

“Kyiv District Heating Project”

Invitation to participate in public marketing advice on the supply, installation and commissioning of cogeneration units in Kyiv.

The European Bank for Reconstruction and Development (the “Bank” or “EBRD”) is considering financing a project to support to Municipal Enterprise “Kyivteploenergo” (the “Employer”).

KyivTeploEnergo intends to procure, install and commission a state-of-the-art gas fired combined heat and power (hereinafter “new CHP” or “Plant”) plant to be located in Kyiv. The new CHP shall have a gross electrical power output of around 60 MW and a heat output of not less than 48 MWth.

The Plant should be based on gas engine technology providing exhaust gas to a heat only boiler producing district heat for the DH system. The new CHP plant will be fired with natural gas.

The new CHP plant is foreseen to operate in combined heat and power mode as well as electricity only producing mode. It shall be able to deliver electricity market balancing services using its fast start-up features. Security and high levels of availability of power supplies to the electricity network are essential requirements of the project, hence reliability and redundancy are regarded as key factors in the new CHP plant design.

Requirements include minimum functional specification for a «design and build» contract based on the FIDIC YELLOW Book, for the manufacture, supply, installation, commissioning, testing, defects resolution and long-term service agreement (LTSA) of the Plant.

The new CHP will be constructed on a Design-Build basis and shall include all supply of all equipment, works and services in order to render the power plant fully complete and functional for safe, reliable and commercial operation. The site is located on an existing operational site with terminal points for services at the boundary of the site.

In close cooperation with the Bank, the Employer is carrying out market consultations with prospective companies to develop an optimal procurement and implementation strategy(ies) for the Project. The main purpose of the event is to assess the immediate and prospective contractor availability and test the risk appetite of the market in the context of the current situation in Ukraine. The event will give the opportunity to interested companies to provide feedback and voice any concerns they may have.

All procurement for the Project shall be subject to the provisions of the EBRD Procurement Policies and Rules (Rev. May 2022, <https://www.ebrd.com/procurement/project-procurement/policies-guidelines.html>).

Please review the documents provided in Annex I-V and fill in and return the Questionary in Annex VI. Also, you are invited to send us your questions or comments prior to the planned market consultation (if you wish to keep those questions and comments confidential) or please attend the event and share your thoughts on the upcoming call.

Also, be sure to indicate whether you consider any of the following conditions to be a barrier to your company's participation, or whether you require any changes to the terms of the tender to make it more attractive for your participation.

You can send your questions in writing to e-mail: borkovskyi.vv@kte.kmda.gov.ua until 18.08.2025 12:00 (Kyiv time), and also take part in the online meeting, which will be held on 27.08.2025 using [Microsoft Teams Link](#) at 10:00 London time (at 12 o'clock Kyiv time).

Representatives of the European Bank for Reconstruction and Development (EBRD) will also take part in the meeting.

Annexes:

Annex I - Eligibility and Qualification Criteria (draft version)

Annex II - Scope of Works

Annex III - Contract implementation schedule

Annex IV - Requirements

Annex V - Key contractual terms and conditions

Annex VI – Questionnaire

Annex I. Eligibility and Qualification Criteria (draft version¹)

In order to demonstrate compliance with the qualification criteria, the Participant shall meet the below listed main qualification criteria:

Criteria	Requirement	Participant					Documents Required	
		Single Entity	Joint Venture, Consortium or Association					
			All members combined	Lead Partner	Each other member			
The information shall be provided for the period of 2015 – 2024								
2.1. Historical Financial Performance	Financial soundness shall be demonstrated by annual financial statements for the last two (2) years period from 2023 to 2024: <ul style="list-style-type: none"> confirmed by audit statements; or by tax returns/acceptance by the tax authorities of the Participant's country of incorporation or domicile. 	Must meet requirement	N/A	Must meet requirement	Must meet requirement	Form FIN-1; Balance sheets; Profit and loss accounts		
2.2. Average Annual Revenues	A Participant's minimum average annual turnover for any of the three (3) years during the last four (4) years (2021 to 2024) shall be equivalent to: <ul style="list-style-type: none"> Thirty million euros (30 m EUR) equivalent; 	Must meet requirement	Must meet requirement	N/A	N/A	Form FIN-1; Income statement		

¹ these criteria will be further adjusted/subdivided based on final composition of the procurement plan (i.e. contract packaging)

² The monetary values shall be expressed in equivalent of EUR.

The values in other currencies should be recalculated into the above stated currency, based on the exchange rate as set by <https://www.xe.com/currencytables/> on the 1st of July of each year of substantial completion of respective contracts, or for the current year, on the date of the invitation to submit applications or proposals, as appropriate.

Table 2. Financial Situation

Criteria	Requirement	Participant				Documents Required	
		Single Entity	Joint Venture, Consortium or Association				
			All members combined	Lead Partner	Each other member		
2.3. Financial Solvency	<p>A Participant shall not:</p> <ul style="list-style-type: none"> • be bankrupt; • be insolvent or in liquidation proceedings; • have its assets administered by a liquidator or by the court of law; • have its commercial activity suspended by the court of law; or • have no outstanding tax obligations in the Participant's country of incorporation or domicile. 	Must meet requirement	Must meet requirement	Must meet requirement	Must meet requirement	Documents issued by the relevant authorities in the country, where of a Participant is incorporated or domiciled; Balance sheets; Profit and loss accounts	
2.4. Financial Resources ³	<p>A Participant must demonstrate access to, or availability of financial resources such as liquid assets, unencumbered real assets, lines of credit, and other financial means, other than any contractual advance payments to meet:</p> <p>(i) the overall cash flow requirements for this contract taking into account its current commitments and pending awards for the entire duration of the contract; and</p> <p>(ii) the estimated cash-flow requirements:</p> <ul style="list-style-type: none"> • Ten million euros (10 m EUR) equivalent; 	Must meet requirement	Must meet requirement	N/A	N/A	Form FIN-2; Form IRC-2; Bank letters; Balance sheets; Form FIN-3	

³ The monetary values shall be expressed in equivalent of EUR.

The values in other currencies should be recalculated into the above stated currency, based on the exchange rate as set by <https://www.xe.com/currencytables/> on the 1st of July of each year of substantial completion of respective contracts, or for the current year, on the date of the invitation to submit applications or proposals, as appropriate.

Table 3. Historical Contract Non-Performance							
Criteria	Requirement	Participant				Documents Required	
		Single Entity	Joint Venture, Consortium or Association				
			All partners combined	The Lead Partner	Each Other Partner		
The information shall be provided for the period of 2019 – tender closing deadline							
3.1 History of non-performing contracts	The applicant, or any partner in a JVCA, shall not have a consistent history of litigation and/or arbitration resulting in awards against the applicant, or any partner in a JVCA.	Must meet requirement	Must meet requirement	Must meet requirement	Must meet requirement	Form HIS-1	
3.2 Pending Litigations	All pending litigation shall in total not represent more than 25 (twenty-five) percent of the Participant's net worth and shall be treated as resolved against the Participant.	Must meet requirement	Must meet requirement	Must meet requirement	Must meet requirement	Form HIS-1	

Table 4. Experience							
Criteria	Requirement	Participant				Documents Required	
		Single Entity	Joint Venture, Consortium or Association				
			All members combined	Lead Partner	Each other member		
The information shall be provided for the period of 2015 – tender closing deadline							
4.1. General Experience	A Participant shall demonstrate experience as a contractor (in any role), in the execution of: (i) a minimum of 2 (two) contracts, that have been substantially completed, each with a value of works, implemented by the Participant, of at least 40,000,000 EUR (forty million EUR) equivalent; or (ii) one contract with value equal or more than 80,000,000 EUR (eighty million EUR)	Must meet requirement	Must meet requirement	N/A	N/A	Form EXP-1; Documents, demonstrating substantial completion of contracts and services, as appropriate; Form IRC-1	
4.2. Specific Experience	A Participant shall demonstrate its experience within the last 10 years as follows: (i) experience with the substantial completion of a minimum of 2 (two) contracts similar in nature and complexity to the Contract or	Must meet requirement	Must meet requirement	N/A	N/A	Form EXP-1; Documents, demonstrating substantial completion of	

Table 4. Experience							
Criteria	Requirement	Participant				Documents Required	
		Single Entity	Joint Venture, Consortium or Association				
			All members combined	Lead Partner	Each other member		
	<p>related to the construction or modernization of power plants of a minimum 20 MWel capacity (based on gas, liquid and/or solid fuels).</p> <p>Power plants modernization contracts shall include replacement of main technological equipment including: gas and steam turbines (gas engines), boilers and main electrical equipment.</p> <p>(ii) in addition, or as part of the above 2 (two) contracts, the Tenderer or the proposed gas engines manufacturer shall have successful experience of at least 2 (two) same gas engines as being proposed in operation for at least 2 (two) years. Relevant references shall be provided.</p>					contracts and services, as appropriate; Form IRC-1	
4.3 Management Experience	<p>A Participant shall demonstrate:</p> <p>Experience as a main contractor or a lead partner in a JVCA in the execution at least one contract with a value equivalent of at least 100,000,000 EUR (one hundred million EUR) equivalent, that has been substantially completed.</p>	Must meet requirement	Must meet requirement	N/A	N/A	Form EXP-1; Documents, demonstrating substantial completion of contracts and services, as appropriate; Form IRC-1	

Table 5. Environmental, Social, Health and Safety (ESHS) (Works)							
Criteria	Requirement	Participant				Documents Required	
		Single Entity	Joint Venture, Consortium or Association				
			All partners combined	The Lead Partner	Each Other Partner		
<p><i>The information shall be provided for the period of 2019 to tender closing deadline</i></p>							
5.1 ESHS Certifications and Documents	Availability of a valid ISO certification or internationally recognized equivalent (equivalency to be demonstrated by Participant), such as Environmental	Must meet requirement	Must meet requirement	Must meet requirement	Must meet requirement	Form ESHS-1W	

Table 5. Environmental, Social, Health and Safety (ESHS) (Works)

Criteria	Requirement	Participant				Documents Required	
		Single Entity	Joint Venture, Consortium or Association				
			All partners combined	The Lead Partner	Each Other Partner		
	management certificate ISO 14001; and Health and safety certificate OHSAS 18001. In absence of the above certificates, availability of in-house policies and procedures for ESHS management.						
5.2 ESHS Experience	Experience as a contractor (in any role), in the execution of at least 1 (one) contract, where key ESHS measures were carried out, or are on progress, satisfactorily and in compliance with international standards.	Must meet requirement	Must meet requirements for all characteristics	N/A	N/A	Form ESHS-2W	

Annex II - Scope of Works

The new complete gas engine Combined Heat and Power (CHP) plant with a power output voltage of ca. 100MWe, including Related Services

<u>1.1. List of Goods:</u>			
Nº	Name	Brief description of Goods	Quantity
1)	A new complete gas-fired CHP with a total output of approximately 60 MWel, which consists of identical gas piston engines with a unit output not less than 9 MWel each.	New complete gas engine power plant including spare parts and consumables, equipment and tools for maintenance, repair and related services in accordance with the Requirements	1 units
2)	Documentation	In accordance with Requirements	3 sets
<u>1.2. List of Related Services:</u>			
Nº	Name	Brief description of Works	Quantity
1)	Warranty obligations;	In accordance with the Requirements	1 set
2)	Purchaser's Maintenance and Repair Support during the warranty period;	In accordance with the Requirements	1 set
3)	Fulfil detailed analysis, measurements, geologic surveys, investigations necessary to complete the works;	In accordance with the Requirements	1 set
4)	Prepare of the detailed design documentation (in accordance with the requirement of the applicable Ukrainian legislation);	In accordance with the Requirements	1 set
5)	Obtain all necessary permits and approvals;	In accordance with the Requirements	1 set
6)	All preparatory and construction works on the site;	In accordance with the Requirements	1 set
7)	Undertake activities for protection of labour and industrial safety on the construction site as per State Construction Norms (DBN A.3.2-2-2009 "The system of standards of safety of labour "PROTECTION OF LABOUR AND INDUSTRIAL SAFETY IN BUILDING CONSTRUCTION" (ref. in Ukrainian: http://dbn.at.ua/load/normativy/dbn/dbn_a_322_2009/1-1-0-945) or other relevant Ukrainian regulations;	In accordance with the Requirements	1 set

8)	Design, Manufacture, supply and install all necessary basic and auxiliary equipment and systems;	In accordance with the Requirements	1 set
9)	Execute all connections to the gas, electrical, district heating and water supply networks up to agreed terminals points;	In accordance with the Requirements	1 set
10)	Supply and install automation and control systems;	In accordance with the Requirements	1 set
11)	Execute all general construction works;	In accordance with the Requirements	1 set
12)	The construct of the new buildings (structures) for the new CHP excluding protection structures (required according to the Ukraine legislation for equipment protection in current circumstances) shall be done by the Contractor. Design, including protection structures to be carried out by the Contractor; The construction of protective structures shall be carried out by the Employer in accordance with the Contractor's Design;	In accordance with the Requirements	1 set
13)	Carry out trial run of the installed equipment, commission it and hand it over;	In accordance with the Requirements	1 set
14)	Carry out performance tests;	In accordance with the Requirements	1 set
15)	Provide training of the Employer's personnel;	In accordance with the Requirements	1 set
16)	Submit a list of spare parts and consumables, including their lifetimes, prices, availability on stock in Ukraine and delivery terms for emergency supply;	In accordance with the Requirements	1 set
17)	Submit all needed documentation for operation and technical maintenance of all the equipment which forms part of the new CHP plant;	In accordance with the Requirements	1 set
18)	Submit As-Build documentation;	In accordance with the Requirements	3 set
19)	Supply consumables for the first filling (all chemicals, lubricating oils and lubricants not fuel);	In accordance with the Requirements	5 set
20)	Supply key spare parts;	In accordance with the Requirements	1 set
21)	Special tools and maintenance equipment for all plant and equipment, including lifting tackle;	In accordance with the Requirements	1 set
22)	Remedy the defect during the defect notification period, if any;	In accordance with the Requirements	NA

23)	Consumable / wear spare parts up to end of the defect's notification period.	In accordance with the Requirements	NA
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Annex III. Contract implementation schedule

The Participant shall fill the Implementation Schedule below and send it to the Employer.

Nº	Brief description	Implementation schedule from the Commencement Date (month)
1	First delivery of complete gas engine CHP	[...]*
[...]	<i>[Information to be detailed by the Participant]</i>	[...]*
2	Last delivery of complete gas engine power plants	[...]*
[...]	<i>[Information to be detailed by the Participant]</i>	[...]*
3	<i>Design Works Completed</i>	[...]*
4	<i>Construction and installation work completed</i>	[...]*
5	<i>Gas connection needed</i>	[...]*
6	<i>Power Plant's back energization</i>	[...]*
7	<i>Trial run</i>	[...]*
8	<i>Tests on Completion</i>	[...]*
9	<i>Commissioning in accordance with the requirements of Ukrainian legislation</i>	[...]*
10	New CHP handover Taking-Over Certificate	[...]* Not later than 36 months from Commencement Day

* To be filled in by the Participant

The milestone specified above starting from the “Commencement Date”, which is the date of receipt of the advance payment by the Supplier.

The goods will be delivered to the site in Kyiv.

Annex IV - Requirements (Preliminary)

Operating conditions

New complete gas engine ‘Combined Heat and Power Plant’ designed for the generation of electrical energy from the energy of natural gas from internal combustion gas piston engines, as well as generating heat for district heating system. The installations are subject to the requirements of the regulatory documents in force in EU and Ukraine (national standards (DSTU), technical standards (TOR) and other standards and regulations established by the official legislation of Ukraine) for this type of installation. The new CHP shall comply with all EU and Ukrainian emission requirements in force. New CHP shall meet the requirements set forth in EU Best Available Techniques (BAT) for the selected technology.

The Employer intents to procure, install and commission a state-of-the-art gas fired combined heat and power (hereinafter “new CHP” or “Plant”) plant. The new CHP shall have a minimum gross electrical power output of around 60 MWe and a heat output of not less than 48 MWth. The minimal electrical capacity of one engine shall be not less than 9 MWe. The new CHP shall ensure supply of heat to the district heating (DH) network in all existing modes.

The Plant should be based on gas engine technology providing exhaust gas to a waste heat boiler producing heat for the DH system or alternative technologies. The new CHP plant will be fired with natural gas.

The new CHP plant is foreseen to operate in combined heat and power mode, as well as electricity only producing mode. It shall be able to deliver electricity market balancing services using its fast start-up features. Security and high levels of availability of power supplies to the electricity network are essential requirements of the project, hence reliability and redundancy are regarded as key factors in the new CHP plant design.

The Employer expects to follow single comprehensive turnkey Engineering, Procurement and Construction (EPC) Contract for the design, manufacture, supply, installation, commissioning, testing, defects resolution and long-term service agreement (LTSA) for the Plant, using the FIDIC YELLOW Book. The construction of protective structures shall be carried out by the Employer in accordance with the Contractor's Detailed Design. The full scope of work will be covered by the ‘Requirements’ as part of future tender documentation that will form part of the Contract.

The new CHP will be procured and constructed based on a Design-Build contract and shall include all plant, equipment, work and services required to provide the new CHP plant that is complete and functional for safe, reliable and commercial operation under all operating conditions, within the terminal points. It is expected the Contractor will enter into a Long Term Service Agreement for major part of the works.

Figure 1 provides an overview of the plants and its battery limits.

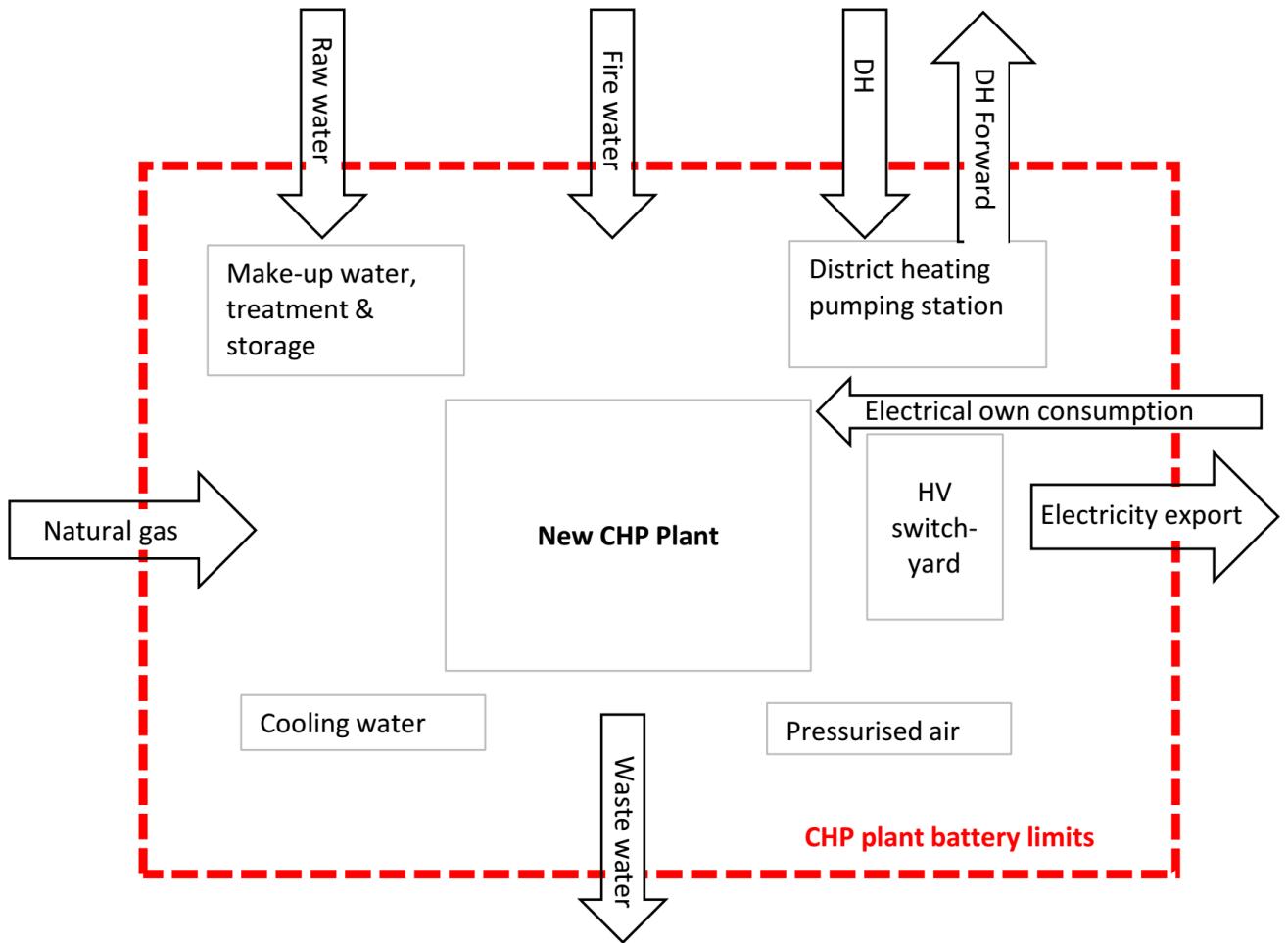


Figure 1 New CHP battery limit diagram.

The scope of works will include the Detailed Design according to Ukrainian legislation, procurement, manufacture, testing in works, packaging, shipping, transport, delivery to Site, unloading at Site, construction, health and safety management, painting, installation, commissioning, testing, start-up and obligations for the defects under the liability period of the complete power plant.

Standards and certificates

All the equipment in the scope of supply shall be certified in the Ukraine. Equipment could be certified after the contract signature, but not later than the end of detailed design development before proceeding with the designs State Expertise. A Manufacture Authorization Form shall be provided.

Testing, acceptance and commissioning

- 1) Factory Acceptance Tests of gas engine units shall be carried out with the Employer's Representative at the manufacturer's production facility prior to shipment. The Employer reserves the right to attend any intermediate tests as well as the final tests. The Factory Acceptance Tests program shall be provided for the Employer's Representative in advance.

2) The first complete gas engine unit shall be delivered to the site after a test period of continuous operation for 72 hours non-stop work.

3) Commissioning shall be done in line with the requirements of Ukrainian legislation.

4) Final acceptance of the new CHP shall be made after commissioning and all Tests on Completion including performance testing in line with the Requirements.

Any defect found during testing and commissioning shall be rectified within twenty (20) days at the Contractor's expense. Final acceptance is subject to the correction of all remaining defects.

5) Completion Certificate for the new CHP shall be issued after all contractual conditions have been met including fulfilment of Ukrainian legislation requirement for commissioning.

Functional specification of a complete gas engine units

Purchaser's requirements

№	Employer's requirements		Answer: YES / NO <u>If YES:</u> specify the manufacturer, brand, link to the supporting document <u>If NO:</u> indicate the reasons
	Description	Value	
1.	Type of power plant:	gas piston	
2.	Total Electric power, MW:	Not less than 60MWe	
3.	Single engine power, MW:	Not less than 9MWe	
4.	Output voltage level, kV:	10.5 kV	
5.	Frequency, Hz:	50 Hz	
6.	Fuel:	natural gas	
7.	Engine Speed, rpm:	based on the technical characteristics of the manufacturer	
8.	Exhaust manifold:	dry	
9.	Execution method:	Indoors (Dedicated machine house)	
10.	Quick start mode support:	Yes	
11.	Island mode paralleling and load sharing with other existing CHP power modules:	Yes	
12.	Synchronization with an external network:	Yes	
13.	Availability of a heat energy recovery module:	Yes	
14.	Warranty period, years:	not less than 2 years	
15.	Installation supervision services:	Yes	
16.	NOx emission level	Not more than 75 mg/nm ³	
17.	Designed DH network water supply temperature	90°C	
18.	Designed DH network water return temperature	65°C	

Annex V - Key contractual terms and conditions

1. **Terms of payment:** 30% advance payment. 30% shall be deducted from the amount certified in each Interim Payment Certificate and the amount certified in the Final Payment Certificate. Local and Foreign Contractors will be required to pay taxes, duties, fees and other impositions levied under the Applicable Law (current legislation of Ukraine).
The Contractor will have to register with the tax authorities of Ukraine within thirty (30) days after signing the Contract if not already registered.
2. **Insurance:** Professional liability insurance for design services, Loss of or damage to the Works, Plant and Materials (110% of the total contract value), Third Party Liability Insurance, Equipment Liability Insurance, Personnel Insurance.
3. **Retention Money** is fixed at 5%.
4. **Dispute Resolution Method** used: DAB (Dispute Adjudication Board)
5. **Delay damages:** 0.5% of the final Contract Price per week. The maximum amount of delay damages under the Contract shall not exceed 10% of the Contract Price.
6. **Time For Completion** shall be 1095 days.
7. **Defect Notification Period** shall be 730 days.
8. **Price Adjustment:** applicable according to the FIDIC contract provisions
9. **Bank guarantees:**
 - 9.1 Advance payment security in the amount of the advance payment to be provided in the form of unconditional bank guarantee;
 - 9.2 Performance security in the amount of 10% of the Accepted Contract Price to be provided in the form of unconditional bank guarantee.

Annex VI - Questionnaire

We will appreciate if you fill in and send the completed questionnaire to our e-mail: borkovskyi.vv@kte.kmda.gov.ua by August 20, 2025.

Project Name: Kyiv District Heating Project

Procurement: “Supply, installation and commissioning of cogeneration units in Kyiv”.

Nº	Question	Answer
	<p>Date of filling:</p> <p>Company name:</p> <p>The contact person:</p> <p>Tel:</p> <p>e-mail:</p>	
1.	Will your company be able to deliver the gas engine CHP units on the territory of Ukraine?	
2.	Will representatives of your company be able to be present on a site physically and supervise the installation and commissioning of the gas engine power plant units? If not, does your Company have experience in remote/distance supervision?	
3.	Is your company capable and interested in providing the design, installation (including civil works) and commissioning of gas engine power plant units on the territory of Ukraine?	
4.	Does the information specified in the Eligibility and Qualification Criteria in “Financial Situation” correspond to your capabilities?	

Nº	Question	Answer
5.	Does the information specified in the Eligibility and Qualification Criteria in “Experience” correspond to your capabilities?	
6.	Does the information specified in the Eligibility and Qualification Criteria in “Environmental, Social, Health and Safety (ESHS)” correspond to your capabilities?	
7.	The Participant shall list main equipment, which he would propose to use for the contract	
8.	What would be preferred setup of Contract execution for this project? E.g., EPC/Split the contract scope into different lots as Supply of Goods and another lot for the installation works.	
9.	Do your company have the in-house capacity to perform design, installation (including civil works) and commissioning of CHP in Ukraine or do you expect to find a local partner/subcontractor?	
10.	Does other information specified in the Scope of Works correspond to your capabilities?	
11.	Does other information specified in the Implementation schedule correspond to the proposed manufacturers capabilities?	
12.	Does the information specified in the Requirements correspond to your capabilities?	
13.	Does the information specified in the Key terms of the contract correspond to your capabilities?	
14.	Is complete information on the subject of procurement given in the Requirements and are there any limiting factors?	

Nº	Question	Answer
15.	Are there any questions about the quantitative and qualitative content of the documentation?	
16.	Please provide dimensions of gas engine genset, as well as required height and span of engine compartment.	
17.	Please provide suggestions for alternative unit configuration, together with pros and cons	
18.	What is the expected lead time in case project kick off at the beginning of 2026? Are there any restrictions in manufacturing facility?	

Questions of the Participant (if available):

1.	
...	

Participant's comments and suggestions (if available):

1.	
...	