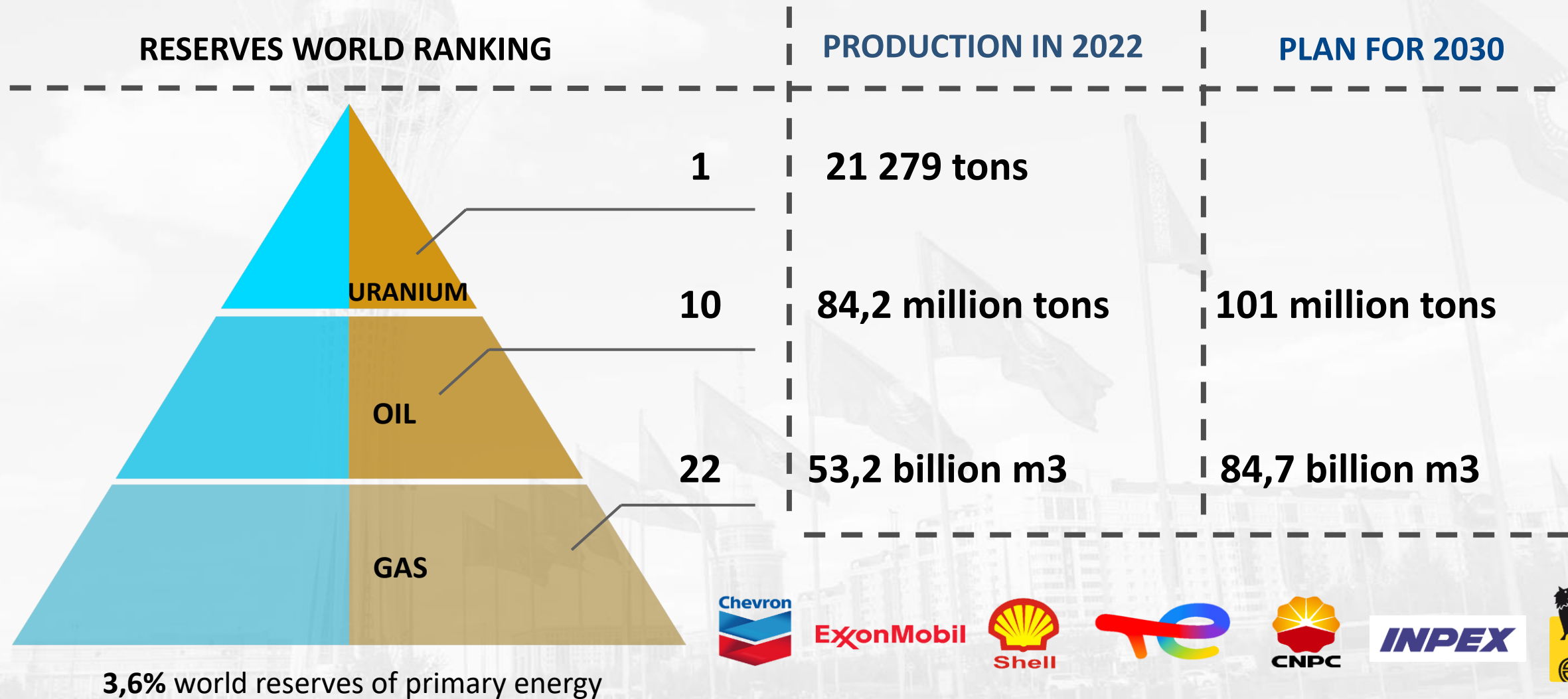
The Yokogawa company has been providing a full range of technical support services since 2005. Distributed control system (*DCS*) and emergency protection (*PAZ*) manufactured by Yokogawa.

INPEX

Marubeni

YOKOGAWA 

KAZAKHSTAN'S ENERGY SECTOR



OPEC's top 10 of oil-exporting countries in the world

ABOUT KAZAKHSTAN OIL AND GAS INDUSTRY



GEOLOGICAL OIL RESERVES

15,5

billion tons



EXTRACTABLE OIL RESERVES

4,4

billion tons



EXTRACTABLE GAS RESERVES

3,8

trillion M³



CONDENSATE

0,4

billion tons

15 SEDIMENTARY BASINS

76 billion tons HYDROCARBON RESOURCES FORECAST

5

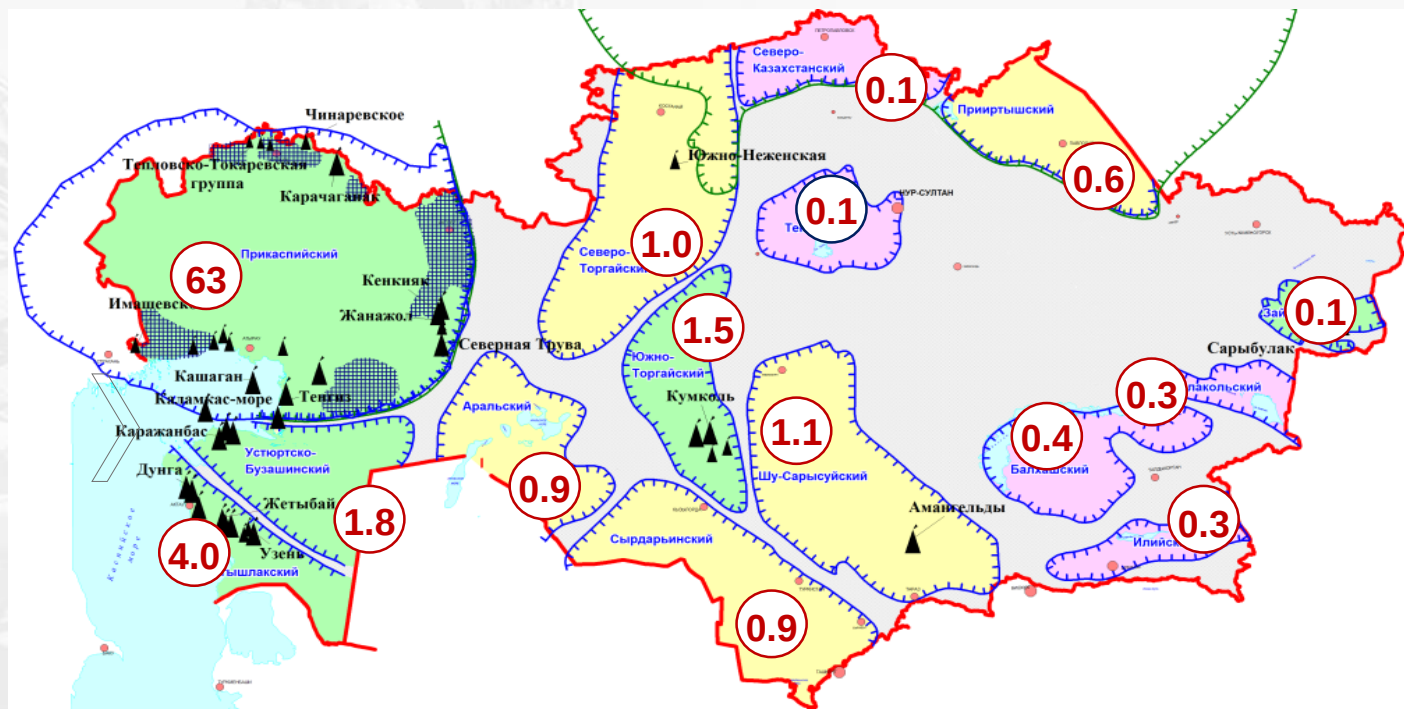
DEVELOPED

5

POORLY STUDIED

5

UNSTUDIED



DEVELOPED (investments)

UNSTUDIED

POORLY STUDIED (state budget)

Prospective areas for deep drilling

IMPROVED MODEL CONTRACT

REGULATORY PREFERENCES

- **stability** of **contract** terms
- international **arbitration** for dispute resolution
- free **choice** of crude oil export
- **simplified transition** from exploration to production

FISCAL PREFERENCES

- application of the **simplified taxation regime** for subsurface users
- increase in the limit to depreciation **up to 50%** for costs after the start of production
- temporary exemption from **Property tax**
- simplified fiscal regime

Signed **3 IMCs**, at sea (**Kalamkas/Khazar**), on land (**Karaton subsalt**), gas project (**Urikhtau**), with investments of **\$8.0 billion**

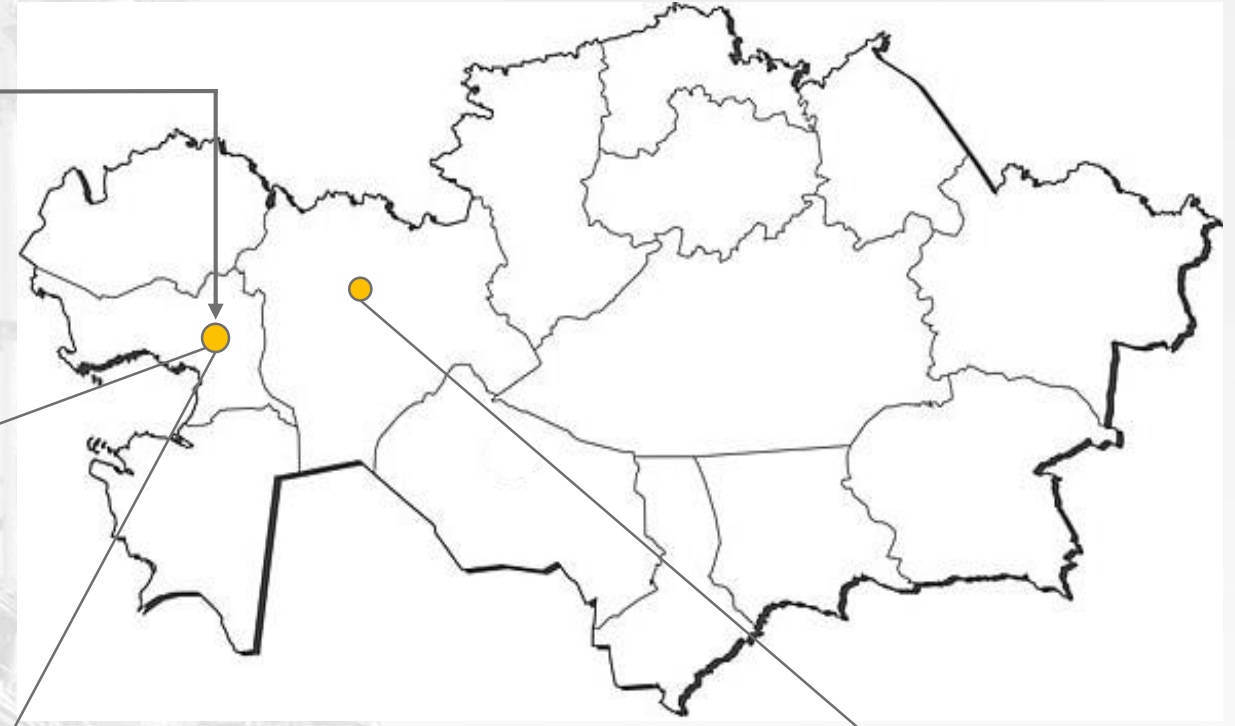
PROMISING PROJECTS OF THE PETROCHEMICAL INDUSTRY

PREFERENCES For FEZ "NATIONAL INDUSTRIAL PETROCHEMICAL TECHNOPARK"

- **TAX BENEFITS:**

0% on corporate income, land, property tax, VAT;

- **Simplified procedure for attracting foreign labor;**
- **Exemption from customs duties;**
- **Providing infrastructure.**



Polyethylene terephthalate production project

Raw materials: 400 thousand tons paraxylene + 18 thousand tons. acetic acid – the resulting product is 620 thousand tons. terephthalic acid + 245 thousand tons. monoethylene glycol.

Product: polyethylene terephthalate - 735 thousand tons.

Cost: ~\$1.1-1.5 billions.

Implementation period : 2023 – 2029 yrs.



Polystyrene production project

Raw materials: 133 thousand tons. benzene, 50 thousand tons. ethylene.

Product: 155 thousand tons of polystyrene.

Today the project is at the development stage, parameters for investment and implementation time are being clarified.



Urea production project

Raw materials: up to 1 billion m3 of natural gas from the Ts.Urikhtau field in the Aktope region.

Product: 1 155 – 1 300 thousand tons urea.

Cost: ~\$1.5 billion

Implementation period : 2023 – 2028 yrs.

UPCOMING PETROCHEMICAL PROJECTS



Polyethylene production project

Capacity: 1,250 thousand tons/year

Cost: \$7,7 billion.

Implementation period: 2022 – 2029 yrs.

Project participants: JSC NC KazMunayGas, LLC SIBUR, Sinopec

Current situation: design documentation is being developed



Project “Construction of a gas separation complex” in Tengiz

Capacity: 9.1 billion m3

Cost: \$2.8 billion (100% loan from the National Fund of the Republic of Kazakhstan)

Implementation period: 2019 – 2029 yrs.

Conducting a tender for EPC: end of the 2nd half of 2024.



Butadiene production project

Capacity: 250-340 thousand tons/year

Cost: \$888 million

Implementation period: 2022 – 2026 yrs.

Project participants: PJSC Tatneft, JSC Samruk-Kazyna Odeu.

Current situation: design documentation is being developed.

NUCLEAR INDUSTRY

№1

IN THE WORLD URANIUM MINING

SHARE OF GLOBAL PRODUCTION

≈40%

№2

IN THE WORLD BY URANIUM RESERVES
(≈700 thousand tons)

SHARE OF WORLD URANIUM RESERVES

14%

№1

IN THE WORLD

launched into industrial production a mine based on the method of underground leaching with a capacity of 1,000 tons of uranium per year.

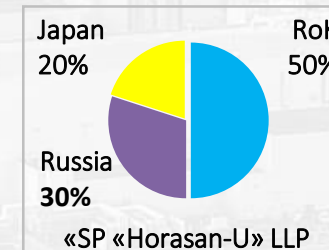
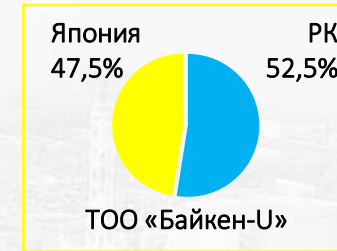
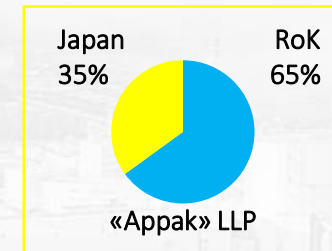
Natural uranium mining regions

Akmola region

Kyzylorda region

Turkestan region

Cooperation with Japan in the field of natural uranium mining



For uranium production by joint ventures with Japan, it amounted to 5.75% (1,223 tons) of the total uranium production in the Republic of Kazakhstan for 2022.

5 YEAR CHART

Auctions for the selection of projects for the construction of RES facilities

7 GW BY 2030

Introduction of RES generating capacities

15% FROM THE TOTAL GENERATION by 2030

Share of RES in the total generation in Kazakhstan by 2030

50% FROM THE VOLUME OF PRODUCTION

Share of RES in the total generation in Kazakhstan by 2050

KEY INDICATORS OF INDUSTRY DEVELOPMENT BY 2050

Carbon Neutrality Strategy by 2060 of the Republic of Kazakhstan

RENEWABLE ENERGY SOURCES AUCTIONS

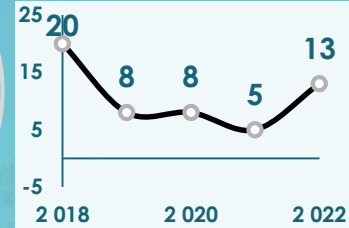
172
investor

13 COUNTRIES

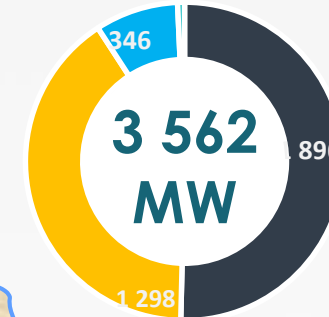
Kazakhstan, Russia, China,
Germany, Singapore,
Malaysia, Italy, Spain,
Netherlands, France,
Bulgaria, UAE and Turkiye

83
projects

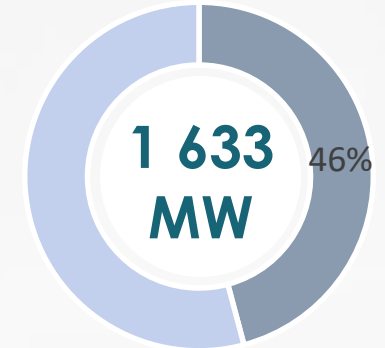
54 auction



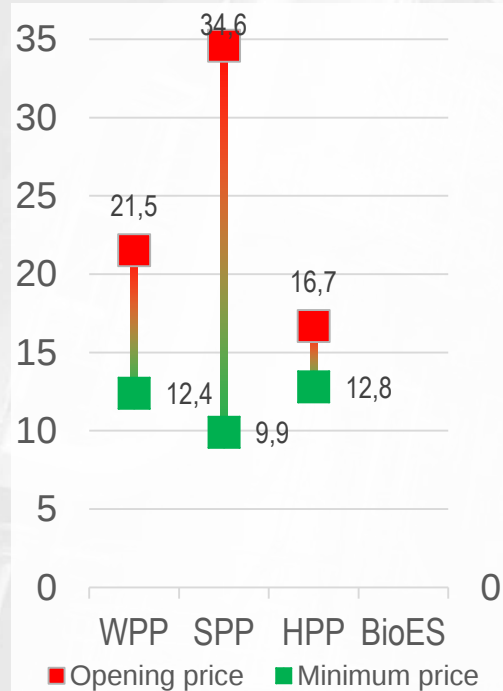
Total implemented



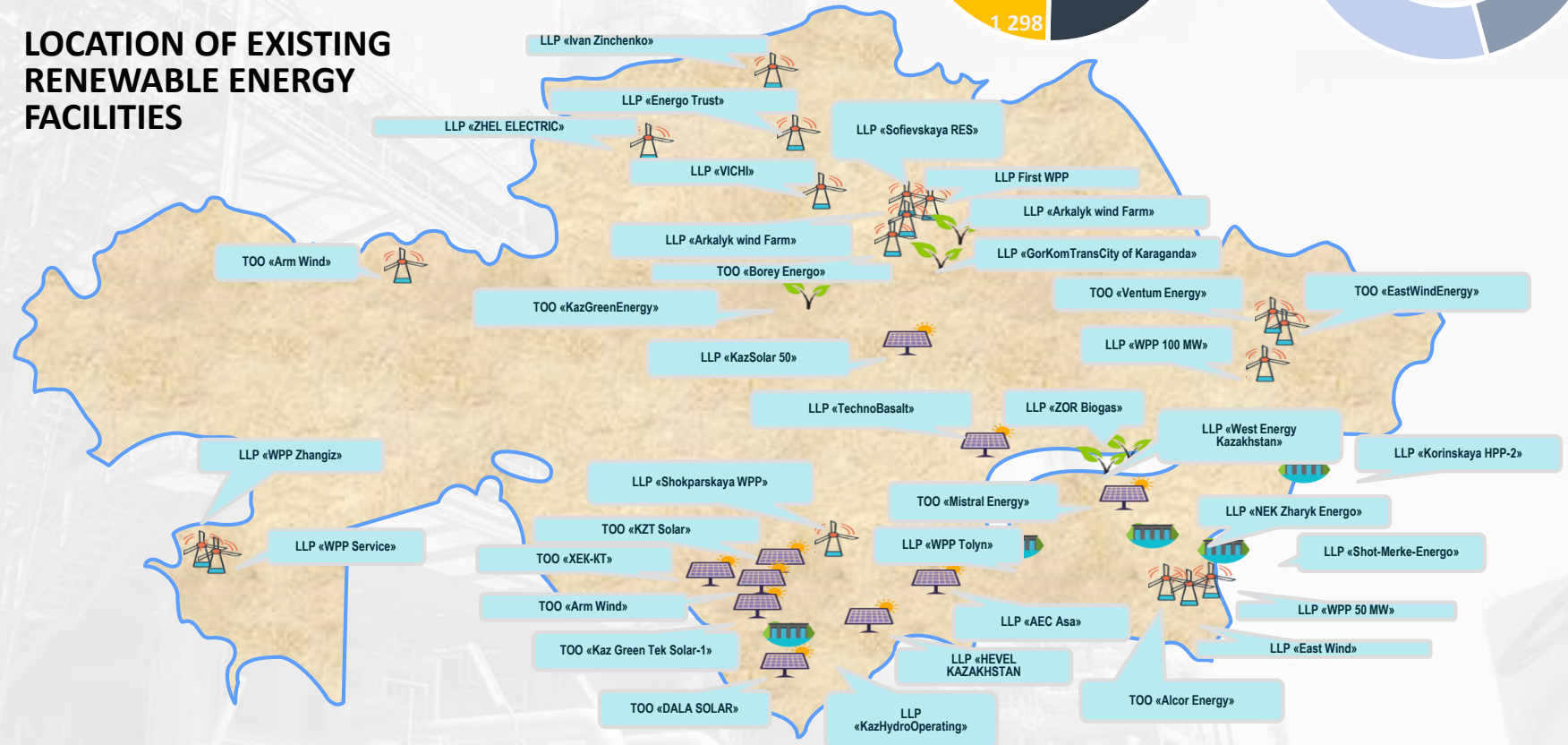
Including RES auctions



AUCTION PRICES, tg/kWh



**LOCATION OF EXISTING
RENEWABLE ENERGY
FACILITIES**



INDICATORS OF THE ENERGY INDUSTRY OF THE REPUBLIC OF KAZAKHSTAN

Number of power plants of the Republic of Kazakhstan

204

Electric stations of various forms of ownership (pieces)

Power plant capacity at the end of 2022

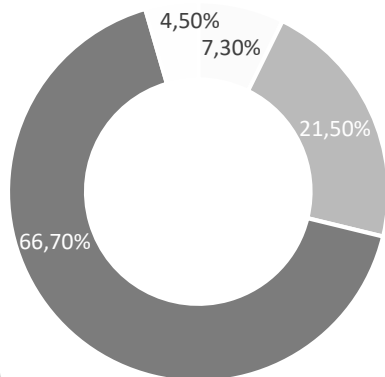
24 524

Total installed capacity, MW

19 024

Available power, MW

Structure of generation of the Republic of Kazakhstan



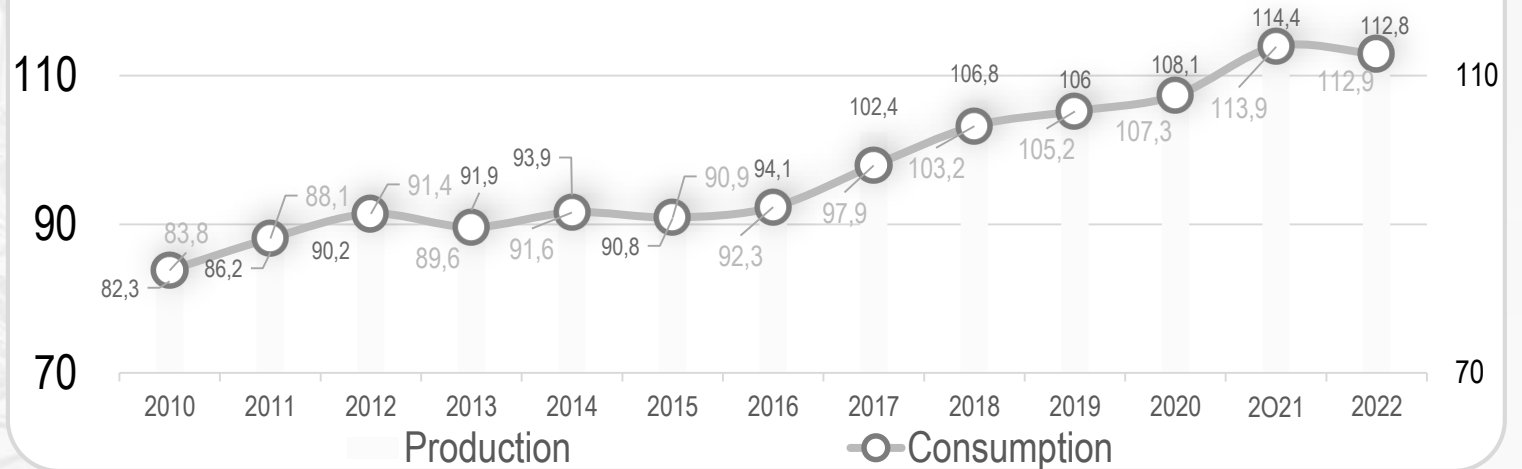
Coal TPP

Gas TPP

Large HPP

RES

Dynamics of electricity generation/consumption in the Republic of Kazakhstan



Power plants of Kazakhstan



44

SPP



53

WPP



39

HPP



72

Traditional



Thank you for your attention!