RENEWABLE ENERGY: 
KEY REFORMS FOR SUSTAINABLE DEVELOPMENT IN UKRAINE 

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Dynamics of natural gas consumption in 2014-2018*

- 6 billion m³ (or -24 %)

2014 2018

-28% -16% -24%

14,8 8,4 0,66

10,6 7,1 0,50

Public sector

District heating companies

Households

Achievements in 2014 – Q3 2019:

Invested in Ukrainian "clean" energy projects $\sum \approx 4.1$ billion €

IN RENEWABLE ENERGY:

- 2 282 MW of new heat capacities
  - Investments – 524 million €
- 3 899 MW of new renewable energy capacities
  - Investments – 3.3 billion €, including:
    - 11 888* of households installed SPP with total capacity – 276 MW
      - Investments – 240 million €

IN ENERGY EFFICIENCY:

- 682 609 of families implemented energy efficiency measures via "warm" loans in the residential sector
  - Investments – 278 million €
- 355 ESCO-contracts are concluded in the public sector
  - Investments – 18,5 million €

* according to operational data of NJSC “Naftogaz of Ukraine” and PJSC "Ukrtransgas" (without temporarily occupied territories)

*Q2 2019
CURRENT STATUS OF ENERGY EFFICIENCY AND RENEWABLE ENERGY IN UKRAINE

National Renewable Energy Action Plan-2020

- 11% of Renewables in final energy consumption

Energy Strategy of Ukraine till 2035

- 25% of energy, produced from RES in the structure of primary energy supply

- € 20 bln

Necessary investments by 2035 for: attraction

- construction of renewable energy facilities (SPP, WPP, small HPP, CHP, biomass boiler station, biogas facilities, etc.)
- construction of capacities for production of equipment for renewable energy facilities
- construction of biofuel production plants (solid, liquid)
- growing of energy crops

Potential directions of investment

- Residential sector – continuation of state program for stimulating households to implement energy efficiency measures
  - € 44 – 74 bln – investment potential
- Industry – state support for realization of energy efficiency measures
  - € 2,3 bln – investment potential
- Public sector – development of EPC market
  - € 8 bln – investment potential

National Energy Efficiency Action Plan-2020

- of energy saving comparing to the average final energy consumption in 2005-2009

9%
INSTALLED CAPACITY OF RENEWABLE ENERGY OBJECTS WORKING UNDER THE "GREEN" TARIFF, MW

From the beginning of 2015, 3 899 MW were introduced and around € 3.3 bln were invested.

*information on SPP households as of Q2 2019
DYNAMICS OF SOLAR INSTALLATIONS IN PRIVATE HOUSES

Number of private households

Installed capacity, MW

Around 240 mln EURO invested.
The number of private houses eligible for solar panels installation is 6,5 mln.
NEW RENEWABLE ENERGY INCENTIVES INTRODUCTION

07.2019
Law adoption
2020
2030

Obligatory participation:
from 2020:

- SPP ≥ 1 MW;
- WPP ≥ 5 MW;

PPA terms 20 years

Other key points:

- All types of RES will participate in auctions
- Electronic Trading System
  PROZORRO
- Bank guarantee 15 000 € for 1 MW
  Land and Specifications for accession
- Premium for the use of Ukrainian equipment 5% - 10% (current law)
- Specifications are valid:
  SPP – up to 2 years;
  WPP, CHP on biomass, small HPP – up to 3 years
On February 24, 2018, Ukraine became a member of the International Renewable Energy Agency (IRENA). WEBINAR with IRENA on the introduction of an auction system to support renewable energy.

Date: October 31, 2018

The result: the proposals made by IRENA experts with appropriate practical advice are sent to the Verkhovna Rada Committee on Fuel and Energy Complex for consideration during drafting the Law.

Date: February 21, 2019

On February 24, 2018, Ukraine became a member of the International Renewable Energy Agency (IRENA).
**«FEED-IN» TARIFF**

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| **SPP**
  (ground based) | 15,02  | 11,26 | 10,88 | 10,50 | 10,12 |
  (-25%)         | (-2,5%) | (-2,5%) | (-2,5%) |
| **WPP**
  (> 2,0 MW)   | 10,18  | 9,05  | -    | -    | -    |
  (-10%)         | (-10%) |        |      |      |      |
| **SPP households** | 18,09  | 16,26 | -    | -    | -    |
  (-10%)         | (-10%) |        |      |      |      |
| **Hybrid**
  (SPP+WPP)
  households   | -      |       |      |      |      |
  **Introduction of “feed-in" tariff**
  (12,28 €ct/kW*h) |
| **Biomass**    | 12,39  |       |      |      |      |
  **The tariff is unchanged and stays at the fixed level**
  of 2019
  (12,39 €ct/kW*h) |
UAMAP comprises detailed information on

103 implemented and
112 potential projects that require investments & soft loans more than € 4,2bln

www.uamap.org.ua
GIF UA: SCHEME OF OPERATION IN BRIEF

1. Customer appeals to GIF and selects interesting project(s) or offers his own.
2. Application Form is processed by Technical Office of GIF.
3. Decision on the type of financing and interaction model with a project.
4. GIF assesses and offers its equity share in RES project.
5-6-7. Stakeholders invest in GIF UA.
8. Banks give loans to the new projects.

PROJECT OWNER/INITIATOR
who is ready to implement the project but lacks funding.

APPLICATION

GIF UA

Share of GIF in projects - 30%

GIF UA: SCHEME OF OPERATION IN BRIEF

Donors
IFIs
City, district and regional councils

Cooperation
Recommendation to finance the project

Executive Committee

Technical Office

Provision with project documentation

Loan (up to 70% for ex. NEFCO)

Investment projects (with feasibility study)
Investment projects (without feasibility study)

Solar
Wind
Hydro
Biomass, Biogas
WTE
ESCO

GIF UA
Lending Institution
Private investor
Project owner/initiator

Supervisory Board
(ITA, ...)

GIF UA: SCHEME OF OPERATION IN BRIEF

Ukraine NOW
Creation of conditions for implementation of green bonds market

Draft of Resolution of Cabinet Of Ministers Of Ukraine «To approve Concept of Green Bond Market Introduction in Ukraine and Affirm Action Plan of Its Implementation»

Establishing legal preconditions for green bond market introduction
Attracting investments to the green bond market
Contributing green bond market development

Key world issuers

Corporations 25%
Banks 17%
States and municipalities 8%
International Financial Institutions 49%
Bonds guaranteed by IFIs and states 1%

Next stages

Introduction of guidelines key procedures and incentives for the green bonds market (in accordance with international)

preparation and implementation of pilot projects for the issue of green bonds by different issuers

arranging information campaigns and attracting stakeholders on Ukrainian green bonds market

Green bonds world market development indicators

Renewables 43%
Energy efficiency in buildings 24%
Clean transport 13%
Water resources management 6%
Waste research 4%
Other 10%

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INVEST in UKRAINE!

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