

EnPC-INTRANS Road-Show

Model Energy Performance Contract

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Major requirements of Energy performance contract

The main requirements of Energy performance contract adopted on the basis of:

Law No. 327-VIII of 09.04.2015 "On Introduction of New Investment Opportunities, Guarantee of the Rights and Lawful Interests of Business Entities for the Large Scale Energy Modernization"

This document is available for uploading from the following link:

<http://zakon3.rada.gov.ua/laws/show/327-19/paran30#n30>

The template of the Energy Performance Contract is adopted by the Act of the Cabinet of Ministers of Ukraine №845 from 21.10.2015 «On approval of the Model Energy Performance Contract “

This document is available for uploading from the following link:

<http://zakon3.rada.gov.ua/laws/show/845-2015-п>

Major requirements of Energy performance contract (continuation)

- **Term:** - 10 years
- **Annual payments to the ESCO**- at least 80% and not more than 90 % of annual cost reduction
- Energy performance contract is terminated ahead of schedule in case the total payment to the executor reached the price of Energy performance contract
- If the actual level of savings doesn't meet the conditions of the contract and it is the fault of the executor, the last is obliged to eliminate defects and/or implement additional measures or reimburse to the customer the amount of difference between the actual level of savings and the level of savings under contract

Key provisions of EPC contracts

- 1) Scope of contract
- 2) Price of contract
- 3) Energy service object specifications
- 4) Baseline consumption
- 5) Reduction of consumption/expenses
- 6) Duration of contract
- 7) Compensation under the contract
- 8) Verification methods of the actual consumption and /or expenses reduction
- 9) Rights and obligations
- 10) Responsibility of the parties
- 11) Conditions, procedure , consequences of the contract termination
- 12) Transfer of ownership order
- 13) Method of calculation of energy saving results
- 14) Force majeure circumstances
- 15) Settlement of disputes
- 16) Other conditions

Key provisions of EPC contracts (continuation)

The scope of contract is energy service financed by savings achieved as a result of its implementation

Energy service is a complex of technical and organizational energy saving (energy efficient) or other measures. The list of such measures , terms and conditions of their implementation are included in the **Appendix 1** of the Model Energy Performance Contract

Object of the EPC

Appendix 1 of Model Energy Performance contract

LIST of energy service measures, terms and requirements of their implementation

Name of energy service object: _____

Address of energy service object: _____

Number	Name of measure	Stages of implementation	Terms of implementation	Conditions of implementation*

Customer	Executor
_____ (position, surname, name)	_____ (position, surname, name)
_____ signature	_____ signature
MPI	MPI

* Conditions of implementation mean technical requirements and restrictions (requirements of state building codes, safety and labor protection), to be complied with during energy service implementation.

The price of energy service is equal to the winner's offer and determined in accordance with expected reduction of consumption / or costs on energy resources and / or of utility services compared with consumption (expenditure) in the absence of such measures

Specifications of facility :

Specifications of the facility are determined in the **Appendix 2** of the Model Energy Performance Contract :

☐ General data on facility:

- *Name of facility :*
- *The average number of people, permanently and / or temporarily staying at the facility of Energy service*

☐ Operational schedule of facility for three years preceding the year of the contract:

- *Time interval (hours of the start and finish of exploitation)*
- *Operational hours*
- *Operational days per week*

☐ The main specifications of the building:

- *The main material (panel / brick / monolith / etc)*
- *Buildings area (sq. m)*
- *Number of floors*
- *Height of the floor(m)*
- *The area of each floor (sq. m)*
- *Roof Type (onduline / metal / tile / etc)*

Specifications of facility : (continuation)

- ☐ Translucent constructions and doorways :
 - *Type of glazing(wooden frames / plastic frames / etc.)*
 - *Type of glazing (sq. m)*
 - *Area of the entrance door(sq. m)*
- ☐ Heating:
 - *Type of heating*
 - *Heating area (sq. m)*
 - *Heating volume(m. cub)*
 - *Heating period*
- ☐ Sewage and hot water supply:
 - *Type of sewage*
 - *Type of hot water supply*
 - *The daily average temperature in the feeding pipeline (°C) in three years preceding the year of the contract*
 - *The daily average temperature in the return pipeline(°C) in three years preceding the year of the contract*
- ☐ Information on electricity consumption equipment's capacities;
- ☐ Information on the planned refurbishment measures of the building.

Baseline consumption

□ Baseline fuel and energy resources and/or public utilities consumption in natural and monetary units in prices on the date of announcement of procurement of energy services :

Type of fuel and energy resources (public utility service)	Baseline consumption in natural units		Prices (tariffs)		Baseline consumption in monetary units, thousand UAH
	units of measurement	value	units of measurement	value	
Heat energy (heat supply)	Gcal per year		Gcal per year		
Electrical energy (electricity supply)	KWh per year		KWh per year		
Cold water (centralized cold water supply)	c.m. per year		c.m. per year		
Hot water (centralized hot water supply)	c.m. per year (or Gcal per year)		c.m. per year (or Gcal per year)		
Natural gas (gas supply)	thousand c.m. per year		thousand c.m. per year		
Other types of fuel and energy resources (public utility service)	corresponding unit of measurement per year		corresponding unit of measurement per year		

Baseline consumption (continuation)

- Baseline fuel and energy resources and/or public utilities consumption in natural units by month: monthly payments made under the contract, are given in the **Appendix 3** of Model energy-performance contract.

Type of fuel and energy resources (public utility service), unit of measurement	January	February	March	April	Mai	June	July	August	September	October	November	December
Heat energy (heat supply), Gkal												
Electrical energy (electricity supply), kWh per hour												
Cold water (centralized cold water supply), c.m.												
Hot water (centralized hot water supply), c.m.												
Natural gas (gas supply), thousand c. m.												
Other types of fuel and energy resources (public utility services)												

- Total monthly consumption is equal to the annual baseline consumption

Reduction of consumption

Appendix 4
of Model Energy Performance
Contract

REDUCTION

of fuel and energy resources consumption that should be achieved as an energy service result for each year of the contract

Type of fuel and energy resources and/or public utility service	% reduction in consumption	Contract year											Total
		20__	20__	20__	20__	20__	20__	20__	20__	20__	20__	20__	
Heat energy (heating supply)	%												
	Gkal												
Electrical energy (electricity supply)	%												
	kWh												
Cold water (centralized cold water supply)	%												
	c.m.												
Hot water (centralized hot water supply)	%												
	c.m.												
Natural gas (gas supply))	%												
	thousand m.c.												
Other types of fuel and energy resources (public utility services)	%												
	in natural volume												

Customer		Executor	
(position, surname, name)		(position, surname, name)	
(signature)		(signature)	
Stamp		Stamp	

Reduction of consumption (continuation)

Appendix 5
of Model Energy Performance
Contract

REDUCTION
of fuel and energy resources and/or public utility service expenses that should be achieved as an energy service result for each year of the contract

Type of fuel and energy resources	Expenditure reduction, thousand UAH	Contract year												Total
		20__	20__	20__	20__	20__	20__	20__	20__	20__	20__	20__	20__	
Heat energy (heating supply)														
Electrical energy (electricity supply)														
Cold water (centralized cold water supply)														
Hot water (centralized hot water supply)														
Natural gas (gas supply)														
Other types of fuel and energy resources (public utility services)														

Customer		Executor
(position, surname, name)		(position, surname, name)
(Signature)		(Signature)
Stamp		Stamp

Contract payment procedure

- ❑ Payment under the contract is budget savings from energy bills that would have been paid in the relevant period based on actual prices (tariffs) in that period without energy service
- ❑ In cases when contract provides for reduction of consumption of fuel and energy recourses, the total reduction of customer's costs is determined as the difference between baseline consumption and actual consumption, multiplied by actual tariff in the period of payment.
- ❑ Payments under the contract are made monthly
- ❑ Annual payment is determined as the sum of monthly payments
- ❑ The amount of annual payments to ESCO is set by parties and should be 80-90% of the annual cost reduction of the customer.

The payment procedure for EPC (continuation)

Payment for the billing period as defined by the formula :

$$\text{Payment for billing period } x_n = \frac{B \times (BP_n - \Phi P_n) \times T_n}{100\%}$$

n - billing period ;

B - the percentage of the annual cost reduction by the customer specified in the contract;

BP_n – baseline consumption of the fuel and energy resources in natural units for the corresponding billing period;

ΦP_n – actual consumption of the fuel and energy resources in natural units for the corresponding billing period;

T_n – price (tariff) on the fuel and energy resources valid at the end of the relevant billing period.

Methods of evaluation and verification of the actual reduction of consumption and/or expenses

- ☐ Evaluation of the actual reduction of fuel and energy resources consumption in natural units is based on the readings of metering devices.
- ☐ Project implementer composes an ***Act on implementation of commitments*** to verify actual reduction of fuel and energy resources consumption and/or expenses for the billing period. This act is the basis for payments under the contract. The sample of this act is included in **Appendix 6** of the Model Energy Performance Contract.
- ☐ Clients' objections (remarks) can be settled through negotiations.

Adjustment of energy service results

Adjustment of energy service results is made in the case of changes in design, area, operating hours or use schedule in the period of contract duration.

Corrections of **heat energy** consumption may be requested with regard to:

- ☐ climate change;
- ☐ operational changes;
- ☐ building (buildings) assignment change.

Corrections of **electrical energy** consumption may be requested with regard to:

- ☐ electricity consumption equipment power, number, composition changes.
- ☐ operational changes;
- ☐ climate change;
- ☐ building (buildings) assignment change;

Corrections of **electrical energy** consumption may be requested with regard to:

- ☐ operational changes;
- ☐ climate change;
- ☐ building (buildings) assignment change;

The adjustment order is included in **Appendix 7** of the Model Energy Performance Contract.



THANKS A LOT FOR YOUR PARTICIPATION

And good success in your future efforts promoting energy performance contracting in public buildings!

Lets's meet at: www.encp-intrans.eu



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