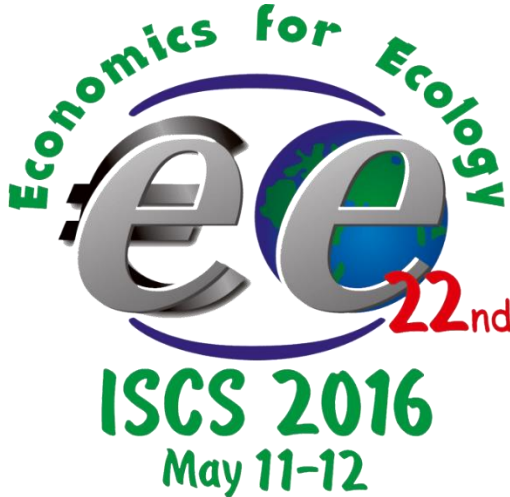


Ministry of Education and Science of Ukraine
Sumy State University
Oleh Balatsky Academic and Scientific Institute of Finance,
Economics and Management

22nd International Scientific Conference
"Economics for Ecology"
ISCS'2016



Економіка для екології

Матеріали
XXII Міжнародної наукової конференції
(Україна, Суми, 11-12 травня 2016 року)



Суми
Сумський державний університет
2016

information and synergy (communication). As a result of these processes the basis of a new type of economy is being formed.

GREEN ENERGY FOR SUSTAINABLE DEVELOPMENT IN UKRAINE¹

Leonid Melnyk, Iryna Dehtyarova, Daryna Shevelyova
Sumy State University, Sumy, Ukraine

To ensure energy independence of Ukraine on the way to sustainable development one of the priority areas is the implementation of alternative energy projects.

Rising energy demand raise the issues of a gradual shift from traditional technologies that involve the use of mainly energy assets and passive energy networks to fundamentally new solutions, focused on the widespread use of renewable energy sources (RES) and active networks that can provide services for transfer, storage and conversion of electricity.

Such network is EnerNet. EnerNet is an information-energy active system for the collection (from separate sources), transfer, storage, conversion and use of electric energy in the most efficient manner. It performs the following functions: power generation, transmission, collection, storage, rental, control, billing, sales, operations optimization, protection, providing of power quality, power system stability.

The Law of Ukraine "On Electric Power ", dated 01.01.2014 allows domestic private households fixing on theirs roofs photovoltaic panels, which power does not exceed 10 kW and connect them to the local grids.

Ukraine provides economic incentives to private households for green energy production using a Green Tariff for the period up to 01.01.2030. It refers to those economic agents (private households) that produce electricity from RES. Oblenergo will purchase from private households electricity produced from renewable energy sources.

It should be noted that promising and cost-effective energy projects are being realized with the use of a Green Tariff and in accordance with the terms of the Law of Ukraine "On Electric Power". It allows selling energy

¹ Material is prepared within the framework of Jean Monnet program "Using best EU practices for sustainable economy forming in Ukraine" (UBEUP) 553185-EPP-1-2014-1-UA-EPPJMO-MODULE).

from alternative energy sources to Oblenergo, and payment is done according the wholesale Green Tariff prices of electricity market [1].

Ukraine has established the following levels of a Green Tariff for private households that generate electricity from solar power, power not exceeding 30 kW:

- 01.01.2016 - 31.12.2016: 4.6476 UAH / kWh (excluding VAT);
- 01.01.2017 - 31.12.2019: 4.4237 UAH / kWh (excluding VAT);
- 01.01.2020 - 12.31.2024: 3.9761 UAH/ kWh (excluding VAT);
- 01.01.2025 - 12.31.2029: 3.5416 UAH / kWh (excluding VAT) [2].

For example, Table 1 shows the performance of an individual household project using a Green Tariff. It presents calculation and economic efficiency of the project for solar power with the capacity of 10 kW*.

Table 1 - Indicators for economic efficiency of the project for solar power [1]

Efficiency of photovoltaic power plant of 10 kW per year **, kWh **	10000
Energy consumption by a household per year, kWh., To 250kVt-hours per month	3000
Electricity surplus transmitted to the network, sold under a Green Tariff, kWh per year	7000
Green Tariff by the end of 2015, 0.18 € per kWh	0,18
Total income per year, EUR	1800
The cost of photovoltaic equipment for network stations for private households*, EUR	11850
Payback, years	6,58

* Calculation conducted by Photovoltaic Geographical Information System (PVGIS-CMSAF).

** equipment: 40 to 250W PV modules, inverters, system fasteners, components and related materials. The cost of the kit is specified at the time of delivery.

Today there are some problems that prevent private owners from active use of renewables. Here belong high cost technologies; inadequacy of government policy; difficulty in joining such facilities to Oblenergo power grids, etc. Such mechanisms as taxes, tariffs, subsidies, administrative mechanisms, etc. can encourage energy efficiency and alternative energy production in Ukraine.

References:

1. Green Tariff implementation projects for individuals and legal firms. Earnings on alternative energy. 2016 [Electronic resource]. – Access mode <http://www.ecosvit.net/ua/zeleniy-tarif> (in Ukrainian)
2. Green Tariff. The method not only save, but also to earn! 2016 [Electronic resource]. – Access mode http://solarfamily.com.ua/en/zelenyj_tarif

**MACROECONOMIC BASIS OF DOMESTIC BUSINESS
DEVELOPMENT: PROBLEMS AND RISKS**

Yaryna Mnykh, Tetyana Kulinich

Lviv Polytechnic National University, Lviv, Ukraine

Any organization is located and operates in the environment. Macroenvironment creates general conditions of organization being [1]: as it can provide opportunities of expansion, it can also be a cause of restriction and forced changes in the company. The events in Ukraine since 2013 and till the present have been significantly changing, complicating the functioning of many businesses – Russian military aggression in Crimea and Eastern Ukraine has become a key factor in the destabilization of economic system and transformation of foreign economic activity of our country. It can be noted that Russian aggression has become a factor of significant strengthening of negative trends in the dynamics of basic macroeconomic indicators (GDP, exchange rate, inflation, budget deficit, foreign exchange reserves, strategic reserves of certain types of resources). Accordingly, the current situation in the country is a source of challenges for businesses.

Considering political and economic instability in the country, the most important factors of the macroeconomic environment that have determining influence on Ukrainian enterprises are further devaluation of hryvnia; increasing of inflation and reducing consumption in the domestic market;