Alternative Energy in Ukraine

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lternative energy in Ukraine is considered by many as one of the most fast-growing and attractive industries for investment. This is explained by the fact of favourable geographical conditions in Ukraine, introduction of a new policy by the government aimed at reducing use of traditional fossil fuels as well as gradual increase of price for communal services, such as electricity and heating, and favourable legal framework. The latter is discussed in detail in this article.

Current state of affairs in the field

Following a couple of years of relative silence on the alternative energy market in Ukraine, some substantial increase in the number of commissioned renewable energy projects has been observed in 2016. Thus, a couple of dozen projects, mainly in relation to wind, solar and biomass energy, have been already completed in 2016 or are at their final stages of completion. Many of these projects are carried out by foreign investors, in particular from Canada, USA, China and South Korea, who turned to the Ukrainian market following the introduction of legal reforms in relation to feed-in tariff regulation in mid-2015.

Additionally, the State Agency for Energy Efficiency and Energy Saving of Ukraine, the body that is largely responsible for implementation of energy efficiency policies, including in the area of renewable energy, assures potential investors that Ukraine has all the technical means and resources needed to move from traditional fuels to alternative sources of energy. The state aims to facilitate and increase the proportion held by alternative energy in the energy system of Ukraine to 11% by 2020.

Pursuant to the recent calculation made by the State Agency for Energy Efficiency and Energy Saving of Ukraine, the investment potential of Ukraine’s “green” energy market is estimated at EUR 16 billion. Moreover, in 2016 the overall power capacity of the Ukrainian renewable energy sector exceeded 1000 MW and is continuing to grow steadily.

Feed-in tariff: main attraction for investors

Renewable energy is on the rise worldwide. Many countries run a special government programme under which renewable energy is subsidized by the state, which results in more incentives for investment. Ukraine is no exception.

For many years Ukraine has been making efforts to stimulate financially the generation of electricity from alternative sources of energy. Such stimulation results in legislative provision for feed-in tariff, i.e. the guaranteed obligation of the state to purchase generated “green” energy from producers of alternative energy.

The new procedure for calculation of feed-in tariff in Ukraine was established in July 2015, following introduction of relevant amendments to the Electricity Act of Ukraine. Thus, pursuant to this procedure, the feed-in tariff is fixed in euro until 2030, and its amount is specified by multiplication of the retail tariff for consumers of the second voltage type as of January 2009 (UAH 0.5846, at that time EUR 0.05585) by the feed-in tariff coef-
icient for the relevant type of alternative energy. The National Commission for State Energy and Public Utilities Regulation quarterly converts the feed-in tariff into national currency on the basis of the average official currency rate of the National Bank of Ukraine for the applicable period. All generated electricity, except for volumes for personal needs, shall be paid under the feed-in tariff (except for blast furnace and coke gas, and for hydro plants with a capacity of up to 10 MW).

It is the obligation of the wholesale electricity market of Ukraine to purchase “green” energy produced under the feed-in tariff and make full payment for the cost of electricity, regardless of the installed capacity or volume of supply.

The sum of the feed-in tariff depends on the commission date of the electricity generation object, including phase of construction of the electricity station, which produces electricity from alternative energy sources. The certificate issued by the authorized state construction body, which certifies compliance of the constructed facility with the project documentation and its operational readiness (for facilities of categories IV and V of difficulty), or the registered declaration on the operational readiness of the constructed facility (for facilities of categories I-III of difficulty) serves as confirmation of the fact and date of commission.

The feed-in tariff for different types of renewable sources of energy is shown in the table below (in EUR).

### Premium to feed-in tariff

Following introduction of amendments to the Electricity Act of Ukraine, the mandatory local content requirement, which provided for a certain share of components used during construction of the electricity facility to be of Ukrainian origin, was cancelled. Instead, the use of equipment of Ukrainian origin by investors is stimulated by the relevant premium to the feed-in tariff (throughout all term of its validity), if the electricity facilities are commissioned between 1 July 2015 and 31 December 2024.

Therefore, if equipment of Ukrainian origin is used at least to the level of 50%, the premium for the feed-in tariff shall be 9%. If equipment of Ukrainian origin is used to at least a level of 50%, the premium to the feed-in tariff shall be 10%.

The level of use of equipment of Ukrainian origin at power plants that generate electricity from alternative energy sources is defined as the sum of respective percentages of specific items of equipment. Thus, for blades and towers the indicator is set at the rate of 30%, for gondolas and main frames at 20%. By using solar power photovoltaic modules of Ukrainian origin one may expect a premium to feed-in tariff of 5%, as the specific percentage for photovoltaic modules is 40%, for mounting systems for photovoltaic modules, inverter equipment, energy accumulation and tracking such specific percentage is 15%. The Electricity Act of Ukraine provides an exhaustive list of equipment for each type of alternative energy source that qualifies for the feed-in tariff premium.

The Ukrainian origin of equipment shall be confirmed by the appropriate certificate issued by the Ukrainian Chamber of Commerce. In order to apply premium to the feed-in tariff on the basis of the requirement of Ukrainian origin, the applicant shall submit its application along with the required documents to the National Commission for State Energy and Public Utilities Regulation.

However, it is worth noting that such premium to the feed-in tariff does not apply to electricity facilities belonging to private households.

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<tbody>
<tr>
<td>Ground-mounted solar power plant</td>
<td>&lt;600</td>
<td>0.1696</td>
<td>0.1599</td>
<td>0.1502</td>
<td>0.1352</td>
<td>0.1201</td>
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<tr>
<td></td>
<td>&gt;600-2000</td>
<td>0.1804</td>
<td>0.1723</td>
<td>0.1637</td>
<td>0.1475</td>
<td>0.1309</td>
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<tr>
<td>Wind turbine</td>
<td></td>
<td></td>
<td>0.0582</td>
<td>0.0517</td>
<td>0.0452</td>
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<tr>
<td></td>
<td>&gt;2000</td>
<td></td>
<td>0.0679</td>
<td>0.0603</td>
<td>0.0528</td>
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<tr>
<td>Biomass</td>
<td>&lt;200</td>
<td>0.1239</td>
<td>0.1115</td>
<td>0.0991</td>
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<tr>
<td>Biogas</td>
<td>&gt;2000</td>
<td>0.1239</td>
<td>0.1115</td>
<td>0.0991</td>
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<tr>
<td>Hydro plant</td>
<td></td>
<td></td>
<td>0.1745</td>
<td>0.1572</td>
<td>0.1395</td>
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<td></td>
<td>200-1000</td>
<td>0.1395</td>
<td>0.1395</td>
<td>0.1255</td>
<td>0.1115</td>
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<td></td>
<td>1000-10000</td>
<td>0.1045</td>
<td>0.0942</td>
<td>0.0835</td>
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<td>Geothermal energy</td>
<td></td>
<td></td>
<td>0.1502</td>
<td>0.1352</td>
<td>0.1201</td>
<td></td>
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<tr>
<td>Solar power for private household</td>
<td>&lt;30</td>
<td>0.2003</td>
<td>0.1901</td>
<td>0.1809</td>
<td>0.1626</td>
<td>0.1449</td>
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<tr>
<td>Wind turbine for private household</td>
<td>&lt;30</td>
<td>0.1163</td>
<td>0.1045</td>
<td>0.0932</td>
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</table>
**Tax benefits**

For a number of years, the producers of “green” energy in Ukraine enjoyed quite substantial tax benefits. However, amendments made to the *Tax Code of Ukraine* in late 2014 cancelled many tax privileges for producers of electricity from alternative energy sources, specifically in relation to income and land taxation.

Nevertheless, some tax benefits are still available for renewable energy producers. Thus, pursuant to the *Tax Code of Ukraine*, no VAT is applicable to transactions on import to the territory of Ukraine of:

— equipment functioning on the basis of alternative energy sources, energy saving equipment and materials, means of measuring, control and management of energy resources, equipment and materials for production of alternative types of fuels or electricity from renewable energy sources;

— materials, equipment, components for manufacturing equipment, which is functioning on the basis of renewable energy sources; raw materials, equipment and components for production of alternative types of fuels or electricity from renewable energy sources; energy saving equipment and materials, products whose operation provides saving and rational use of energy resources; means of measuring, controlling and managing energy resources.

In addition, pursuant to the *Customs Code of Ukraine*, the above-mentioned goods are exempt from import and export duties, provided that the taxpayer uses them for its own production and that no identical goods with the same qualities are produced in Ukraine. Nevertheless, this tax benefit, while being resolved on paper, cannot be implemented in practice due to the failure of the Cabinet of Ministers of Ukraine to approve the list of such goods with specification of codes under the Ukrainian Classification of Foreign Economic Activity Products.

Furthermore, the *Tax Code of Ukraine* provides that any transactions relating to the sale of electricity generated by qualified cogeneration units and/or from renewable energy sources are not subject to excise tax.

**Private households: a new popular trend**

According to the State Agency for Energy Efficiency and Energy Saving of Ukraine, the latest trend in the alternative energy sector of Ukraine is the increase in solar panels installed by households. This is attributed to the positive legislative changes made in 2015, which enabled private households to not only sustain their electricity needs by means of using renewable energy sources, but also to sell any such excessive generated energy under the feed-in tariff. The trend has been growing continuously for the last two years.

Thus, pursuant to the *Electricity Act of Ukraine*, private households are entitled to set up electricity generating facilities with capacity of up to 30 kW and sell electricity produced from solar or wind energy under the feed-in tariff to the electricity distribution company in an amount that exceeds monthly consumption of electricity by such private households.

Generation facility at a private household is deemed to be commissioned as of the date of submission (sending) of the respective notification to the electricity distribution company. If within the household there are several commissioned generating facilities, to which several coefficients of feed-in tariff apply, such a household shall establish special commercial accounting for each such generating facility as well as special commercial accounting for electricity consumed by the household.

**Conclusion**

Based on the above information, it is clear that potential investors could receive great benefits from investing in the alternative energy sector in Ukraine. The industry is growing steadily, the legislative framework is stable and settled until 2030 and some additional perks are available (such as tax benefits and premium to feed-in tariff). Notably, due to the system of calculation of the feed-in tariff, the sooner that an investment is made and a power generation facility is commissioned, the bigger the share of profit that may be acquired.

It is also a great opportunity for manufacturers of renewable energy equipment for private households (particularly wind and solar energy) to establish their presence within the Ukrainian market. The significant interest on the part of Ukrainian citizens in generating electricity for their own households is likely to increase in the near future due to the government’s policy of charging higher utilities services payments for its citizens.