





ESCO in Ukraine: 8 Years of Progress and Resilience amid war

Webinar organized by UNEP Copenhagen Climate Centre

in cooperation with The Global ESCO Network

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AGENDA

- 1. Introduction speech by Anna Zhovtenko, Project Manager in Energy and Environment Portfolio, UNDP in Ukraine
- 2. 8 Years of ESCO Market Evolution in Ukraine: Legislation, Guarantees, Public ESCO Procurement and EE Technologies by Roman Palahusynets, ESCO Engineering Analyst, UNDP in Ukraine
- 3. The First Financial Mechanisms Supporting ESCO in Ukraine: From Bank Loans to the Decarbonization Fund by Serhii Novosolov, Green Financial Mechanisms Specialist, UNDP in Ukraine
- 4. Fostering Collaboration Between the Ukrainian ESCO Association and the Global ESCO Network: From Accessible Financing to Trade Credit by Oleksii Korchmit, Head of the NGO "Ukrainian Association of Energy Service Companies", Expert on ESCO market development
- 5. Q&A







INTRODUCTION TO ESCO MARKET IN UKRAINE

Anna Zhovtenko,

Project Manager in Energy and Environment Portfolio, UNDP in Ukraine

anna.zhovtenko@undp.org

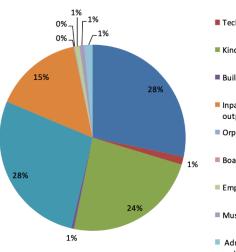






Drivers of ESCO Market in Ukraine:

Stock of public buildings (as of 2012/2013)



Schools

Technical schools

Kindergardens

Buildings for higher education

Inpatient facilities and outpatient/polyclinic intstitutions

Orphanages

Boarding schools

Employment centres

Museums

 Administrative buildings of central and local governments

Outdated Infrastructure

Energy Efficiency Potential

- Public sector: ~ 110 million m² as of 2012/2013
- Residential and public buildings consume 37% of total heat and 25% of all electricity
- Old building stock in government, private, and communal sectors 80% of buildings constructed before 1950 y. based on inefficient soviet building codes.
- Low energy-saving standards, no thermostatic measuring equipment, etc

⊖ Decarbonization Potential & Energy Security

 132.5 million tons of oil equivalent (Mtoe) were consumed in 2012, largely consisting of fossil fuels, more than 50% of which was supplied by the Russian Federation. Natural gas: 34.8% | Coal: 34.6%. | Nuclear: 19.2% | Oil: 9.6%

Insufficient institutional capacity to define and procure energy efficiency measurements

 $^{\odot}$ Budgeting limitations for both national and local communities







The main principle of energy service contracts in Ukraine: ESCO invests in the energy efficiency of public buildings and recoups the investment solely through verifiable energy savings

Implementation of energy saving measures Budget benefit Saving budget costs **Budget costs** costs savings **Payouts of ESCO investments** Basic Energy energy costs **Energy costs** Legislation after implementatio **Energy costs after** Prozorro implementation of energy n of energy efficiency measures efficiency measures Guaranteed return of the investments **Detailed analysis Contract duration** Time







All the necessary legislative framework for energy services in the public sector has been created

Laws of Ukraine adopted in 2015



Nº 327-VIII dd 09.04.2015

on the energy service mechanisms definition (including the specifics of state/public procurement of energy services)



Nº 328-VIII dd 09.04.2015

on the possibility of budget funds managers to take long-term obligations for energy services (amendments to the Budget Code of Ukraine)

All necessary Secondary Legislation have been adopted



Sample energy service agreement

Decree Nº 845 dd 21.10.2015

The Cabinet of Ministers of Ukraine approves the Model Energy Service Agreement

№996 dd 06.11.15

The classifier of expenditures has been supplemented: 2276 'Payment for energy services'



) Orders of the Ministry of Finance of Ukraine

№1118 dd 04.12.15

The budget estimates of budgetary institutions can be formed considering the costs of energy services

Nº1117 dd 04.12.15

The Instruction on the application of the economic classification of budget expenditures has been supplemented by code 2276 'Payment for energy services







712 ESCO contracts worth over USD 97,5 mln concluded and implemented in Ukraine as of August 2024



Nº	Region	ESCO contracts quantity	ESCO contracts costs (UAH)
1	Kyiv (region+city)	175	436 135 256,77
2	Odesa	98	159 029 870,93
3	Volyn	56	317 802 687,33
4	Kirovohrad	50	232 904 897,76
5	-	45	103 933 004,90
6	Zaporizhzhya	44	189 927 507,27
7	Kherson	42	361 428 427,98
8	Dnipropetrovsk	34	160 964 952,23
9	Kharkiv	26	66 370 408,07
10	Khmelnytsk	24	80 057 411,40
11	Lviv	19	127 807 666,13
12	Chernivtsi	18	41 867 183,41
13	Donetsk	12	15 928 645,12
14	Rivne	12	39 730 960,48
15	Sumy	12	18 801 841,07
16	Luhansk	10	9 230 354,63
17	Poltava	10	47 023 306,58
18	Zhytomyr	7	67 840 032,10
19	Mykolaiv	7	116 381 888,00
20	Cherkassy	6	21 680 592,72
21	Vinnytsia	3	13 295 193,04
22	Ivano-Frankivsk	1	1 849 014,82
23	Zakarpattia	-	-
24	Chernivtsi	-	-
25	Ternopil	-	-
	Total	712	2 629 991 103

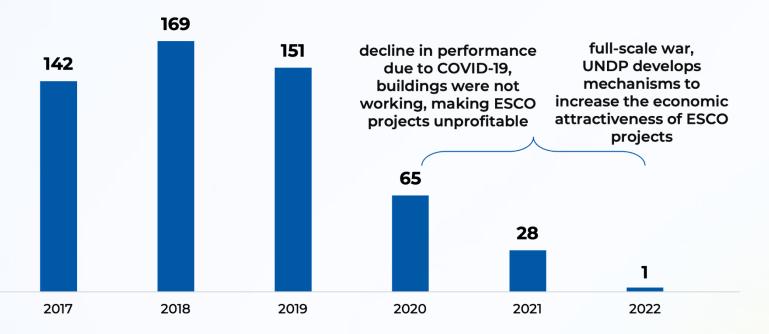






STATE OF THE ESCO MARKET AT THE BEGINNING OF 2022

Number of ESCO contracts by year









CHALLENGES & OPPORTUNITIES

OVID-19 – lockdown effect on the baseline estimations

Full-scale invasion resulted in the non-functioning of public buildings due to the constant threat of shelling

- Decentralisation reform growth of local communities' capacity, increased requests for deeper thermomodernization measures and enhanced partnership
- → High demand for energy efficiency and resilience







UPDATES OF THE ESCO-PROCUREMENT PROCEDURES, ADOPTED BY THE GOVERNMENT ON 19.06.23 Nº621

(changing Decree Nº1178)

Deregulation instruments

(1)

Removing the need to approve the **baseline of consumption** of fuel and energy resources. Basic level appears immediately in the tender documentation

2

Removing the need to approve essential conditions after bidding and determining the winner of the procurement (by the local council for communally owned objects, the State Energy Efficiency Agency for state property)

Effect:

procurement procedure reduction for up to 45 days

Effect:

 allows to conclude contracts immediately after the tender regardless of the decision of the local council (also if the session of the local council has not convened);

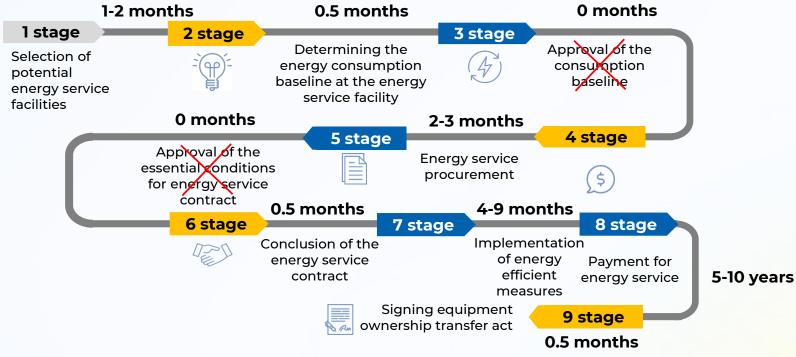
procurement procedure reduction for up to 90 days







DEREGULATION REDUCED PURCHASING CYCLE FROM 9 TO 3 MONTHS









NEW OPPORTUNITIES FOR COMPLEX ENERGY MODERNIZATION OF BUDGETARY INSTITUTIONS

by changes of the calculation of the energy consumption baseline for ESCO projects, adopted by the Government on 04.02.24 Nº382 (changing the Decree Nº1178)

Introduced calculation of three models of energy consumption baseline

1 buildings whe heat regime i observed	S	2 buildings where failure to comply with the air-heat regime in recorded	3 buildings where a violation of the object's operation mode was recorded (downtime, work suspension, functional purpose change)

Baseline is calculated as the average consumption for 2 years (2019 and 2021)

Baseline is calculated according to the Ministry of Infrastructure' method, order Nº578 from 07.06.23

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Baseline is determined according to the energy certificate, resolution of the CMU №382from 02.04.24







5 ENERGY SERVICE MODELS IN COMMUNITIES



ESCO-thermal modernization of public buildings

UNDP prepared 97 energy audits

ESCO-water facilities

modernization of pumping **UNDP prepared 12 feasiblitity studies**



ESCO-solar power stations in hospitals and water facilities

UNDP prepared 58 feasiblitity studies

ESCO-street lighting installation of LED lamps

UNDP prepared 4 feasiblitity studies

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Co-financing under enhanced ESCO partnership **UNDP prepared 7 feasiblitity studies**

More about first 53 ESCO-contracts in Ukraine supported by UNDP

More about 67 feasibilitity studies ESCO-solar power stations in hospitals support by UNDP







Number of EPCs concluded during the last 8 years

due to the GEF/UNDP Project's legislative initiatives and active support of communities

