Energy efficiency in Ukraine
Challenges and approaches

агенція європейських інновацій

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Short Description of AEI

Agency of European Innovations (AEI) is a non-profit, research organization aimed to increase cooperation between Ukraine and EU in ICT, Renewable Energy, Agricultural, Food, Health R&D areas within HORIZON2020, ENI and others EU-programmes. AEI acts as Innovation Bridge between science, business and authorities.

The main aim of AEI is development in Ukraine the areas of ICT, Renewable Energy, Energy Efficiency, Agricultural, Food, Health R&D

The organization's mission is to support the professional development of domestic intellectual capacity to reform the economy and social life of Ukraine in accordance with the best European and international standards.

AEI is a member of civil platform «New country», member of Ukrainian national platform of the Civil Society Forum of the Eastern Partnership, and a coordinator of working group «Science and technology, information society, education, youth, culture and sport» of Ukrainian part of Civil Society Platform on Implementation of the Agreement on EU-Ukraine Association.

Expertise in Energy Efficiency

AEI successfully implemented the cross boarder project FARADAY: "Creating permanent mechanisms for transfrontier cooperation in the area of RES" http://www.pl-by-ua.rescluster.eu

AEI initiated the creation and chairs ***the Cluster of energy efficiency and renewable energy of Lviv region.*** The members of the cluster are companies engaged in renewable energy and energy efficiency.

Project "Strengthening the capacity of state and local governments of Ukraine to implement solutions for energy efficiency and promote renewable energy sources in municipal supplies with special emphasis on buildings and public buildings and apartment buildings", that was realized in cooperation with the Institute for Energy (Poland, Warsaw). Duration: March-December 2015. The project was implemented with the financial support of the Ministry of Foreign Affairs of the Republic of Poland under the "Polish Aid for Development 2015".

NGO AEI has experience in organizing events of various types, namely, information days, conferences, forums and exhibitions, seminars, trainings, brokerage meetings, round tables, master classes, panel discussions, competitions etc. Events were held both in Ukraine in various regions, as well as abroad.

Ukraine plans to move to new energy efficiency standards is one of the main objectives of the government and society

Today, energy consumption per 1 square. m in Ukraine is 230 kWh.

For comparison, average index in Poland to more than twice lower 95-100 kWh

Today, Ukraine has a number of motivational factors to introduce wide number of energy efficiency measures, not just limited to replacing windows.

National Energy Efficiency Action Plan till 2020

This plan is developed according to

Energy Services Directive 2006/32/EC

The adoption of the law transposing the provisions of Directive 2006/32/EC is now pending for several years.

The only concrete progress was Ukraine's adoption of its 1st EEAP for 2020 in November 2015.

The plan, which foresees an overall national indicative energy savings target of 9% of final energy consumption (6,5 mtoe) till 2020

The preparations to adopt a new law on energy efficiency to transpose Energy Efficiency Directive 2012/27/EU are ongoing.

Ukraine also prepares legislation to implement EU directives such as:
Energy Labelling Directive 2010/30/EU and
Energy Performance of Buildings Directive 2010/31/EU

GOVERNMENT PRIORITY AREAS OF WORK

- Reduction and replacement of gas consumption
- Improving stimulating mechanisms for public to implement energy efficiency measures
- Development of market of energy services for thermo modernization of public institutions' buildings
- Promoting energy production from renewable energy sources
- Creating a competitive market of heat energy
- Improving the investment climate for business in the area of energy efficiency and renewable energy
- Carrying out large-scale public awareness campaigns and communication activities

KEY ENERGY EFFICIENCY MEASURES

Thermo-modernization of residential buildings, by easing the cost of such measures, including through preferential loans, partial reimbursement of the cost or any amount (interest) on loans, providing state guarantees

Setting minimum requirements for energy efficiency in buildings and electrical household; ensuring the functioning of the energy labeling of household electric

Providing a full accounting of energy consumption and implementation of billing information and analytical data on the dynamics of consumption of energy (utilities)

Review of building regulations and standards. The introduction of certification system for energy efficiency of buildings

Thermo-modernization of buldings of public institutions and organizations by concluding energy service contracts.

Implementation of the national program of information and promotion of economic, environmental and social benefits of energy efficiency

The draft Law of Ukraine "On energy efficiency of buildings"

The aim - improving the energy efficiency of buildings

Mandatory certification of energy efficiency of buildings (from January 1, 2018)

- ✓ **Objects of construction with middle and significant class of effects (eg. apartment buildings, large public buildings, hospitals, schools, etc.)**
- ✓ **Buildings with the premises of total heating area over 250 sq.m.:**
  - **government agencies frequently visited by the public;**
  - **local governments, municipal enterprises in the case of renovation / modernization of buildings**

- ✓ **Creation of a uniform base of energy auditors and energy efficiency certificates, opened for everyone**
- ✓ **Defining the principles of energy auditors work**

Example of projects

2008-2014 Energy efficiency in buildings
http://eeib.org.ua/page/about/en/

2013-2017 Energy Efficiency in Municipalities
http://eeim.org.ua/project/background/
Supported by German Federal Ministry for Economic Cooperation and Development (BMZ)
Project leader - Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH www.giz.de
Key UA Partner - Ministry of Regional Development, Construction, Housing and Municipal Economy of Ukraine http://www.minregion.gov.ua/

The green tariff in Ukraine

"Green" tariff is calculated according to the euro rate, to avoid the risk of inflation.
The requirement of local "component" is canceled.
The "green" tariff includes:

- geothermal electrical installations;
- solar and wind power stations of private households up to 30 kW.

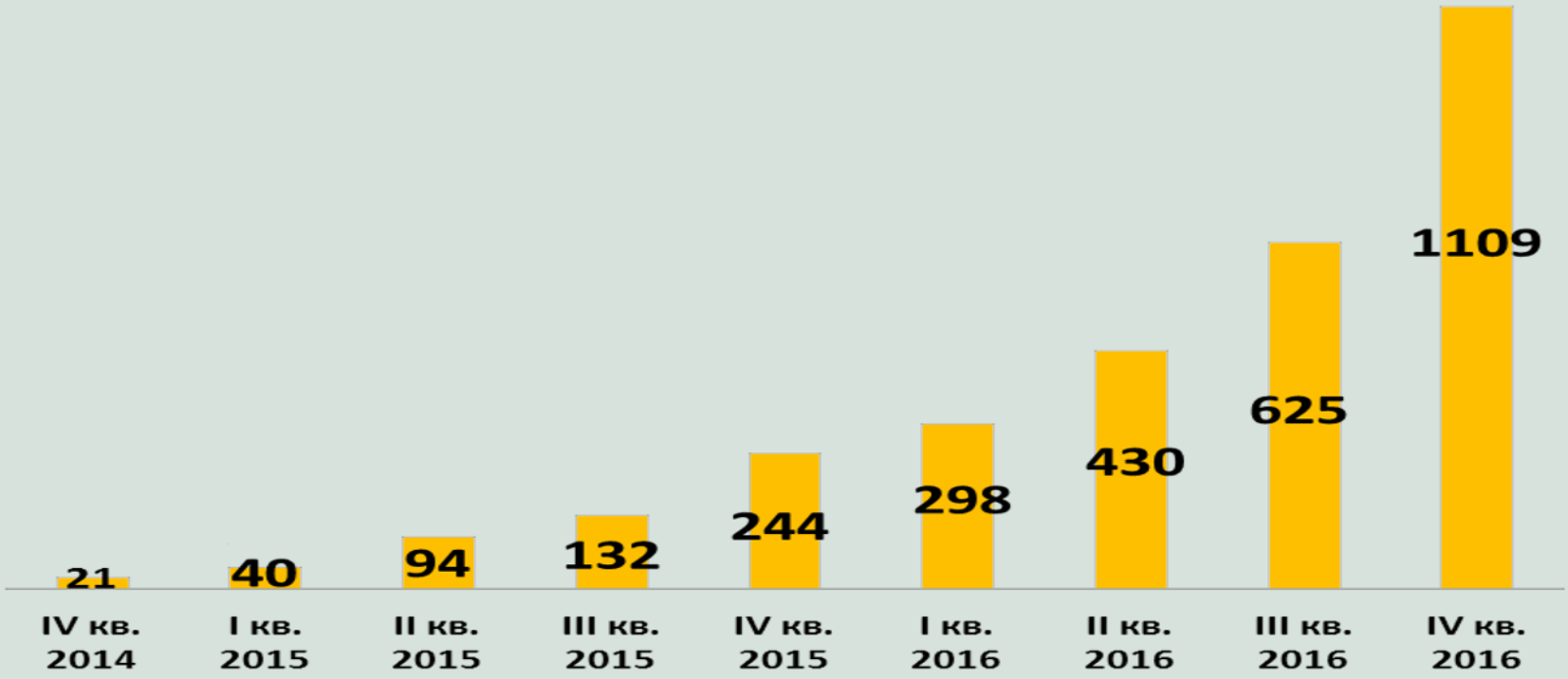
The rate of the "green" tariff

- Solar: 15.03 -16.37 €ct/кВт·год;
- Wind: 5,82-10,18 €ct/ кВт·год;
- Biomass: 12,39 €ct/ кВт·год;
- small Hydro power: 10,45-17,45 €ct/ кВт·год;
- Geothermal power: 15,03 €ct/ кВт·год;
- Solar of households: 18,09 €ct/ кВт·год;
- Wind of households: 11,63 €ct/ кВт·год.

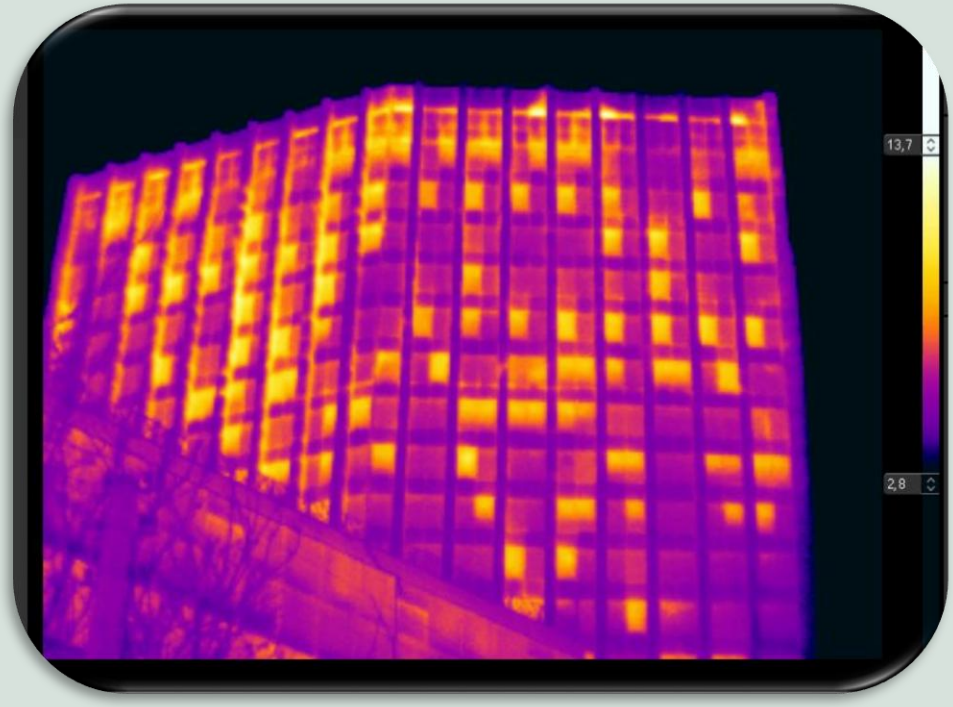
Search for investment and aid from EU

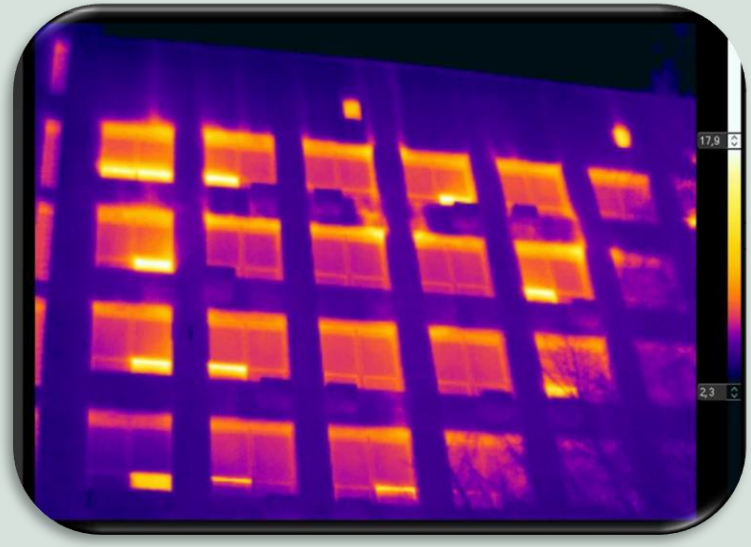
- Formation of a foundation for energy efficiency
- Construction of cogeneration plants in Ukraine
- Construction of waste recycling plants
- Construction of solar and wind power stations
- Construction of geothermal power stations
- Construction of small hydropower station
- Construction of factories producing second-generation bioethanol

Number of solar stations on private houses



Real pictures of government buildings





Topics for cooperation in H2020 – Deadline -07.June 2017

EE-11-2016-2017 Overcoming market barriers and promoting deep renovation of buildings

EE-14-2016-2017 Construction skills

EE-22-2016-2017 Project Development Assistance

EE-24-2016-2017 Making the energy efficiency market investible

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