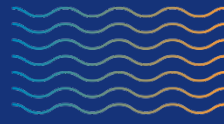


SOLAR



WIND



HYDRO

DEVELOPMENT | EPC

RENEWABLE ENERGY





Experts since 2004

We Drive Your Future in Renewable Energy
Esteemed, Looking Forward, Experienced Since 2004

Moderator: Vadim Sannikov
Founder & CEO
GSA Group



About Company

Since 2004, GSA Group provides development sites and performs Turnkey Construction (EPC) of power plants in the field of renewable energy, including solar power plants, wind farms, hydro power plants, the accumulation and transmission of electricity, substations, as well as innovative energy systems.

GSA Group is a modern and dynamic organization, we are committed to our professional experience and as a company with high standards, we value our customers and investors.





Company Overview

- **Company Name Group** | **GSA Group**
- **Founded** | **2004**
- **Business Sector** | Renewable & Green Energy (Solar, Wind, Hydro, Hydrogen)
Power Generation & Transmission
- **Business Scope** | Development; Turn-Key Solutions and Construction; EPC; Expertise.
- **Headquarters** | Kazakhstan, Almaty
- **Overseas Offices** | Poland, Uzbekistan, Ukraine, Kyrgyzstan, Africa
- **International & Local Membership** | **GSA is a Member of AREK (Kazakhstan Renewable Energy Association) and ULE Association «RES of Kyrgyz Republic»**



International Presence

KAZAKHSTAN

GSA Headquarters

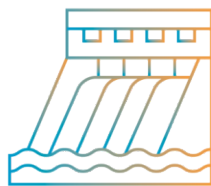
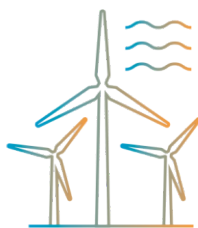
POLAND

UZBEKISTAN

UKRAINE

KYRGYZSTAN

AFRICA





Turnkey Solutions Stages

○ Feasibility & Development

Selecting optimal locations, Understanding project constraints, Design: technical guidance through project set-up, Resource assessments and bankable yield reporting.

○ EPC Stages

EPC / Design and adoption of technical documentation, Procurement and supply of materials and equipment, Site preparation, Construction and installation works, Commissioning.

○ Operation & Maintenance Stages

Monitoring and Facility Operations and full Services.



Clients & Partners





The Strategic Partners



Memorandum of Cooperation
24 December 2018



Memorandum of Cooperation
June 2018



Memorandum of Cooperation
7 January 2017



Memorandum of Cooperation
30 May 2019



Memorandum of Cooperation
27 March 2015



Memorandum of Cooperation
6 September 2021



Memorandum of Cooperation
22 November 2019



Memorandum of Cooperation
10 August 2017





GSA Key Indicators

7

Years of experience in construction of RES Projects

500+

MW, total capacity of commissioned projects

18

RES Projects accomplished with participation of GSA

With our experience and determination, we are capable to offer ready-to-build platforms for investors, assist in signing an electricity purchase agreement (PPA), as well as we provide an expert legal and technical support for your RES projects.

We support customers and make every effort to speed up construction time with consistently high quality while minimizing cost. As a company that operates in the fast-growing renewable energy industry, we can always offer the best solution.

This gives our customers the flexibility to choose one service or a full EPC service. Using our extensive experience in the energy sector, GSA GROUP is the leader in renewable energy, exceeding customer expectations and maximizing efficiency throughout the project.

GSA is your reliable partner in Innovative & Renewable Energy.





Our Portfolio



GSA GROUP successfully completed dozens of large projects in the field of telecommunications, automation and energy, we focused on the development and construction of turnkey projects in the field of renewable energy, as well as innovative energy industry.



Baikonyr Solar Power Plant - 50 MW

Location: South Kazakhstan

Scope of Works: Turn-key construction of PV plant including full scope of civil works, mechanical and electrical installation

Client: Caspian Legacy Construction (United Green)

Status: Completed in 2020



Shoktas Solar Power Plant – 50 MW

Location: South Kazakhstan

Scope of Works: Turn-key construction of PV plant including full scope of civil works, mechanical and electrical installation
Materials procurement and turn-key construction of OTHL 110 kV

Client: KZT Solar LLP (Hevel Energy Group)

Status: Completed 2021





Tainty Hybrid Power Plant - 263 MWp

Location: East Kazakhstan

Scope of Works: Project Development, permit management, pre-engineering, feasibility

Client: Neo Energy Limited

Status: Due completion 2025



Badamsha Wind Farm - 48 MW

Location: West Kazakhstan

Scope of Works: Procurement, installation supervision and commissioning of HV equipment (power transformer, switchgear, auxiliary systems)

Client: KazPaco (BI Group)

Status: Completed in 2020



Shalanki Solar Power Plant - 34,5 MW

Location: West Ukraine

Scope of Works: Turn-key construction of PV plant including full scope of civil works, mechanical and electrical installation
EPC of substation including procurement of main equipment, construction and commissioning of substation and underground HV transmission line

Client: Solaris (United Green)

Status: Completed in 2019



Centrale Hybride "KAKARA" Hybrid Power Plant - 120 MW

Location: Conakry (Africa)

Scope of Works: Full EPC including engineering, procurement, construction and commissioning.

Client: Annalex International PDG

Status: Due completion 2025



Zhanakorgan Solar Power Plant - 10 MW

Location: South Kazakhstan

Scope of Works: Full scope of project design engineering
Construction of OTHL 35 kV

Client: KZT Solar (Hevel Group)

Status: Completed in 2020



Zadarya-1 Solar Power Plant - 14 MW

Location: South Kazakhstan

Scope of Works: Turn-key construction of PV plant including full scope of civil works, mechanical and electrical installation

Client: KazGreenTekSolar (Urbasolar)

Status: Completed in 2020





Saumalkol Wind Farm - 50 MW

Location: North Kazakhstan

Scope of Works: Full scope of project design engineering

Client: EnergoTrust

Status: Due completion 2022





Ybyrai Wind Farm – 50 MW

Location: North Kazakhstan

Scope of Works: WTG installation

Client: Universal Energy

Status: Due Completion 2022





Erementau Wind Farm - 4,95 MW

Location: North Kazakhstan

Scope of Works: Feasibility study for expansion of existing wind farm

Client: First Wind Power Station

Status: Completed in 2021



Kushata Solar Power Plant - 10 MW

Location: South Kazakhstan

Scope of Works: Turn-key construction of PV plant including full scope of civil works, mechanical and electrical installation

Client: KZT Solar (Hevel Group)

Status: Completed in 2021



Kaskelen Solar Power Plant - 50 MW

Location: South Kazakhstan

Scope of Works: Construction of PV plant, including mechanical and electrical installation

Client: Mistral (Universal Energy)

Status: Completed in 2020



Gulshat Solar Power Plant – 40 MW

Location: Central Kazakhstan

Scope of Works: Construction of PV plant, including civil works, mechanical and electrical installation

Client: Hi-Tech Qazaqstan LLP

Status: Completed in 2018



Prusim Solar Power Plant – 1 MW

Location: Poland

Scope of Works: Full EPC including engineering, procurement, construction and commissioning.

Client: RTM

Status: Completed 2021





Akshakur Wind Farm – 5 MW

Location: West Kazakhstan

Scope of Works: EPC

Client: Best Group LLP

Status: Completed 2018



Hydro power station – Shelek 254 MW

GSA Project Team are involved in implementation of the development and preparation of **Expertise and Engineering Services** of the purely new Hydro Power Station in Shelek Settlement, located in Almaty Region.



Burnoye – 1 Solar Power Plant – 50 MW

Location: South Kazakhstan

Scope of Works: Construction of PV plant, including civil works, mechanical and electrical installation

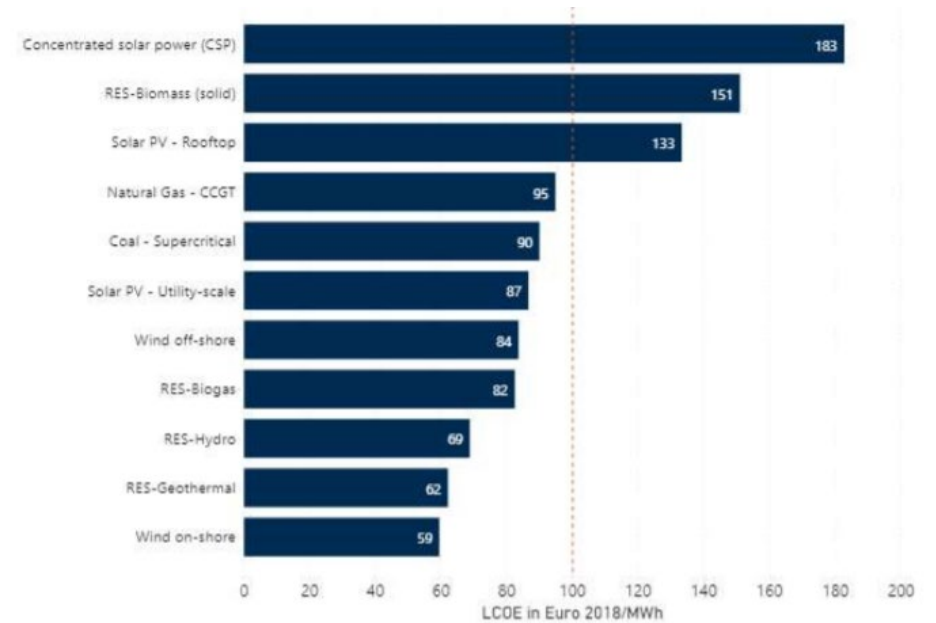
Client: GTR Energy Kazakhstan

Status: Completed in 2015



RES Advantages

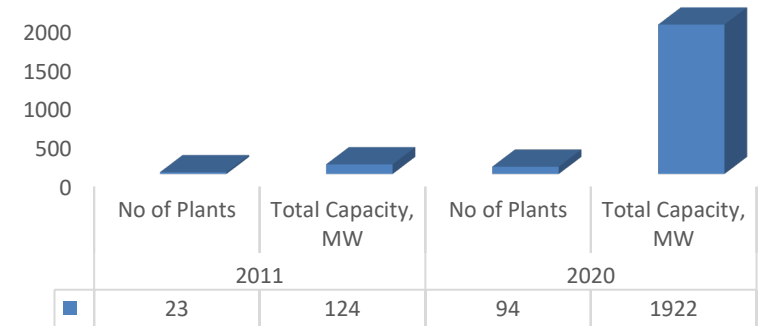
- **Decrease of Carbon Footprint** – the transition to Renewable Energy Generation is one of the crucial directions of Sustainable Development and is a part of Paris Convention.
- **Security and safety of Power Sector** – since RES generation does not consume fuel, widespread implementation of RES allows for a long-term security for the governmental power sector from scarcity and price fluctuations on traditional fuel (fossil, coal, gas)
- **Economical benefits** – According to Trinomics Final Report on Cost of Energy, RES LCOE has already reached the competitive generation cost, for instance Utility Scale Solar, Wind, Hydro projects are already more cost effective than traditional Natural Gas Turbines.



RES in Kazakhstan

- **2009** – Release of Law of Republic of Kazakhstan «On support of Renewable Energy Generation»
- **2013** – Creation of Financial Settlement Center of RE for state supported centralized purchase of renewable electric energy by single buyer, PPA period – 15 years
- **2016** – RES Projects included into invest project list, with following preferences:
 - exemption from customs duties
 - exemption from import VAT
 - State funded grants
- **2017** – Implementation of auction mechanism for RES projects at KOREM platform
- **2020** – Further additions to preferences:
 - exemption from property tax
 - exemption from land tax
 - exemption from income tax
 - extension of PPA term to 20 years

Relative growth of RES in Kazakhstan over 9 years



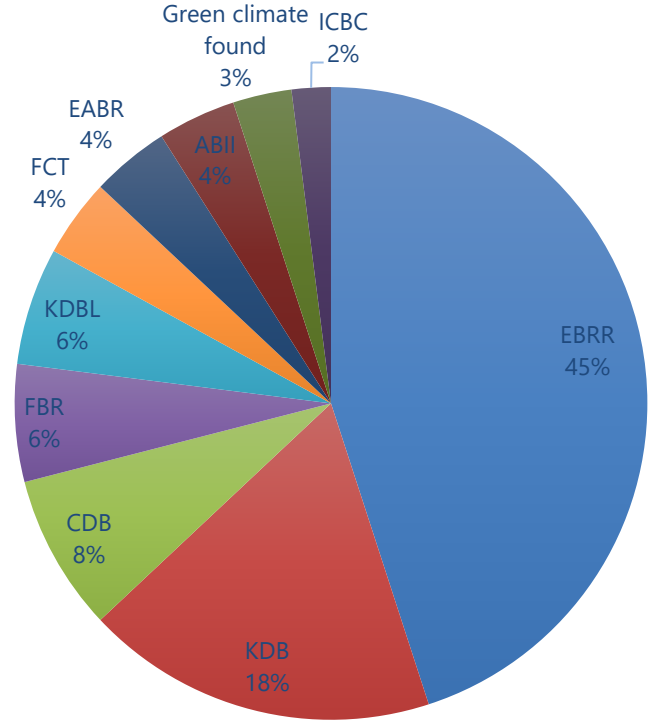
Current Key indicators of RES in Kazakhstan

Type of generation	No of Plants	Total Capacity, MW
Hydro	40	280
Solar	48	1033
Wind	31	601
Biogas	5	8
Total	124	1922

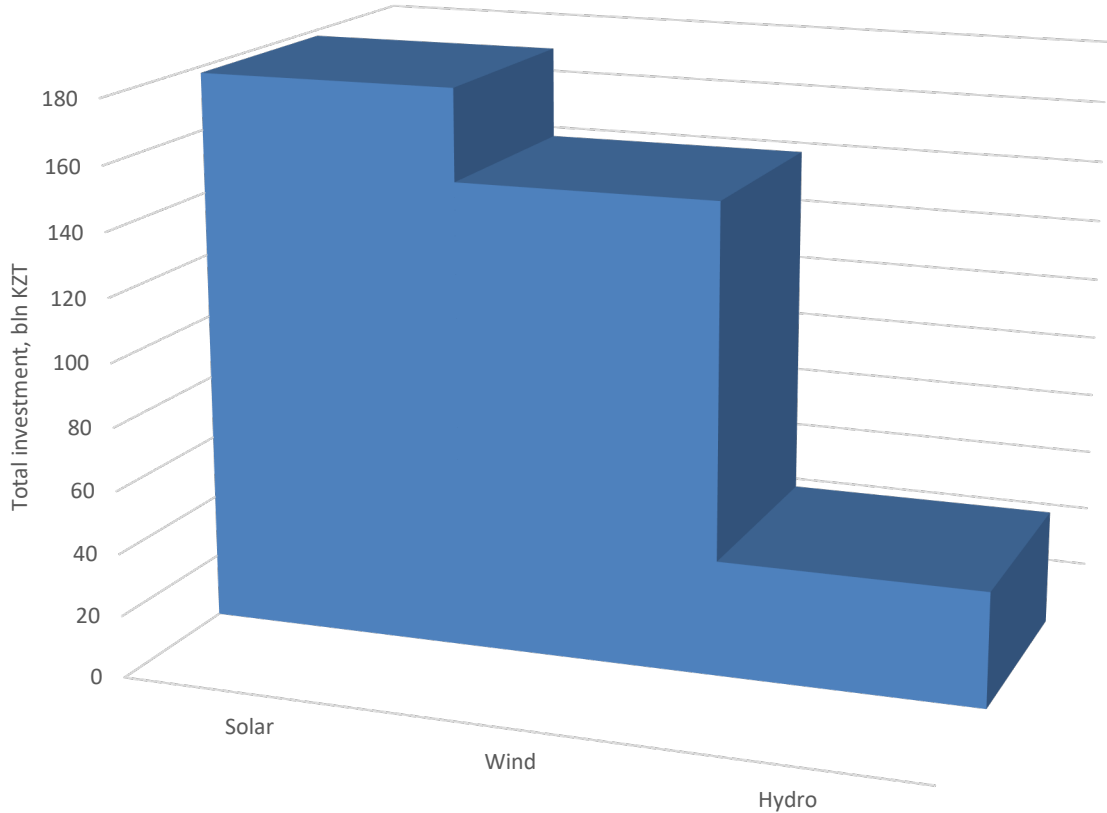


RES in Kazakhstan - Investments

Debt financing in RES KZ 2011 - 2020



Total investments in RES KZ 2011 - 2020





RES in Kazakhstan – Future Opportunities

- **2022 – 2030** - +8 GW of RES Generation is expected to be commissioned
- **NOW** – GSA is open for Cooperation on Kazakhstan market in the following directions:
 1. Joint Development of RES Projects in Kazakhstan
 2. Full scope of EPC Services and O&M
 3. Technical Consulting and experience exchange

President of Republic of Kazakhstan at his speech on May 26th, 2021, has announced: “RES generation shall become 15% of total generation by 2030. Currently the State is already developing an Updated Program to implement the expansion, including the construction of new facilities and power infrastructure.”



GSA in Poland

- **2020** – Establishment of GSA branch in Poland (GSA Polska)
- **2021** – Commissioning of the first GSA project in Poland – Prusim
- **NOW** – GSA is open for Cooperation on Poland market in the following directions:
 1. Joint Development of RES Projects in Poland
 2. Partnership in EPC as Consortium
 3. Technical Consulting and experience exchange





Thank you for attention!

Speaker – Vadim Sannikov



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