European-Ukrainian Energy Agency
Since 2009

Renewable Energy & Energy Efficiency Development in Ukraine

Kyiv, 2019
About European-Ukrainian Energy Agency

European-Ukrainian Energy Agency (EUEA) is an independent non-profit organization open to all stakeholders in the Ukrainian Energy Efficiency (EE) and Renewable Energy (RE) sectors who want to work constructively with like-minded members to contribute to the gainful and transparent development of these markets in Ukraine, through the promotion of fair and sustainable business practice, raising of public awareness of energy issues, and by influencing government energy policy.

Launched in November 2009, open to all market players, EUEA has become an effective platform for realizing the massive potential of energy-saving and renewable energy projects through collaboration with the Ukrainian business community, government authorities and other key market players.

For 10 years EUEA has been uniting various companies in the field of sustainable development remaining faithful to our mission of “Advocating, engaging, reforming Ukraine’s energy future”. It is our strategy for this year and years to come to regain our leading position and unite companies who want to work constructively with like-minded members to contribute to the gainful and transparent development of sustainable Ukraine.

EUEA unites investors from Austria, Belgium, Great Britain, Norway, Spain, Switzerland, Turkey, Ukraine, USA and other countries that implement projects in Ukraine with a combined capacity more than 1,5 GW of renewable energy generation.

We are proud to have international recognition and being a voice of national and international investors, to make our contribution in a long-term basis to develop good policy in Ukraine in energy and business climate sectors.

This year EUEA is 10. EUEA stands at the entrance of a new stage of development. A new stage begins: a new President, a newly elected Parliament, a new Government, a new electricity market - together with our members, as well as the Ukrainian and international energy community formed in recent years, including with the participation of EUEA, we can achieve ambitious goals for business and Ukraine!

“As EUEA grows and strengthens administrative capacities we will strive to offer more and more services to our members, while remaining open to your ideas of what other value added can we generate specifically for your company. If your business depends on the Energy Efficiency and Renewable Energy markets, we sincerely invite you to join EUEA.” – Oleksandra Gumeniuk, Director of EUEA.

“For 10 years EUEA has been uniting various companies in the field of sustainable development remaining faithful to our mission of “Advocating, engaging, reforming Ukraine’s energy future”. It is our strategy for this year and years to come to regain our leading position and unite companies who want to work constructively with like-minded members to contribute to the gainful and transparent development of sustainable Ukraine.” – Mats Lundin, Chairman of the Board of the European-Ukrainian Energy Agency.
For 10 years EUEA has been uniting various companies in the field of sustainable development remaining faithful to our mission of “Advocating, engaging, reforming Ukraine’s energy future”. It is our strategy for this year and years to come to regain our leading position and unite companies who want to work constructively with like-minded members to contribute to the gainful and transparent development of sustainable Ukraine.” – Mats Lundin, Chairman of the Board of the European-Ukrainian Energy Agency.
Power System of Ukraine

For three months, 937 million kWh of electricity was imported, that is 64% of total amount of exported electricity (1,457.7 mln kWh) for the same period.
Renewable energy sector of Ukraine

Installed capacity of RES objects (2014-2020), MWt

Electricity generation by RES objects (2014-2020), mln KWh
Renewable energy sector of Ukraine

Total investments of 3.3 bln Euros in 3.8 GW 2014 - 6 months of 2019 in green generation by sources, million euro

Investments in RES capacities of 9 months 2019
Renewable energy sector of Ukraine

Installed Capacity of RES objects by regions of Ukraine, MW, on September 1, 2019

RES share in electricity generation and national targets
Energy Efficiency market of Ukraine: does it exist?

Residential buildings

154,255 buildings

approx. 985 mln. sq. m

Public buildings

53,429, incl.:

- educational 34,134
- cultural 1,795
- medical 15,500
- others ~ 2,000
- cultural 1,795

Investments needed vs allocated financing

Residential buildings

EUR 45 bln

EUR 200 mln

Public buildings

EUR 10 bln

EUR 350 mln

Communal utilities

EUR 5 bln

EUR 700 mln
Energy Efficiency market needs

Direction: Residential buildings

Services needed:
- Energy Audits;
- Energy passports;
- Design documentation;
- Energy performance certificates;
- Project implementation support and quality assurance — reliable Contractors

Direction: Communal Enterprises

The facilities of the communal enterprises extremely need the rehabilitation and modernization.
Briefly about the new electricity energy market

Today, the electricity sector of Ukraine is in a state of reforming since Ukraine’s accession to the Energy Community of Southeast Europe. Primary legislation, implementing the provisions of the Third Energy Package of the EU, namely the NEURC Law and the Law of Ukraine “On the Electricity Market”, which incorporated the provisions of EU Directive 2009/72 into national law of Ukraine formed the basis of the legislative framework for reforming the electricity market of Ukraine.

The reform process is aimed at moving to a target model of the EU’s national electricity market, which envisages its further integration with neighboring markets into a regional market and further into a single EU energy market.

The introduction of the new market model was carried out in two stages. **As of January 1, 2019, the retail market started operating under the new rules, and from July 1, 2019 - the wholesale electricity market.**

New electricity market provides for such mechanisms for the purchase and sale of electricity, as bilateral agreements, a day-ahead market and an intraday market. In order to ensure sufficient amounts of electricity necessary for real-time balancing of electricity production and import and electricity consumption and export, congestion management in the IPS of Ukraine, as well as financial settlement of electricity imbalances, the operation of the balancing market and the ancillary services market is also prescribed. New support system for renewable energy projects is being implemented.

**As for July 2019, more than 3 billion euros have been invested in the renewable energy sector of Ukraine.** According to the National Renewable Energy Action Plan for the period up to 2020, the share of renewable energy in the total final energy consumption should be 11%, and according to the Energy Strategy of Ukraine for the period up to 2035, the share of energy from renewable sources in the primary energy supply structure should be 25%. This requires **attracting not only large volumes of investments** (approximately 30 billion euros according to the SAEE), but also the **development of balancing tools and increased flexibility of the power system of Ukraine.** According to the Ministry of Energy and Environmental Protection of Ukraine, balancing tools and increased flexibility of the power system stressed as urgent for further RES development. **Already in 2020, the deficit of balancing power will be 500 MW, and by 2025, it will grow to 2 GW.**

In fact, 53% of generated electricity was being traded on the open market in the first two months. However, the old non-transparent, overregulated “single buyer” model that should have been replaced by a competitive electricity market structure was brought back through various Public Service Obligations (PSO) imposed by a Cabinet of Ministers’ PSO Act. Deplorably, 90% of electricity from Energoatom and 35% of electricity from Ukhydroenergo, the two cheapest producers with more than 57% of all electricity generation in Ukraine, is foreclosed and currently cannot reach the open market.

In particular, the latest amendments to the PSO Act adopted on 21 August 2019 have increased the electricity volumes to be sold under the PSO framework, hampering market functioning. Additionally, the operational market segments do so also under regulated conditions. **Sales are subject to regulated threshold prices at the bilateral market and price caps at the organised dayahead and intraday markets.**

Under such overregulated conditions, market participants are discouraged from participating in the new market segments, with the initial limited interest to trade on the day-ahead, intraday and balancing markets even declining. Moreover, problems with historical debts and unpaid bills further complicate the functioning of the market.

Ensuring that the price caps and other restrictive measures such as disproportionate PSOs are limited in time and phased out in order to stimulate market participation and allow competition to develop should be treated with high priority.
Some more details about the new state support regime for RES producers

The Law of Ukraine “On Amendments to Some Laws of Ukraine on Ensuring Competitive Conditions for Production of Electricity from Alternative Energy Sources” No. 2712-VIII was adopted on 25.04.2019. It introduces new system of state support (auction system) for producers of electricity from renewable energy sources instead of the existing “green” tariff. The Law is aimed to create competitive bases for state support of renewable energy projects and to approximate the Ukrainian legislation to the EU legislation.

Key provisions of the Law:

1. **Auction system** shall be introduced from **July 01, 2019** and be valid until **December 31, 2029**. “Green” tariff and auction system will work in parallel. Projects operating under “green” tariff will continue enjoying the incentive until 2030.

2. Projects under development, which are not commissioned before 2020 may qualify for “green” tariff provided that the pre-PPA is concluded. **Final date to sign a pre-PPA to qualify for the “green” tariff (regardless of the project size) is 31 December 2019.**

3. Preconditions for the pre-PPA conclusion: a) confirmed right of land ownership/use; b) concluded grid connection agreement; c) construction permit.

4. “Green” tariff is valid until **2030**.

5. **Pilot auctions** shall be held during **6 months** from the effective date of the Law. Annual auctions shall be held from **01 January 2020**.

6. **Auctions shall be held twice a year**, but not later than **April 01 and October 01** of the respective year.

7. **Term of support for auction winners is 20 years.**

8. **Obligatory participation in the auctions** is established for wind power plants with installed capacity exceeding **5 MW** and solar power plants with installed capacity exceeding **1 MW**. All other producers of electricity from renewables may participate in auctions voluntarily.

9. **Auction competition** is a mandatory condition to conduct an auction. Capacity for which the bidders shall obtain the right for the support cannot exceed **80% of the total** capacity offered by all bidders.

10. **Qualification criteria for auction participants:**

    - confirmation of a right for land ownership or use;
    - concluded grid connection agreement;
    - disclosure of beneficial owners, information about management and related parties;
    - extract from the Unified State Register of Legal Entities, Individual Entrepreneurs and Public Organizations of Ukraine;
    - provision of a bid bond (bank guarantee).

11. **Bid bond** constitutes: **EUR 5 for 1 kW** to participate in the auction and **EUR 15 for 1 kW** to be provided in case of auction winning as the guarantee of contractual obligation fulfilment.
New Regime of State Support for Renewables Energy Producers

The Law "On Amendments to Some Laws of Ukraine on Ensuring Competitive Conditions for Production of Electricity from Alternative Energy Sources"

Term to apply for support schemes

- Auction system
- "Green" tariff for producers, signed up for PPA by
  - July 2019
  - 31.12.2019
  - 31.12.2020
  - 31.12.2021
  - 31.12.2022
  - 31.12.2023
  - 31.12.2024
  - 31.12.2025

Deadlines for holding auctions (starting from 01.01.2020)

- October 1, 2019
- April 1, 2020

Final date to sign a pre-PPA to qualify for the "green" tariff:

- 31 December 2019

"Green" tariff/CAP for auction price, eurocent:

- For solar facilities
  - As of 01.01.2017 up to 31.12.2019: 15.03
  - As of 01.01.2020 up to 31.12.2020: 11.26
  - As of 01.01.2021 up to 31.12.2021: 10.88
  - As of 01.01.2022 up to 31.12.2022: 10.5
  - As of 01.01.2023 up to 31.12.2023: 10.12
  - As of 01.01.2024 up to 31.12.2024: 9.75

- For wind power facilities
  - As of 01.01.2017 up to 31.12.2019: 10.18
  - As of 01.01.2020 up to 31.12.2020: 9.05
  - As of 01.01.2025 up to 31.12.2025: 7.92

- For biogas and biomass facilities
  - Fixed tariff: 12.39 eurocent til 2030

Local content premium to the "green" tariff and auction price:

- 5% or 10% depending on the volume of local content usage
New Regime of State Support for Renewables Energy Producers

Qualification criteria for auction participants:

- confirmation of a right for land ownership or use
- concluded grid connection agreement
- disclosure of beneficial owners, information about management and related parties
- extract from the Unified State Register of Legal Entities, Individual Entrepreneurs and Public Organizations of Ukraine
- provision of a bid bond (EUR 5 for 1 kW to participate in the auction and EUR 15 for 1 kW to be provided in case of auction winning as the guarantee of contractual obligation fulfilment)

Term of validity of Technical Conditions for grid connection:

- from obtaining TC or from the Law effective date
- 2 years for solar
- 3 years for other RES

Obligatory participation in the auctions:

- solar stations > 1 MWt
- wind facilities > 5 MWt
  (except for objects with three wind turbines, regardless of the installed capacity of such wind turbines)

- other RES facilities – optionally

Share of annual auction quota:

- ≥15% for solar energy
- ≥15% for wind energy
- ≥15% for other RES
Sustainable Development of RES and EE in Ukraine - Horizon 2025: EUEA Members' View

We strongly believe that the support programs of the European Union and the scientific & industrial R&D community in general are key for a sustainable development of the Union and each individual country participating in R&D projects. We are happy that Ukraine has started to be more and more engaged within the R&D environment and is receiving and contributing to the knowledge base for a sustainable European development” - CES clean energy solutions

It is only possible to grow and develop when there is a strategy ahead. Setting strategic tasks and breaking it down into smaller objectives has to precede any political declarations contradicting real action. In this sense the Horizon 2025 for renewables and energy efficiency market in Ukraine should give business a strong and clear signal on Ukraine’s plans and the way business can contribute to their implementation” – iC consultenten

In our opinion, it is without doubt important to have a successfully operating renewable energy market for the already existing wind power plants, as well as for those under development. This will contribute to the development of Ukraine’s energy independence and enable the country to exploit its renewable energy potential by making it competitive and even cheaper than conventional sources already in the short run, as it happened in developed countries” - Guris

Scatec Solar supports the sustainable energy transition and Ukraine’s targets to increase its share of renewable energy, contributing to improvement of energy security and independence” - Scatec Solar

Development of renewable energy sources, construction of a modern flexible energy system, integration with ENTSO-E, introduction of a true market environment - this is the only path for the energy sector of Ukraine” - IMEPOWER

Delivering Tomorrow’s World Today” – SINNALBA’s motto shows their attitude

Ukrainian policymakers are beginning to take more notice of the renewable energy agenda, but much remains to be done. It is only about half way towards the adoption of advanced and sustainable policy frameworks. Therefore the goal for 2025 is to help overcome barriers and ensure predictable project revenue streams for investors in Ukrainian green energy and energy efficiency” - GOLAW

DTEK Renewables development strategy is in line with the national Energy Strategy of Ukraine. We support the state targets on the transition to the “greener” future of the country” - DTEK Renewables

The future is now. You either adapt to the new world, or die with the old” - Indian Solar
EUEA Members

Acciona

Acciona aims to meet the needs of today without compromising the ability of future generations to meet theirs. To do so, Acciona offers sustainable solutions for the main global challenges, contributing to the creation of more resilient societies and designing a better planet and providing access to clean water, generate 100% renewable energy and build resilient infrastructure to guarantee sustainable development.

**Acciona in numbers:** SPP of 44 MW in Kyiv region. Two SPP are under construction in Odessa region, of 19,8 MW i 13,5 MW.

**Contact:** +38 044 492 75 97

AVENSTON

AVENSTON is Ukrainian investment and engineering company with European standards, professional in project management and construction of turnkey industrial PV power plants. The company’s core team has been professionally working on the “sun” market since 2007. Long-standing unique experience, the use of foreign practices in the innovative technologies launch and modern engineering solutions in design, as well as the focus on EPC-services allow us to offer the most competed and effective technical solutions within the budget of each individual project, which allows to optimize the implementation costs and achieve the best results for the Customer. The main business branches – investment, engineering and consulting.

**AVENSTON in numbers:** Total capacity of implemented projects as general contractor – 85,7 MW. 25 implemented projects; 6 projects are under development.

**Contacts:** info@avenston.com; +380 (66) 508-07-64

Celynx AG

Celynx is a Swiss based investment and advisory company focusing on renewables and other sustainable technologies. We have since 2001 established our own investments in wind power in Sweden, Turkey and Ukraine.

In Ukraine, we were one of the founding co-investors and advisors to Nova-Eco LLC and Vindkraft Ukraina LLC. Presently, we advise Scatec Solar in their quest to build up a large scale solar PV portfolio. We are interested in charging networks for electrical vehicles and waste to hydrogen technologies.

**Celynx AG in numbers:** Ukrainian operational wind power: 200 MW+; Ukrainian in construction solar PV projects: 250 MW+.

**Contacts:** Mats Lundin, Director, Im Tiergarten 36, CH-8055 Zürich, Switzerland; Phone: +41 79 256 5625

CES clean energy solutions GmbH

CES clean energy solutions is the competence center for energy efficiency, renewable energy and sustainable development. CES is operative worldwide and offers complete solutions out of one hand to its clients.

**CES in numbers:** CES is active in Ukraine since 2010 and has implemented more than 50 projects for private and public sector clients. CES is currently working on 7 projects and has more than 10 further projects under acquisition.

**Contacts:** Andreas Helbl, Michael Reidlinger; Managing Directors of CES; a.helbl@ic-ces.at; m.reidlinger@ic-ces.at

DTEK Renewables

DTEK Renewables is the biggest investor into the renewable energy sector of Ukraine. Having spent in total of EUR 1.2 billion in wind and solar projects, the company is one of the leading renewable energy companies in Ukraine with a portfolio of renewable assets of 950 MW whilst also featuring a management team with extensive international experience and a strong track record within the renewables sector.

In 2018, the sale of electricity produced by solar and wind farm amounted 677 million kWh. This volume of electricity can provide electricity to more than 350 thousand households over the course of the year.

**DTEK Renewables in numbers:** 950 MW capacities (almost equal split between 4 wind and 3 solar farms). DTEK Renewables will reduce CO2 emissions into the atmosphere by 2.6 million tonnes per year. 2.5 billion KWh of carbon-neutral electricity annually.

**Contact:** +38 044 594 46 52; Renewables@dtex.com

EDS Engineering Ltd

EDS-Engineering gives all services in the sphere of providing of electricity energy: service of electricity objects and networks; building and re-building of electricity objects; connection buildings to electricity networks; building electricity networks to 35kV; production of electricity equipment; making projects; our electricity laboratory can do measuring electricity parameters of electricity networks.

**EDS in numbers:** Since 2017, the company has designed more than 600 MW and built more than 130 MW of photovoltaica capacities throughout Ukraine. The solar power plants that we built operate in the Dnipropetrovsk, Zhytomyr, Zaporizhzhya, Kharkov, Kherson, Khmelnitsky regions. 12 projects of solar power plants (summary capacity 96+ MW) are under development

**Contacts:** Sales department: +38 056 731-95-78; +38 066 610 21 10; market@eds-ltd.com.ua

EMSOLT Investment

EMSOLT is an investment firm deploying capital in the alternative energy sector, working with sustainable and clean technologies through a broad range of financing solutions. Our efforts are always geared towards developing customized investment strategies tailored for business needs. We try to provide a complete set of solution, combining a variety of investment vehicles across the entire capital structure.

**Contact:** Alper Tuncer, Managing Partner; atuncer@emsolt.com
Electrum
Electrum exists to create custom engineering solutions and innovative products to deliver complex care, security and optimization in developing, establishing and operating energy and industrial assets. The company was founded in 1999.

**Electrum in numbers:** with over 10 years of experience on the RES market, we have implemented over 50 power stations – from WN/SN to NN/WN, and connected over 1000 MW RES power.

**Contact:** Pawel Gorski; Managing Director; pgorski@electrum.pl

Eurocape
EuroCape is an international renewable energy group focused on generating renewable wind energy in key European growth markets. EuroCape develops and then constructs these projects, together with leading international wind turbine manufacturers, and EuroCape then owns and operates the projects, thus generating long-term revenues from the sale of its renewable energy. EuroCape’s renewable energy development projects comprise a portfolio in excess of 2,000 MW. EuroCape has project development teams and administrative offices located in France, Germany, Italy, Monaco, Poland, Romania and Ukraine. EuroCape established its operations in Ukraine in 2008.

**Contact:** +38 044 290 2594; Shota Rustaveli str., 44, 2nd floor, Kyiv

GOLAW
GOLAW is an international full-service law firm with the offices in Ukraine and Germany. The firm is recognized by prestigious Ukrainian and international rankings, such as The Legal 500, Chambers & Partners, Best Lawyers, Who is Who Legal, IFLR 1000, Legal Awards, and continuously ranked among TOP 10 Leading Law Firms of Ukraine.

GOLAW provides sophisticated legal advice and reliable legal assistance in all major sectors, including agribusiness, retail and FMCG, healthcare and pharmace, financial services, renewable energy, transportation and infrastructure, internet technology, real estate.

**Contact:** Max Lebedev; Partner, Attorney at law; m.lebedev@golaw.ua; +380445811220 +380664850003

Guris
GÜRİŞ, since its establishment 60 years ago, has been a leading Company in the fields of construction, industry, trade, manufacturing, assembly, energy and tourism and has successfully completed many projects, which have not only been based in Turkey, but also have been taking place in CIS, Romania, Iraq, Syria, Libya, Ukraine, Kosovo, United Arab Emirates and Saudi Arabia.

**Guris in numbers:** 30 MW Ovid Wind WPP, Odesa region is commissioned; 120 MW Atlas Volovets Energy WPP (Zakarpattia region); 66 MW Ovid North WPP (Odesa region) are under development.

**Contacts:** English: Ozer Erdogan, +38 (063) 278 76 89; Russian & Ukrainian: Ernest Usenov, +38 (063) 674 80 20

Greenworx Holding N.V.
GreenWorx actively develops and invests in environmental and renewable energy projects.

Development activity is done by its dedicated development subsidiary and investments are made through special purpose holdings (SPH) and/or special purpose companies (SPC). The geographical focus is on Balkan countries, Eastern Europe, former CIS countries and Eurasia.

GreenWorx is interested in: wind energy; biomass to pellets or to energy; municipal solid waste; rendering (slaughterhouse waste); non-toxic hazardous waste; medical waste; geothermal energy.

**Contact:** Tom Hanson; Renewable Energy Project Developer; tom.hanson@greenworx.eu
       Oleg Terletskyi, oleh.terletskyi@veu.com.ua

Helios Strategia Polska
Helios Strategia Polska is a Poland solar EPC company that belongs to Helios Strategia (a group of companies). Founded in 2016 as one of the main Helios Strategia’s representative offices in Europe, now Helios Strategia Polska successfully operates in the Polish photovoltaic market. The company also owns a utility SPP with total capacity of 0.54 MWp.

The company offers its services to implement solar projects in the EU by delivering EPC, as well as providing such services, as land plots allocation and development for the construction of solar power plants; has a variety of ready investment solutions for implementing solar projects in Polish territories.

Today Helios Strategia Polska implements projects of solar power plants with a high bank liquidity ratio and offers a comprehensive approach in the area of solar power plants construction.

**Helios Strategia Polska in numbers:** 230 MWp — total capacity of SPP projects completed by the group of companies; 10 SPPs — total quantity of already implemented SPPs in Poland; 31 investment solutions — are already developed and ready for implementation in Poland in 2020.

**Contact:** +38 098 183 11 01; +38 056 372 88 47; contact@heliosstrategia.com
IMEPOWER

IMEPOWER is Ukraine’s leading advisory group focused on energy sector since 1996. IMEPOWER has been the accredited consultant for the Parliament Fuel and Energy Sector Committee for many years, having contributed to key pieces of legislation including the Energy Regulator Law, the Electricity Market Law, the Renewable Auction Law, etc. The company’s advisory practice focuses on developing of strategy, structuring and financing of investment projects, preparing of sector reports and forecasts, supporting companies operating on energy markets. The company’s legal practice is dedicated to assisting the clients working in electricity, gas, municipal and energy efficiency sectors. Our energy sector team is one of the strongest in Ukraine with in-depth knowledge of relevant legal and regulatory framework.

Contact: +38 044 287 49 22; office@imepower.com

Indian Solar

INDIAN SOLAR LLC was established in April 2017 to develop, realize and manage renewable energy projects. The company is developing SPP, WPP and biomass projects for further implementation.

Indian Solar in numbers: SPP projects with a total capacity of up to 150 MW have been developed in different regions of Ukraine. Negotiations are currently underway to attract investment in these projects.

In cooperation with Elawan Energy (Spain) and Beycelik Holding (Turkey), the development of wind power projects with a total capacity of up to 500 MW has been started.

Also under development projects by sources: ROOF PV further development and construction of 8MW in same regions; GROUND PV Projects that are starting to be financed in size of 100MW in Cherkasy and Khmelnytsky of which 32MW will start construction in middle November 2019. Expected date of finish for the 100MW is summer 2020; WIND, sites have been already selected and the land preparations and zoning is starting in November, first project of 50MW will participate in the first AUCTIONS; BIOMASS projects are in early stages of development and undergoing TFS.

Contact: Dmitry Prinus, Investor Relations; +38 095 388 46 33; d.prinus@indsolar.com.ua

Khmelnitsky Bio Power Plant (KBPP)

KBPP is a clean energy company based in Khmelnitsky, Western Ukraine. Our main aim is to take advantage of a little used biomass resource that is readily available in the Ukraine. This resource is straw, which is generated from grain production in Ukraine. By using straw as Biomass fuel we can generate renewable electricity and in doing so address the increasing need to make Ukraine less dependent on energy imports, as well as helping reduce green house gas emissions and also supporting local development & employment.

KBPP in numbers: KBPP currently have in excess 70MW under development in Ukraine across a number of sites. It is expected that we expand following the conclusion of the pilot project in Khmelnitsky.

Contact: Neil Rutherford, Project Development Director; nrutherford@kbppenergy.com; Telephone: +447378321313

Meganom Ukraine LLC

Meganom-Ukraine is representative of the plant YUZHCABLE. Meganom Ukraine has already supplied cable products for 55 solar and wind power plants with a total capacity of 1.5 GW.

Meganom provides a comprehensive solution for each client - technical support of qualified personnel for the selection, replacement and calculation of cable products, close work with customers, designers, installers, logistics to the facility, maintenance, installation supervision, warranty.

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Contact: Dmytro Maletskiy, Deputy Director; 067 565 4402; dm@meganom.kiev.ua

NBT AS

NBT AS was founded in 2006 and headquartered in Oslo, Norway.

NBT wants to contribute to a better environment and establish new, healthy business operations across borders, harvesting from the vast and renewable global wind resources. NBT develops, operates and owns large-scale wind farms in emerging economies.

NBT in numbers: 250 MW Sivash wind farm under construction; wind farms Zophia 2 and Zophia 3, with total capacity of 750 MW, are under development.

Contact: post@nbtas.no

IMEC'SSUKRAINE

IMEC’SBLUE is an engineering consulting company, working in many technical fields: energy, water, environment, construction and project management, geology and geotechnical engineering, tunneling, buildings and structures, transport. IMEC’SBLUE has been actively present on the Ukrainian market since 2006 and since then provided support to over 20 municipalities in implementing energy efficiency measures in the public buildings sector, prepared numerous energy audits and feasibility studies, consulting assignments in the transport and road infrastructure sectors, certification of buildings by international standards, energy modelling, construction project management, institutional and policy development assignments and many others. Currently, the IMEC’SBLUE group counts approximately 500 employees with experience in more than 100 countries. Ukrainian office employs 15 people.

IMEC’SBLUE in numbers: 79 consulting projects in Ukraine:

42 implemented and 37 – in progress.

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Contact: Elena Rybak, Managing Director, +38 044 38 44 337; e.rybak@ic-group.org.

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Contact: post@nbtas.no
**Sinatec Solar**

Sinatec Solar is a leading independent solar power operator that reliably and quickly supplies clean energy worldwide. The company currently manages and builds solar power plants with a total capacity of 1.9 GW on four continents. By the end of 2021, the company plans to operate and build solar power plants with a total capacity of 4.5 GW worldwide. Sinatec Solar’s headquarters are located in Oslo, Norway. Sinatec Solar is a publicly traded company traded on the Oslo Stock Exchange, an SSO ticker.

**Sinatec Solar in numbers:** portfolio of projects in the Ukrainian green energy is up to 500 MW in Kyiv, Cherkassy and Mykolayiv regions. 47 MW already under operation, 289 MW in construction and 65 MW in development.

**Contact:** Alina Sviderska, Head of Business Development in Ukraine, alina.sviderska@scatecsolar.com

**Schletter Group**

The Schletter Group is one of the world’s leading manufacturers of solar mounting systems. Schletter Group develops and manufacture mounting solutions made of aluminum and steel for solar farms, flat roofs, pitched roofs and solar carports. Their sophisticated solutions deliver supreme quality and durability – wherever the sun shines. Schletter Group in numbers: Branch offices: Australia, France, Japan, Canada, Spain, Turkey, South Africa, UK, Vietnam, Philippines, Korea, Germany, China, Australia. Turnover is about 270 mln. Euro per year. Projects in Ukraine: Tsykaly Region – Ukraine; 2MW provided; Donipropevsk region – Ukraine; 150 MW under development.

**Contact:** UMUT GURSAN Key Account Manager; Mail: umut.gursan@schletter-group.com; Phone: +90 533 340 86 37

**SINNALBA Group LLC**

Sinnalba specialises in breaking new ground in complex turnkey project management solutions, corporate strategic advice and transaction advisory services in a number of core business areas including technology, manufacturing, supply chain management, change management, total organisation fulfilment and financial solutions. Established in 2014, the company now has a presence in China, North Africa and Europe with an impressive team of experts combining international experience in strategy, management, project execution and corporate finance. This global coverage puts the company in an ideal position to help clients find new ways of doing things in a fast-changing world – such as reducing the environmental impact of energy consumption by adopting new technologies in everything from transportation and new materials to the internet of things.

Sinnalba acts as a conduit to provide emerging markets with vision, governance and competitive competence in: developing tomorrow’s world; total manufacturing solutions; innovation Project Management. Sinnalba team are not limited to one geographical area or industry sector – which means they can offer project management and fulfilment opportunities across the board.

**Sinnalba in numbers:** RES Projects: 1) 94MW under construction-solar 2)132 MW in development-solar 3) 190 MW in design & consultation stage -Biogas

**Contacts:** Dimitrios Moudouris, Director of Projects& Board Executive Director

T: +44 (0)131 322 2282; M: +44 (0)7858183541; Dimitrios.Moudouris@sinnalba.com

**Smart Energy LLC**

Smart Energy manages energy assets of the Smart Group and implements the best global practices of production, business process orchestration and HR management. Among multiple services provided by the company, there are:

- consulting on business and management matters;
- design engineering of production infrastructure, processes and technologies;
- project support, including developments of fields, drilling and operation of wells;
- acquisition, systematization, processing, interpretation and analysis of geological data, 3D modeling of oil and gas condensate fields;

**THERMOSYSTEMS Ltd**

Scientific production association “THERMOSYSTEMS” is an engineering company that provides the whole cycle of works on implementation of energy efficient projects from pre-project works to commissioning of the object. One of the main areas of work is the design of district heating and energy supply schemes for cities and enterprises.

**Contact:** +38 057 714 29 50

**Ukraine Power Resources**

Ukraine Power Resources is the latest in a series of renewable energy companies founded or co-founded by Peter A. Gish, which have successfully developed over 2.1 GWs of wind power capacity in six countries. UPP aims to produce reliable and sustainable clean energy from renewable energy projects that we develop in cooperation with rural communities in Ukraine.

Ukraine Power Resources is developing wind power production with a focus on projects along Ukraine’s Black Sea coast.

**Contact:** Jeoff Berlin; gberlin@ukraine-powerresources.com
**Volten**

Production Association "VOLTEN GROUP" is a leading national manufacturer of a wide range of high-voltage equipment. The company began its "path" in the Ukrainian energy market back in 2010, and over these 8 years, the scale of the company’s work has increased tenfold. High-voltage equipment manufactured by VOLTEN is installed at almost all energy facilities in Ukraine; more than 70 companies from the CIS countries evaluated the quality of their products. The availability of documents for manufactured products, responsibility in work, time-tested reputation of a reliable partner and truly “honest” pricing policy are the indisputable advantages of our company.

**Contacts:** Novikov Konstantin, Commercial Director, tel. +380504234203

**VR Capital**

VR Capital is an alternative asset manager focused on distressed securities and event-driven/special situations investments with a strong historical orientation towards emerging markets. VR Capital Group operates offices in London, New York and Moscow and has a presence in Buenos Aires.

**Contact:** General Inquiries: Mr. Ashok Raju: +1 646 571 1870

**YE0 Electrical & Automation**

YE0 founded in 2004 and has become a leading electrification and automation company. With its strong domain expertise, pioneering engineering solutions and global presence, YE0 is well positioned as a one stop solution provider for Energy sector along the electrification value chain—from power generation, transmission and distribution to the smart & efficient power and energy. YE0 executes projects as the EPC contractor in design, engineering, procurement, integration, installation, and commissioning for clients ranging from traditional state owned utilities to the independent power plant developers.

**YE0 Electrical & Automation in numbers:** Malyn Solar Power Plant 11MW.

**Contacts:** Dilfuza GÜNDÜZ; Global Business Development & Account Management +4915147497907; +380 (63) 708 65 15; dilfuza.gunduz@yeo.com.tr
EUEA Members about EUEA

EUEA is an effective platform for realizing the potential, effective networking and constructive cooperation with the business community of Ukraine and EU” – AVENSTON

EUEA is excellent communication platform to get new business opportunities” – Meganom

CES values the EUEA as a critical and knowledgeable association that, supported by their members, verifies and assesses the legal, political and business developments of the renewable energy and energy efficiency market at the time they pop up. We consider the EUEA as one of the most important platforms for the international and national business community to express and discuss a sustainable market development on highest political level in Ukraine” – CES clean energy solutions

EUEA provides unrivalled opportunities for members to share best practices by participating in projects, events and other mutual-learning activities involving a wide range of audiences. The Association also provides members with unique opportunities to shape policies and initiatives affecting transparent development of EE and RE sectors in Ukraine. EUEA is a platform providing the potential for a united voice on renewable energy issues and interests among leaders in the renewable energy community and respective national and international associations.” – YEO Electrical & Automation

We find EUEA are extremely effective at raising awareness of the importance of energy efficiency and renewable energy sources in Ukraine” – Khmelnytsky Bio Power Plant (KBPP)

EDS-Engineering

Indian Solar

Khmelnytsky Bio Power Plant (KBPP)

Scatec Solar

As a foreign investor in the energy sector of Ukraine, the company supports the formation and development of such industrial associations as the European-Ukrainian Energy Agency, which aim to promote the sustainable development of the economic, political and technological environment in Ukraine” – Guris

EUEA passion, understanding and drive in RES sector, helps us form, shape and guide our company growth” – Indian Solar

DTEK Renewables highly appreciates the successful experience of cooperation with EUEA as one of the leading international platforms for networking of business, authorities, experts and all other stakeholders in RES sector for the fulfilment of the Ukrainian Energy Strategy targets” - DTEK Renewables

The important role of NGOs has been acknowledged in the EU Clean Energy Package specifically in relation to the establishment of the Energy Union. EUEA as a leading industry Association has been doing exactly that – influencing the positive development of Ukraine’s Energy Sector. In this process a lot of hard work is in the background, and one of the most important task has been gaining trust of members, governmental authorities and of course, people. So far, Ukraine’s has made quite a progress in developing RE and EE markets, but there is still a long way to go. We are proud to be part of the process of making Ukraine more energy secure, more sustainable, efficient and attractive to international partners and businesses” - IC consulten
PARTNERS OF EUEA 10TH EUROPEAN-UKRAINIAN ENERGY DAY

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