





8 YEARS OF ESCO MARKET EVOLUTION IN UKRAINE:

Legislation, Guarantees, Public ESCO Procurement and EE Technologies

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100 ESCO contracts concluded with the Project support in 2024 for over \$24 million



N⁵	Region	ESCO contract quantity	ESCO contract costs (UAH)
1	Odesa	25	100 091 293
2	Kyiv	13	190 819 821
3	Dnipropetrovska	12	135 361 712
4	Chernihivska	6	28 549 207
5	Mykolaivska	5	109 567 009
6	Rivne	4	20 595 992
7	Kharkivska	4	35 017 451
8	Kirovohradska	3	40 707 733
9	Lviv	3	74 976 173
10	Chernivetska	3	63 727 101
11	Zhytomyrska	2	17 623 426
12	Khmelnytska	2	61 956 424
13	Vinnytsia	1	5 661 200
14	Volynska	1	6 052 941
15	Poltava	0	
16	Kyiv (city)	0	
17	Sumy	0	
18	Ternopilska	0	
19	Kherson	0	
20	Cherkassy	0	
21	Ivano-Frankivsk	0	
22	Donetsk	0	
23	Zakarpatska	0	
24	Zaporizhzhya	0	
25	Luhansk	0	
	Total	100	1 076 000 000







47 ESCO-THERMAL MODERNIZATION CONTRACTS IN 9 CITIES IN 2024 WITH SUPPORT FROM THE PROJECT

29 more ESCO tenders announced in the Prozorro system

12 ESCO contracts

EE measures:

- ✓ Insulation (facade, attic, basement)
- ✓ Individual heating points (IHP)

Kryvyi Rih, Brovary, Novovolynsk, Rokytne, Slavutych

Price of contracts: 198 mln UAH

Savings: 55%

Term: 15 years

35 ESCO contracts

EE measures:

- ✓ Insulation (attic)
- ✓ IHP

Kryvyi Rih, Vinnytsia, Pervomayskyi, Odesa, Nizhyn, Brovary

Price of contracts: 101 mln UAH

Savings: 30%

Term: 10 years









IMPORTANCE OF ESCO-SPP PROJECTS FOR COMMUNITIES

More than 50%

of electricity generation in Ukraine was destroyed by Russia

In 2023, UNDP launched a new ESCO model, Solar Power Plants for Hospitals and Water Utilities.

Solar installations on the roofs of hospitals and on the land of water utilities can partially address the need for electricity for critical infrastructure during outages.

To date, 30 ESCO-SPP contracts have been signed (12 of which have already been implemented)

Implementation of an ESCO-SPP project takes only 6 months









50 of those are ESCO-Solar Power (SPP) USD 16 mln



		FCCC	CDD	5000
Nº	Dogion	ESCO contract	SPP capacity,	ESCO contract cost
IN=	Region	quantity	kW	(UAH)
1	Dnipropetrovska	5	205	21 010 584
2	Kyiv	7	990	87 247 543
3	Mykolaivska	4	520	49 780 604
4	Odesa	3	635	64 182 293
5	Kirovohradska	3	390	40 707 733
6	Lviv	3	850	74 976 173
7	Chernivetska	3	640	63 727 101
8	Rivne	2	90	7 477 197
9	Zhytomyrska	2	210	17 623 425
10	Khmelnytska	2	560	61 956 424
11	Chernihivska	1	45	3 195 061
12	Kharkivska	1	350	28 524 960
13	Volynska	-		
14	Ivano-Frankivsk	-		
15	Poltava	-		
16	Kyiv (city)	-		
17	Sumy	-		
18	Ternopilska	-		
19	Kherson	-		
20	Cherkassy	-		
21	Vinnytsia	-		
22	Donetsk	-		
23	Zakarpatska	-		
24	Zaporizhzhya	-		
25	Luhansk	-		
	Total	50	6 853	670 292 102







ESCO-Solar station in Truskavets Hospital

105 kW

SPP capacity

12%

annual replacement of traditional electricity

13 years

contract term 14,5 years (nominal)

160k USD contract price

87 000 kW-h

annual energy generation

14k USD

annual savings

25 years operation term

Verification of the project in August 2024

32,425.00

9,970
31%

Baseline
Spp
generation
Replacement
Savings
(ESCO payments_









ESCO-SPP in Chornomorsk

"Water sewage facilities", Odesa region

150 kW

Energy storage

450 kW

SPP capacity

25 years

operation term

1 mln USD

contract price

10 years

expected contract term 15 years (nominal term)

520 000 kW-h

annual energy generation

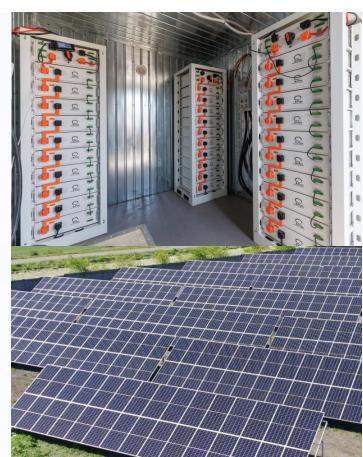
23%

annual replacement of traditional electricity

78k USD

annual savings

- UAH 73k USD (payment to ESCO as return of investment)
- UAH **5k USD** (savings remain for facility)









ENHANCED ESCO PARTNERSHIP

Co-financing from the city and ESCO-investor.

Many communities receive solar panels as grant aid, but do not have funding for procurement additional equipment and installation.

Such works can be performed by ESCO under the enhanced partnership model.

Kryvyi Rih case:

The city received panels in 2023. It announced tenders in February 2024, and in April already successfully concluded energy service contracts for three hospitals for the installation of 25, 30, and 40 kW SPP. Expected savings in electricity vary from 10 to 24% and will amount up to 30,000 USD per year.

3 EPC-Enhanced ESCO projects has already been installed









BENEFITS OF AN ESCO-ENHANCED PARTNERSHIP FOR COMMUNITIES

Classic ESCO model

100% of ESCO investments

80-100% savings for ESCOs

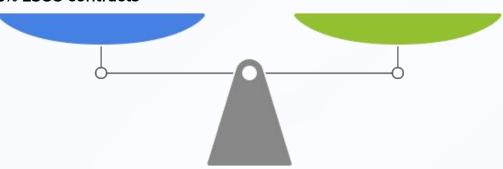
95% ESCO contracts

ESCO-enhanced partnership model

Co-financing of the city and ESCO

50-50% distribution of savings

5% contracts



Comparison of ESCO models in Ukraine







KRYVYI RIH HOSPITALS: THREE ENHANCED-ESCOS



SPP 40 kW

Generation 58k kW-h Traditional el. replacement 10%

Savings 11k USD

Price 88k USD Term 15 years Savings distribution

- 70% ESCO
- 30% city



SPP 30 kW

Generation 36k kW-h Traditional el. replacement 24%

Savings 6k USD

Price 47k USD Term 15 years Savings distribution

- 70% ESCO
- 30% city



SPP 25 kW

Generation 30k kW-h Traditional el. replacement 24%

Savings 5k USD

Price 43k USD Term 15 years Savings distribution

- 70% ESCO
- 30% city







3 ESCO-STREET LIGHTING CONTRACTS SIGNED

Slavutych, 2021

- √ 450 new LED lamps installed
- ✓ USD 180k contract price
- ✓ **59% savings** per year:
- ✓ 165,000 kWh-h (600k UAH) savings per year
- ✓ 15 years contract term

Korosten, 2022

- ✓ 2,500 new LED lamps installed
- ✓ USD 1 million contract price
- √ 59% savings per year
- ✓ 945,000 kWh-h (5 mln UAH) savings per year
- ✓ 15 years contract term

Voznesiensk, 2024

- √ 3000 new LED lamps
- ✓ USD 1 mln contract price
- ✓ 50% annual savings
- √ 500,000 kW-h (4,6 mln UAH) annual savings
- √ 15 years contract duration

Prospect ESCO projects for the modernization of the street lighting network - installation of LED lamps

Nº	City	LED lamps	Saving	Contract price, UAH	Contract price, USD
1	Novovolynsk	1500	21%	15 mln	384 615
2	Cherkasy	7500	51%	100 mln	2 564 103
3	Pryluky	4600	20%	55 mln	1 410 256
4	Drohobych	87	17 %	2.3 mln	58 974











IN 2024, 3 EPC CONTRACTS WERE CONCLUDED UNDER THE ESCO PUMPING UNITS MODEL IN ZHYTOMYR

Energy efficiency measures

- ✓ Installation of new EE pumping and power equipment;
- ✓ Installation of energy-efficient automation

Expected savings

√ 30-50% per year









CURRENT CHALLANGES

Mobilization of men, which causes a lack of workers for energy projects, especially in important areas. UNDP has already launched the first training courses for women and veterans, fostering their involvement in solar energy sector.

Risks of damage to equipment installed by ESCO (e.x. Solar PP).

Risk insurance in case of damage can be incorporated into EPC contracts.

Access to affordable financing for scaling up EPC projects.

In 2024, 50 EPC contracts were signed for solar power plants with a capacity of 6.7 MW and 1 MWh of storage. Private investments - USD 15 million. However, this represents only 1% of Ukraine's needs.

