



Solar Power  
Association of Qazaqstan

## Information about SPAQ

2020



# Solar Power Association of Qazaqstan



**Single Platform** for national and international players in solar energy



**Goal** – is industry consolidation to bring together actors in the field of solar energy in order to create favorable conditions for development of the sector



**Mission** - formation of a holistic position of association members to obtain attractive conditions for investing in solar system projects

## Key tasks:

- Representation and protection of interests of the SPAQ members
- Conducting outreach to members of the Association and interested investors on the implementation of solar energy projects in Kazakhstan
- Improving the investment climate by making proposals in the legislative norms of the Republic of Kazakhstan
- Cooperation with international financial institutions
- Representation of the industry in the international arena to attract investment and best practices

## SPAQ members



Green Energy 3000 Kazakhstan



ТОО «ХЕК-КТ»

## Associated observers



KazWind Energy LLP



## SPAQ partners



МИНИСТЕРСТВО ЭНЕРГЕТИКИ  
РЕСПУБЛИКИ КАЗАХСТАН



For more details please visit our web-site [www.spaq.kz](http://www.spaq.kz)

# SPAQ Founders



CARER is one of the leading companies in RE sector in Kazakhstan with clear focus on provision of comprehensive solutions in renewable energy to local and international clients.

CARER has professional team with 7 years of unique knowledge and experience in development and implementation of renewable energy projects across Kazakhstan. Our team participated in more than 15 investment projects in RE with total capacity more than 400 MW.

## CARER projects:

- SPP Burnoye-1 (50 MW, Zhambyl region)
- SPP Burnoye-2 (50 MW, Zhambyl region)
- The First Wind PP (45 MW, Akmola region)
- SPP Gulshat (40 MW, Karaganda region)
- SPP Zadariya (14 MW, Turkestan region)
- SPP Chulakkurgan (50 MW, Turkestan region)
- WPP Badamsha (48 MW, Aktobe region)
- SPP Nurgisa (100 MW, Almaty region)

<http://carer.kz/>

## CARER key competencies

We are providing the following solutions in RE:

- Development of RE projects at pre-investment stage (registration of land rights, obtainment of technical conditions for grid connection, CAPEX and OPEX assessment and etc)
- Technical advisor;
- Financial modelling
- Financial structuring
- Tax advisor
- Drafting of EPC-contracts with tax wise solutions
- Obtainment of custom duty exemptions
- Owner's engineer service (independent evaluation and technical assessment of construction works during construction period on behalf of client)
- Assistance in commissioning and grid connection of RE projects.

# SPAQ members



Huawei Representative Office in Kazakhstan was established in 1998. The company's activities in Kazakhstan cover all three Huawei business groups.

- Huawei Carrier business group cooperates with almost all Kazakhstan telecom operators
- Huawei Consumer Business Group Delivers Consumers with Latest User Devices
- Huawei Enterprise is a division of the company that provides corporate customers with IT equipment and solutions that increase business efficiency by streamlining administration and production processes by informing them.

Huawei is a supplier of network inverters for solar panels. They allow you to maximize the energy production of solar power plants located both on the roofs and on the ground. The devices manufactured by the company are successfully used to build PV systems of megawatt capacities and for small home systems using solar panels

<https://www.huawei.com/kz/>



The Urbasolar Group is a leading French specialist in solar photovoltaic energy and for this purpose aims to make a significant contribution to the development of this energy on a large scale so that it provides the bulk of energy needs

Urbasolar operates a 350 MW fleet of 500 photovoltaic power plants

Urbasolar is widely represented in France. It develops significant international cooperation by developing, creating and operating photovoltaic power plants in Kazakhstan, the Philippines, Burkina Faso, Senegal, Kenya and many other countries where our experience can be applied to promising fields of application.

The Urbasolar Group has a portfolio of future projects with a total capacity of more than 1000 MW in France and internationally. These projects will be built over the next three financial years, which will lead to the ownership and operation of a fleet of photovoltaic power plants with a total capacity of more than 1 GW

<https://urbasolar.com/homepage-urbasolar/>



Hevel Group of Companies was founded in 2009 and is Russia's largest integrated company in the field of solar energy

The activity is focused on high-tech production of solar modules, the construction and operation of solar power plants, as well as research activities in the field of solar energy

Hevel's own plant annually produces 260 MW of heterostructured solar modules with cell efficiencies above 22%

The company implements any solutions including design, assembly and supply of solar modules, as well as construction, installation and commissioning

The scientific and technical center is engaged in research and development in order to reduce the cost and improve the quality of mass-produced Hevel solar modules

In Kazakhstan the company has portfolio of projects with total installed capacity of 238 MW

<https://www.hevelsolar.com/>

# SPAQ members



Risen Energy Co. Ltd.

Risen Energy is a high-tech enterprise engaged in research and development, production, sale and maintenance of solar modules, photovoltaic technology products, application of solar terminals and integration

It is among the top 10 companies in the world in the production of solar panels (based on the results of sales in 2018). Products are exported to over 30 countries around the world.

Risen Energy participated in the implementation of the 40 MW Gulshat SES project (Karaganda region), as well as the 50 MW Shulakurgan SES project (Turkestan region)

<http://risenenergy.com/>

## «HECK-KT» LLP

HEC-KT LLP is a developer, investor and implements SES projects in Kazakhstan  
The company is implementing a project for the construction of a 10 MW solar power station in the Zhanakorgan district of the Kyzylorda region

The implementation of this project is expected to reduce carbon dioxide emissions by at least 13 tons per year, the plant will generate more than 14.8 GWh of electricity per year, and the implementation of SES will contribute to the achievement of the target indicators in the field of renewable energy sources stipulated by strategic documents countries, and will also create additional green jobs in the region and attract foreign investment

# SPAQ Associated Observers



The European Bank for Reconstruction and Development (EBRD) was established in 1991 after the end of the Cold War in order to build a new era in Central and Eastern Europe

- In Kazakhstan, we have the following priorities:
- Balancing Public and Private Sector Roles
- Improving access to finance, strengthening the banking sector and developing local capital markets
- Interregional communication and international integration
- Transition to a green economy
- As a country where the EBRD operates, Kazakhstan is also a donor to the EBRD.

EBRD is a key investor in renewable energy projects in Kazakhstan

<https://www.ebrd.com/where-we-are/kazakhstan/overview.html>



Kazakh-German University

The Kazakh-German University is working under the Agreement between the Government of the Republic of Kazakhstan and the Government of the Federal Republic of Germany on further cooperation on the development of the Kazakh-German University in Almaty, concluded in Astana on September 3, 2008 and ratified on July 15, 2010

The university conducts training in the undergraduate and graduate specialties at 3 faculties:

- Faculty of Engineering and Information Technology
- Faculty of World Politics
- Faculty of Economics and Business

<https://dku.kz/ru>

# SPAQ new associated observers



Unicase provides a full range of legal services to local and international clients. Our lawyers have contributed to the development of more than 90 national laws and regulations. Our clientele includes large national companies and international corporations in Kazakhstan. International financial institutions such as the EBRD, the World Bank, the International Finance Corporation, the Development Bank of China and many more have repeatedly engaged Unicase to support their operations in Kazakhstan

## Consulting clients and government agencies in the Central Asian region in the R.E.S

Investing in creating a relationship of trust with clients and regulators, our team helps clients implement successful projects in Kazakhstan and minimize the risks of noncompliance. Unicase lawyers have remarkable experience in advising on the traditional and renewable energy projects involving the wind, solar, hydro and geothermal energy as well as other alternative energy sources. Unicase advises investors, financial institutions and the Ministry of Energy on the development of sector specific legislation, and on the structuring and financing of energy projects.

<http://unicaselaw.com/en/about-us/>

## KazWind Energy LLP

KazWindEnergy Company was founded in 2011 in the Republic of Kazakhstan in order to develop national wind energy.

Renewable energy - wind energy - is now a promising area in the most advanced countries. The Republic of Kazakhstan is also actively developing wind energy, using the country's unique natural resources. Currently, work has begun on the construction of wind farms, investor interest in these projects is growing.

According to the World Meteorological Organization, wind energy is 170 trillion. kW hours per year, this is several times more than all the electricity production in the world today.



## Linkage & Mind LLP

Linkage & Mind Law Firm was founded in 2005 and is one of the leading law firms in Kazakhstan. As a result of dynamic growth and an innovative approach to development, the company has operating offices in Almaty, Astana, New York and a number of regional partners.

Linkage & Mind is known in the market among the management and owners of large and medium-sized international and Kazakhstani companies, as well as among national companies and government agencies as a company that solves complex legal problems.

Partners and lawyers of the company are qualified specialists in the field of Kazakhstani and foreign law, and also have significant practice in government and teaching experience, and are members of leading Kazakhstani lawyers associations.

Linkage & Mind specialists are regularly recruited as consultants on various legislative work by government agencies, as well as Kazakhstani and foreign public organizations.

<https://linkagemind.com/>



# SPAQ partners



## Eurasian Development Bank

The Eurasian Development Bank (EDB) is an international financial organization designed to promote the economic growth of participating states, expand trade and economic relations between them and develop integration processes in the Eurasian space through investment activities

The Bank was established on the basis of an interstate agreement signed on January 12, 2006 by authorized representatives of the Russian Federation and the Republic of Kazakhstan. The initiative to create the Bank belongs to the presidents of Russia and Kazakhstan

In 2009, the Republic of Armenia and the Republic of Tajikistan, in 2010 - the Republic of Belarus, and in 2011 - the Kyrgyz Republic became full members of the Bank

The authorized capital of the Bank is 7 billion US dollars, including paid up capital - 1.5 billion US dollars and capital on demand - 5.5 billion US dollars

<https://eabr.org/>



## Eurasian National University named after L. Gumilyov

Eurasian University named after L.N. Gumilyov was founded by Decree of the President of the Republic of Kazakhstan N.A. Nazarbayev May 23, 1996

Currently, Eurasian National University is one of the leading classical universities in Kazakhstan.

Educational activities at ENU. L.N. Gumilyova is taught according to a three-level training system: undergraduate - graduate - doctoral PhD in Russian and Kazakh only full-time, which ensures high quality education

The university consists of 13 faculties (Faculty of Mechanics and Mathematics, Faculty of Information Technologies, University of Architecture and Civil Engineering, Faculty of Natural Sciences, Faculty of Social Sciences, Faculty of Law, Faculty of Philology, Faculty of Economics, Faculty of International Relations, Faculty of Physics and Technology, Faculty of Journalism and Political Science, Faculty of History and Faculty of Transport and Energy)

<http://www.enu.kz/ru/>



## Association of Solar Energy Enterprises

The activities of this industry association are aimed at the comprehensive development in Russia of an innovative industry - solar energy and the creation of favorable conditions for Russian high-tech products to enter foreign markets

### Members of association:

- AltEnergо
- Vlibor Systems
- Aleo
- Helios Resources
- Scientific and Technical Center for Thin-Film Technologies for Power Engineering
- Svyaz Engineering
- Avelar Solar Technology
- Hevel Solar

<http://pvrussia.ru/>



# Experience of the SPAQ's team

## SPP Burnoye-1

- › Capacity of the project: 50 MW
- › Forecasting electricity generation: 73.18 mln kwh
- › Location: Zhualy district, Zhambyl region
- › Land area: 150 ha (station + solar park)
- › Foreign investor: United Green (United Kingdom)
- › Commissioned: April, 2015
- › Construction period: 10 month
- › Electricity generated: 305,91 mln kwh
- › CO2 reduction: 98 915 tons per year



## SPP Gulshat

- › Capacity of the project: 40 MW
- › Forecasting electricity generation: 57,9 mln kwh
- › Location: Gulshat village, Karaganda region
- › Land area: 100 ha (station + solar park)
- › Foreign investor: Risen Energy (China)
- › Commissioned: February, 2019
- › Construction period: 9 month
- › Electricity generated: 9,34 mln kwh
- › CO2 reduction: 78 590 tons per year



## SPP Burnoye-2

- › Capacity of the project: 50 MW
- › Forecasting electricity generation: 78.9 mln kwh
- › Location: Zhualy district, Zhambyl region
- › Land area: 74 ha (solar park)
- › Foreign investor: United Green (United Kingdom)
- › Commissioned: June, 2018
- › Construction period: 9 month
- › Electricity generated: 71,45 mln kwh
- › CO2 reduction: 105 690 tons per year



## SPP Zadariya

- › Capacity of the project: 14 MW
- › Forecasting electricity generation: 21,6 mln kwh
- › Location: Arys village, Turkestan region
- › Land area: 30 ha
- › Foreign investor: Urbasolar SAS (France)
- › Commissioned: December, 2019
- › Construction period: 8 month
- › CO2 reduction: 29 268 tons per year



# Solar Fest of Qazaqstan – International business festival on renewables, organized with support by the Ministry of Energy of Kazakhstan

Solar Fest Qazaqstan – key event in the country on renewable energy sources

**July 4-5, 2019 organized the first Solar Fest Qazaqstan**

- › Over 300 delegates from Kazakhstan and abroad
- › Participants - representatives of government bodies, investors, private business, international organizations, international financial organizations
- › Discussion of the most pressing problems and challenges of the renewable energy sector of Kazakhstan
- › RES workshop from auction organizers on the selection of renewable energy projects
- › Ecological drawing competition "Sun - Energy - Art"
- › Five-minute youth meeting of student youth with industry experts
- › Solar Expo - Work Presentation Racks Companies
- › Discussion of the Charter - appeal to the Government of the Republic of Kazakhstan on behalf of the industry community on renewable energy

Charter-Appeal to the Government on behalf of the business community on renewable energy

- › Available long-term financing in national currency from financial institutions is a decisive factor in the development of renewable energy in Kazakhstan
- › Stimulating the implementation of small-scale renewable energy projects in Kazakhstan
- › Contingent consumers solvency risks
- › Sustainability of the financial center for renewable energy support
- › Education. Training of human resources for renewable energy development
- › The inclusion of renewable energy projects in the list of priority activities for the implementation of investment priority projects

**Following the event, the Association, together with government bodies, is working on the implementation of the Charter issues, which will improve the conditions for the implementation of renewable energy projects in Kazakhstan**

# Solar Fest Qazaqstan – dialogue platform between state and business on development of renewable energy

- › Discussion of key issues of renewable energy development in Kazakhstan
- › Legislative initiatives for the further development of renewable energy
- › State policy for the development of renewable energy
- › New RES support mechanisms
- › SME Support Tools
- › Investment preferences for investors
- › Terms for the purchase of electricity from renewable energy facilities
- › Planned volumes of procurement of installed capacities
- › Auction bid for the selection of renewable energy projects
- › Placement of renewable energy facilities
- › Renewable Energy Training
- › Contingent consumers solvency risks
- › Plans for the further development of renewable energy





# Solar Fest Qazaqstan – place for discussions of financing for renewable energy projects

- › Renewable Energy Project Financing: Available Tools, Problems, Prospects
- › Meetings with representatives of international financial organizations: EBRD, ADB, EBR
- › EBRD special session as a key player in financing RES projects
- › Problems with access to long-term financing of renewable energy projects in national currency at affordable rates
- › Stability of the financial center as the main buyer of renewable energy
- › The impact of currency risks and the volatility of the national currency on renewable energy projects
- › Reducing capital costs for the implementation of renewable energy projects as a global trend and their impact on auction results
- › High operational costs for the implementation of renewable energy projects



# Solar Fest Qazaqstan – opportunity for development of cooperation on renewable energy with international organizations

- › Development of cooperation with organizations such as: USAID, UNDP, Konrad Adenauer Foundation
- › Programs and special projects of international organizations for the development of renewable energy in Kazakhstan
- › Issues of development of distributed generation and small-scale renewable energy projects
- › Legislation and support measures for small-scale projects
- › Foreign experience in supporting renewable energy projects
- › Training of young renewable energy specialists and gender integration as a necessary component of industry development





# Solar Fest Qazaqstan – B2B meetings: investors, developers, equipment suppliers

- › Presentation of the most advanced equipment and services of companies - RES market players
- › Participation of companies in the top 10 global manufacturers of solar panels (Jinko Solar and Risen Energy)
- › Presentation of high quality inverters (Huawei)
- › Discussion of issues of cooperation and supply of products to the market of Kazakhstan
- › Training of engineers for the maintenance of foreign equipment
- › Discussion of technological tasks in the field of renewable energy: increasing the efficiency of panels, storing electricity, loss of electricity during transmission, reducing the factor of “unstable” generation
- › Participation in Solar Expo - an exhibition of products and services of companies





# Solar Fest Qazaqstan – atmosphere of informal communication

National ceremony «Tusau keser» – opening ceremony



Competition of ecological drawing «Солнце – Энергия – Искусство»



Students session: questions to experts of industry





# International round table on RES development – Dec 11, 2019

- › Results of 2019 on the development of renewable energy in Kazakhstan (implemented projects, installed capacities, legislative initiatives)
- › Legislative initiatives in the field of renewable energy
- › Measures of state support for local content in renewable energy projects and their impact on the renewable energy market
- › Plans for the development of renewable energy in 2020 (procurement capacity, auction schedule and prices)
- › Measures to ensure the financial stability of the system and the stability of the unified energy system of the republic
- › Other actual problems of renewable energy development
- › Based on the results of the Round table SPAQ prepared recommendation to the Government on the issue of development of the local content in the framework of the industry



# Promotion and protection of interests of SPAQ's members

## Legislative initiatives and expertise by SPAQ

- › Extension of PPA from 15 to 20 years and its effect on financial indicators of the projects
  - › Change in range of reactive power in solar stations
  - › Measures of state support for development of the local content and its negative affect on the sector in case of additional exceptional allowances for tariff for stations using the local content
  - › Fixation of the marginal prices for RES auctions on the maximum level of 2018 for promotion of investments activities in the sector
  - › Legislative basis for development of small-scale renewables the framework of the Law on RES
  - › Support on the functioning of Settlement of Financial Center for RES development
- › Investment and Tax preferences for renewable energy projects, inclusion of tax preferences for RES to the Entrepreneurial Code
  - › Adjusting the PPA agreements and increasing the time for the construction of renewable energy facilities under PPA in the framework of the State of Emergency
  - › Development of educational master's program in renewable energy in Kazakhstan (in partnership with Kazakhstan-German University)
  - › Carbon market development, the possibility of acquiring carbon offsets for RES stations in the framework of Ecological Code
  - › Inclusion of the day of renewable energy worker in the calendar of professional holidays of the Republic of Kazakhstan
  - › Expertise on the definition of the "Green Technologies" in the framework of Ecological legislation
  - › Development of balancing capacities in the Electricity Power industry of Kazakhstan

**This initiatives and expertise was done by SPAQ and developed through Parliament of Kazakhstan, Ministry of Energy, Ministry of Ecology of the Republic of Kazakhstan and National Chamber of Entrepreneurship**

# QazaqSolar magazine and monthly digest

## Informational-analytical magazine QazaqSolar on renewable energy sources



- support the development of the renewable energy sector
- highlight public policy in the field of development and support of renewable energy
- create a positive image of renewable energy in general SPAQ

- provide relevant information on the renewable energy market for a wide range of stakeholders: investors, developers, financial institutions, business,
- stimulate interest among a wide audience of readers to issues of green economy



## News digest in Russian and English on the urgent news on renewables from Kazakhstan and abroad



- Constant update of information
- Experts opinion
- Urgent news and events
- Amendments to legislation
- Commissioning of new renewable energy plants
- Plans of the companies on renewables
- News from abroad (CIS and foreign countries)
- Research and Development in the sector

# Membership in SPAQ



Download the application from [www.SPAQ.kz](http://www.SPAQ.kz)



Consideration of Application by the Board of Directors



Provide with copy of certificate of public registration of your entity



Payment of membership fee



Send scanned copy of your application and the copy of certificate of registration on e-mail: [info@spaq.kz](mailto:info@spaq.kz)

For more information please visit [www.spaq.kz](http://www.spaq.kz)





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