

MEMORANDUM

То:	Kyrylo Tomliak, Program Coordinator, Project Manager at EBRD	
CC:	Georgii Geletukha, Director of Scientific Engineering Centre "Biomass" (SECB)	
Date:	18 November 2021	
Re:	Legal analysis of the terms and requirements of the Ukrainian legislation governing injection of biomethane into the gas distribution or gas transmission system, and its further transmission as a commodity from Ukraine to the EU	

Dear Kyrylo,

This Memorandum was prepared in reply to your inquiry regarding the need to analyze the requirements of the Ukrainian legislation governing injection of biomethane into the gas distribution or gas transmission system, and its further transmission to the EU. The memorandum contains a legal analysis of the issues set out in the letter, with further amplification in the correspondence and our proposal.

This analysis is prepared on the basis of the effective laws of Ukraine, giving due consideration to their interpretation and approaches to their application on the part of the competent state bodies and courts, provided that such interpretation and approaches to the application were published before or as of the date of this Memorandum. We do not assess, nor do we set forth any legal position on the laws and regulations or case law that will or may enter into full force and effect or that will be officially published after the date of this Memorandum. Nor can we guarantee that our views comply with those of the government, regulators, and law enforcement bodies in each individual case under review.

I. **DEFINITIONS**

Client shall mean potential producer of biomethane planning to connect the biomethane production facility to the gas distribution and gas transmission systems, to inject biomethane to such systems and gas storage facilities, and transmit it to the EU.

Gas Law shall mean Law of Ukraine On the Natural Gas Market No. 329-VIII, dated 09.04.2015.

Regulator shall mean the National Commission for State Regulation of Energy and Public Utilities.

GTS shall mean the Gas Transmission System of Ukraine.



GDN shall mean the Gas Distribution Networks.

Gas Storage Facilities or Underground Gas Storage Facilities (UGSF) shall mean underground gas storage facilities.

GTS Code shall mean the Code of Gas Transmission System approved by Order of the Regulator No. 2493, dated 30.09.2015.

GDN Code shall mean the Code of Gas Distribution System approved by Order of the Regulator No. 2494, dated 30.09.2015.

Gas Storage Code shall mean the Code of the Gas Storage Facilities approved by Order of the Regulator No. 2495 dated 30.09.2015.

GDN Operator means a business entity that has been carrying out operations, subject to its license, which are related to the distribution of natural gas via gas distribution system in favor of third parties (clients).

TSO or GTS Operator shall mean LLC "Gas Transmission System Operator of Ukraine" that has been carrying out operations, subject to its license, which are related to the transmission of natural gas via gas transmission system in favor of third parties (clients).

Gas Storage Operator shall mean a branch "Gas Storage Facilities Operator of Ukraine" of JSC "Ukrtransgas" that has been carrying out operations, subject to its license, which are related to the storage (injection, withdrawal) of natural gas, using one or several gas storage facilities, in favor of third parties (clients).

Tax Code shall mean Tax Code of Ukraine No. 2755-VI, dated 02.12.2010.

Customs Code shall mean Customs Code of Ukraine No. 4495-VI, dated 13.03.2012.

Order No. 629 shall mean Order of the Ministry of Finance No. 629 dated 30.05.2012 On the Customs Formalities Related to the Pipeline Transport and Powerlines.

II. LIST OF ISSUES, FACTS, AND ASSUMPTIONS

This Memorandum analyzes terms and requirements of the effective laws of Ukraine governing injection of biomethane into the gas distribution or gas transmission system, and its further transportation as a commodity from Ukraine to the EU, specifically:

a. Conditions and requirements for connection of biomethane producers to the gas distribution and gas transmission systems and injection of biomethane into such systems and gas storage facilities in accordance with the Law of Ukraine On the Natural Gas Market, the Gas Transmission System Code, and the Gas Distribution System Code as well as other regulations governing natural gas market, including licensing requirements, agreements with operators of gas distribution, gas transmission systems, and gas storage facilities, reporting, etc. However, this analysis does not cover the construction and operation of biomethane production facilities in general, being limited only to the issue of connection to the systems, injection, and storage of biomethane.

- b. Conditions and requirements set with respect to the producers and sellers of biomethane for the sale of biomethane to foreign companies and transportation of biomethane as a commodity from Ukraine to the EU under gas purchase and sale agreements, in accordance with the Law of Ukraine On the Natural Gas Market, the Gas Transmission System Code, and the Gas Storage Code as well as other regulations governing the natural gas market, including licensing requirements, agreements with gas transmission system operators and gas storage facilities, transaction documentation, reporting, etc.
- c. The applicable tariffs and costs related to the services of connection to the gas transmission and distribution systems, storage and transportation of biomethane in accordance with the Law of Ukraine On the Natural Gas Market, the Code of Gas Transmission System, and the Code of Gas Storage Facilities as well as other regulations governing the natural gas market.
- d. Analysis of the customs formalities related to biomethane exports in accordance with the Customs Code of Ukraine and tax implications for the exporters.
- e. Formation of the list of legal issues and barriers for injection of biomethane into natural gas systems, its transportation, and further export from Ukraine to the EU, based on legal analysis and comments provided by technical/economic advisers, as well as recommendations for resolving such issues pursuant to the effective laws of Ukraine.

Our analysis below is based on the facts and assumptions set forth above. In this Memorandum, we do not analyze any specific operation with biomethane.

II. ANALYSIS

1. Conditions and requirements for connection of biomethane producers to GDN and GTS as well as injection of biomethane into such systems and Gas Storage Facilities, including licensing requirements, agreements with Operators of GDN, GTS, and Gas Storage Facilities, reporting, etc.

1.1. <u>General terms for connection to GTS and GDN, injection of biomethane into such systems and storage in Gas Storage Facilities.</u>

On 21.10.2021 the Ukrainian Parliament adopted the Law of Ukraine "On amendments to certain laws of Ukraine on the development of biomethane production", which took effect on 11.11.2021. The said law introduces the definition of "biomethane" regulating it as a biogas, which in its physical and chemical characteristics corresponds to the regulations on natural gas. It also provides for a biomethane register, a procedure for verifying biomethane to ensure its further supply to the GTS, and a procedure for issuing guarantees as to the origin of biomethane and further transactions with them.

Pursuant to the second paragraph of part 1 of Articles 19 and 19-1 of the Gas Law:

Producers of biogas or other types of gas from alternative sources have the right to gain access to the gas transmission and distribution systems, gas storage facilities, LNG installations and to connect to the gas transmission and distribution systems, subject to compliance with technical regulations and safety requirements in accordance with the effective laws and provided that biogas or other types of gas from alternative sources comply with the natural gas regulations in terms of their physical and chemical characteristics.

The provisions of the Gas Law shall apply on a non-discriminatory basis to biogas or other types of gas from alternative sources, if biogas or other gas from alternative sources meets the requirements for access to gas transmission and distribution systems, gas storage facilities, LNG installations.



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Thus, the laws provide for the possibility to supply purified biogas to GTS or GDN, and store it in the Gas Storage Facilities.

According to the GTS Code, natural gas supplied to GTS must meet the following requirements¹:

No.	Characteristics	Value
1.	Methane content (C ₁), mol. %	≥ 90
2.	Ethane content (C ₂), mol. %	<i>≤</i> 7
3.	Propane content (C ₃), mol. %	≤ 3
4.	Butane content (C ₄), mol. %	≤ 2
5.	Content of pentane and other heavier hydrocarbons (C5 +), mol. %	≤ 1
6.	Nitrogen content (N ₂), mol. %	≤ 5
7.	Carbon content (CO ₂), mol. %	≤ 2
8.	Oxygen content (O ₂), mol. %	$\leq 0,02$
9.	Higher heating value (25°C/20°C)	min 36.20 MJ/m ⁻³ (10.06 kWh/m ⁻³)
		max. 38.30 MJ/m ⁻³ (10.64 kWh/m ⁻³)
10.	Higher heating value (25°C/0°C)	min 38.85 MJ/m ⁻³ (10.80 kWh/m ⁻³)
		max. 41.10 MJ/m-3 (11.42 kWh/m ⁻³)
11.	Lower heating value (25°C/20°C)	32.66 MJ/m ⁻³ (09.07 kWh/m ⁻³)
		34.54 MJ/m ⁻³ (09.59 kWh/m ⁻³)
12.	Dew point temperature at humidity (°C) at an absolute gas pressure of 3.92 MPa	≤ -8
13.	Dew point temperature for hydrocarbons at a gas temperature not lower than 0 $^{\circ}C$	≤0°C
14.	Content of mechanical impurities:	none allowed
15.	Hydrogen sulfide content, g/m ⁻³	≤ 0,006
16.	Mercaptan sulfur content, g/m ⁻³	$\leq 0,02$

Natural gas supplied to GDN must meet physical and chemical characteristics of the natural gas standards defined by the GTS Code².

Natural gas injected to/withdrawn from/ the Gas Storage Facilities must meet the requirements set out in the GTS Code³.

Thus, the Client is entitled to have access, and connect, to GTS or GDN, as well as the possibility to transmit biomethane and store it in the Gas Storage Facilities, provided that biomethane meets natural gas standards and other requirements set by the laws governing the natural gas market.

In order to ensure that the clients fulfill their obligations to transmit or store (inject, withdraw) natural gas, the TSO and Gas Storage Operator have the right to demand financial security from the Client, in particular, in the form of guarantees.

Natural gas transmission services are provided subject to a 100% prepayment in the amount of the cost of allocated capacity (for the period of a gas month, quarter and/or year) or in the amount not less than the cost of access to capacity for a gas day, which is planned to be used according to the nomination (for a period of one gas day).

Operators of GDN, GTS, and Gas Storage Facilities may deny the Client's access to GTS or GDN, Gas Storage Facility if one of the following grounds exists⁴:

¹ Section 13 (chapter 1) of Article III of the GTS Code.

² Pursuant to Section 2 (chapter 1) of Article V of the GDN Code.

³ Pursuant to paragraph 2 of Section 10 (chapter 1) of Article III of the Gas Storage Code.

⁴ Pursuant to part 3 of Article 19 of the Gas Law.



- 1) lack or insufficiency of free capacity;
- 2) granting access will constitute an obstacle for such operator's performing the special duties assigned to it pursuant to the Law⁵;
- 3) denial of such access is substantiated on the basis of the Regulator's decision⁶.

In case of denial of access due to lack or insufficiency of free capacity, TSO, Operator of the Gas Storage Facility, may increase the capacity of GTS, Gas Storage Facilities, provided that such increase is economically justified or that the Client has agreed to reimburse the costs of such Operator incurred as a result of the capacity's increase.

If it is technically feasible to connect the Client's biomethane production facility, and the TSO has a free capacity, the Client may connect its own biomethane production facility directly to GTS. The Client can also connect a facility to GDN if the GDN Operator has a free capacity. The GDN or GTS connection service is a fee-based service and is provided by the Operators of GTS or GDN in accordance with the connection agreement.

Thus, in order to connect the Client's facility to GTS or GDN, transmit biomethane to GTS/GDN and store it in the Gas Storage Facility, the Client needs:

- to obtain permission of the GTS or GDN Operator to connect to the GTS/GDN;
- to enter into a connection agreement with the GTS or GDN Operator, including technical regulations, to formalize rights to the land plots under gas networks from the connection point, to comply with the requirements of construction laws, in particular, to put into operation the internal gas supply network from the connection point, to pay for relevant services and otherwise fulfill requirements of the connection agreement and effective laws of Ukraine. In this case, the relevant operator must perform the above actions for the external gas supply networks, install a metering unit at the measuring point, connect external and internal gas supply networks, and commence gas injection;
- to obtain Energy Identification Code (EIC code);
- to enter into a technical agreement regarding conditions of receipt and transmission of gas with the GTS and/or GDN Operator.
- to enter into <u>transmission agreement</u> with the TSO for access to facilities, gas transmission services, including actions to settle daily imbalances in the GTS;
- to enter into <u>natural gas storage agreement</u> (injection to/withdrawal from the Gas Storage Facilities) with the Gas Storage Operator for gas storage in the Gas Storage Facilities and injection to/withdrawal from, the Gas Storage Facilities;
- to order, and pay for, capacity allocation (at internal entry/exit points and/or interstate connection points), transmission, storage (injection, withdrawal) services, to provide financial security, and to fulfill other obligations under the gas transmission and storage agreements and effective laws;
- to submit appropriate nominations/re-nominations for gas transmission through the <u>TSO IT</u> <u>platform</u>, and for gas injection, withdrawal from the Gas Storage Facilities through the <u>IT</u> <u>platform of the Gas Storage Operator</u>;
- to submit reports regarding operations in the natural gas market.

⁵ Special duties to secure the general public interests may be determined by the Cabinet of Ministers of Ukraine after consultation with the Energy Community Secretariat in exceptional cases and for a specified period. At the current stage, there is no list of such special duties.

⁶ Such decision may be adopted by the Regulator pursuant to the special rules of access in the instances of existence of the take-or-pay obligation under Article 55 of the Gas Law.



Detailed procedures for the Client's connection to GDN, GTS, and the procedure for obtaining gas transmission and storage services are given below.

1.2. <u>Procedure and terms for the Client's connection to GTS.</u>

The GTS Code determines that connection to GTS is possible when one of the below conditions is met:

- denial of the client by the GDN Operator due to lack or insufficiency of free capacity;
- the client is a gas producing company that connects natural gas (biogas) extraction/production facilities;
- if the client ordering connection is the Gas Storage Operator;
- if the client is the GDN Operator, whose territorial boundaries of the licensed activity are as close as possible to the connection point;
- if the pressure required to meet the client's needs exceeds 1.2 MPa.

In order to connect a construction site or an existing facility to GTS and receive transmission services, the Client needs to:

1) Obtain connection permit from the TSO.

To obtain such permission, the Client must submit to the TSO a completed and signed <u>application</u> for connection of the Client's facility to GTS and pay the cost of services for connection permission, connection agreement, and technical regulations.

The application is made in an arbitrary form, and the following documents should be attached to it:

- completed <u>questionnaire</u> in the form of the TSO, which contains the technical parameters of the Client's facility to be connected to GTS;
- copies of documents confirming that the Client ordering connection has the right of ownership, or use, of the facility that is planned to be connected, or of the land plot where it is planned to build such facility;
- copies of the Client's documents confirming the powers vested with the representative in order to enjoy the right to enter into the connection agreement (certified by the authorized person: copies of the articles of association, order appointing the executive, minutes of the founders' meeting regarding appointment of the executive, copy of a power of attorney, copy of documents for signature verification);
- draft act and scheme for the parties' division of balance sheet attribution and operational responsibility.

At the request of the TSO, originals of these documents are presented for review.

In case of connection of the Client's facility to the gas networks which are not owned by the TSO, but are connected to its gas transmission system and which, as a result of connection of the Client's facility, will acquire the status of GTS, the owner of such gas networks should give its written consent to the connection of the Client's facility to its gas networks. Prior to gas injection to the Client's facility, the owner of such gas networks shall enter into an agreement with the TSO (agreement of intentions, memorandum, etc.) regarding the obligation to enter with the TSO into one of the agreements for use of the gas networks (operational management, use or operation) or to transfer ownership thereof.



In the absence of comments regarding the documents submitted or after such comments are considered, the TSO shall review an application for connection and supporting documents within 10 business days.

The templates for the application, form of the questionnaire are available on the TSO's website at the <u>link</u>.

2) Enter into connection agreement with the TSO.

After payment by the Client of the cost of services for granting the connection permit, connection agreement, and technical regulations, the TSO shall provide Client with connection permit, a draft connection agreement in two counterparts, and technical regulations.

The GTS Code does not approve the form of the GTS connection agreement. According to the information received from the representative of the TSO, the draft agreement and technical regulations are provided directly at the Client's request.

3) Perform design and construction works for the external and internal gas supply.

The Client has the right to choose the TSO and/or another company entitled to carry out relevant activity, as a contractor for performance of the connection works.

After entering into the connection agreement, the contractor in charge of performance of design works of the external gas supply on the basis of technical regulations for connection shall provide for:

- obtaining urban planning conditions and restrictions on development of the land plot under external gas supply networks (if necessary);
- performance of engineering and geodetic surveys;
- development and approval of design and estimate documentation for external gas supply networks.

If the contractor of external gas supply works is the Client (including the design organization chosen by the Client), it approves the design and estimate documentation for external gas supply pursuant to technical regulations with TSO. Thereupon, it shall approve the design and estimate documentation, and submit one counterpart thereof to TSO.

In the absence of comments, the design and estimate documentation for external gas supply is to be approved by TSO within 15 days.

After approval of the design and estimate documentation for external gas supply, within 10 business days, TSO is to send to the Client a supplementary agreement to the connection agreement, which determines the time frame for ensuring connection and a connection fee.

If the Client appoints TSO as contractor for the connection works, TSO, in particular, ensures:

- formalization of legal matters pertaining to the land under the external gas supply networks;
- obtaining permits for commencement of the construction works;
- construction and commissioning of newly built (reconstructed) external gas supply networks;
- installation of the metering unit at the connection point (at the Client's request);
- renewal of the amenities damaged as a result of construction;
- connection of the external gas supply networks in the place where capacity is allocated;



- connection of the Client's internal gas supply networks to GTS at the connection point;
- commencement of gas injection to the Client's facility.

If the Client provides for preparatory, design, construction, installation, and commissioning works required for connection to GTS, independently and at its own expense, the cost of these works is not included into the connection service fee.

Within 10 business days after the Client provides supporting documents for commissioning of the internal gas networks, and subject to the Client's payment of the connection fee, the TSO shall ensure connection of the Client's internal gas networks to GTS, unless the connection agreement provides for a later date.

When connecting facilities (installations) of gas producing companies and producers of biogas or other types of gas from alternative sources, the TSO shall organize installation of a commercial metering unit, as well as devices that will continuously monitor physical and chemical parameters of gas (including chromatography recorder, gas density gage, dew point meter, etc.) with the possibility of their remote control, data transmission, and disconnection of low-quality gas supply to the GTS.

The Client may order the service related to installation and outfitting of a commercial metering unit from another company, which is entitled to carry out relevant activities.

The measures related to connection to GTS and construction of gas networks must be carried out in compliance with the <u>Law of Ukraine</u> On Legal Regime of the Lands of Protected Areas of Main Pipelines, the <u>Rules of safety of gas supply systems</u> approved by Order of the Ministry of Energy and Coal Industry of Ukraine, dated 15 May 2015, No. 285, and <u>Rules for safe operation of main gas pipelines</u>, approved by Order of the State Committee of Ukraine for Industrial Safety, Labor Protection, and Mining Supervision, dated 27 January 2010, No. 11.

Gas injection to the Client's facility is carried out by the TSO within 10 business days provided that the natural gas transmission agreement is concluded (see Section 1.4 of Article 1 of the Procedure and terms for gas transmission through GTS).

After the TSO provides the connection service to the Client, the parties shall execute the service delivery and acceptance certificate.

4) Enter into technical agreement on the terms of transfer-acceptance of natural gas.

In order to ensure metering of the gas received and transmitted at entry and exit points, the Client shall enter with the TSO into technical agreement providing for the terms of transfer-acceptance of natural gas⁷.

The draft technical agreement is available on the TSO's website at the <u>link</u> (in Ukrainian only).

According to the GTS Code, the transfer-acceptance of natural gas between the TSO and the adjacent gas producing company shall be carried out in compliance with the requirements of the GTS Code, technical agreement, and shall be formalized by delivery and acceptance certificates signed by the parties no later than the 5th day of the month following the month under review.

1.3. <u>Terms and conditions of connection to GDN.</u>

⁷ Pursuant to Section 9 (chapter 2) of Article III of the GTS Code.



In order to connect a construction site or an existing facility to GDN, the Client needs to:

1) Obtain a connection permit from the GDN Operator

To obtain such permit, the Client must file its application with the relevant GDN Operator and pay the cost of services for granting connection permit, connection agreement, and technical regulations.

The following documents shall be attached to the application regarding connection:

- completed questionnaire in the form approved by the GDN Operator, which contains technical parameters of the Client's facility to be connected to GDN;
- copies of documents defining the Client's right of ownership or use of the facility (premises), and/or a copy of the document confirming the right of ownership or use of the land plot (along with graphic plan of the land plot⁸);
- copies of the Client's documents:
 - o identifying the individual or his/her representative (for individuals);
 - certifying the status of a legal entity or individual entrepreneur and its representative (for legal entities and individual entrepreneurs);
 - \circ confirming registration with the State Tax Service in compliance with the requirements of the Tax Code of Ukraine;
 - a copy of the duly executed power of attorney issued in the name of the Client's representative authorized to represent the Client's interests during the connection procedure (if necessary).

To connect the Client's facility to gas networks which are not owned by the GDN Operator and are connected to its GDN and which, as a result of connection to the Client's facility will acquire the status of GDN, the GDN Operator is obliged to apply to the owner of these gas networks for its written consent to the connection of the Client's facility to its gas networks. The Client has the right to apply on its own for consent of the owner of the gas networks. An agreement (agreement of intentions, memorandum, etc.) shall be entered into by and between the owner of these networks and the GDN Operator regarding the owner's obligation to enter into one of agreements for use of gas networks (operational management, use or operation).

In the absence of comments with respect to the documents submitted or after such comments are considered, the GDN Operator shall within 10 business days provide the Client with a connection permit, a draft connection agreement, draft technical regulations required for connection and relevant invoices for making payment due for the above.

2) Enter into connection agreement with the GDN Operator

The connection agreement and technical regulations required for connection shall enter into full force and effect as of the date of their return to the GDN Operator in the form of the documents signed by the Client and subject to payment of the costs related to providing the Client with a connection permit, connection agreement, and technical regulations required for connection.

⁸ If there is no graphic plan of the land plot (there is no cadastral plan) among the land plot documents, the Client must provide the GDN Operator with general layout plan (scheme) regarding location of the Client's land plot, with its boundaries determined therein.



Depending on capacity of the Client's facility and the connection distance, the GDN Operator determines the type of connection to which the Client's facility (land plot) is eligible: standard⁹ or non-standard¹⁰.

The form of agreement for standard and non-standard connection, technical regulations for connection are given in annexes 15, 16, 17 to the GDN Code (in Ukrainian only).

3) Perform design works as well as external and internal gas supply works

The Client has the right to choose, at its discretion, a contractor for performance of design and construction works related to the connection, among the entities that have the right to carry out the relevant type of activity.

1. If the Client's facility (land plot) is eligible for the type of connection, which is standard, and the Client appoints the GDN Operator as a contractor for the external gas supply design and construction works, in such instances, a connection point for the Client should be determined at the boundary of the Client's land plot or, subject to the Client's consent, within the territory of such land plot.

After entering into connection agreement, the GDN Operator shall ensure connection of the Client's facility (construction of external gas supply networks from the place of provision of capacity to the connection point) within three months, taking into account the requirements of the GDN Code and the Client's payment schedule pursuant to the agreement.

2. If (i) the Client's facility (land plot) is eligible for a type of connection that is not standard, and the Client appoints the GDN Operator as a contractor of external gas supply works (regardless of the contractor for development of the external gas supply project), or (ii) the Client's project (land plot) is eligible for a type of connection, which is standard, but the Client identifies itself as contractor for the external gas supply project, and the GDN Operator as contractor for construction of the external gas supply networks (gas networks to the Client's land plot), in such instances, the connection point for the Client must be determined at the border of the Client's land plot or, with its consent, within territory of such land plot.

After entering into the connection agreement, the contractor for development of the external gas supply project on the basis of the technical regulations for connection shall provide for:

- obtaining urban planning conditions and restrictions on development of the land plot under external gas supply networks (if necessary);
- performance of engineering and geodetic surveys;
- development and approval in accordance with the established procedure of the external gas supply project and its part pertaining to estimates.

If the development of the external gas supply project was provided by a business entity other than the GDN Operator, the specified project and its part related to estimates must be approved by the GDN Operator.

In the absence of comments, the external gas supply project shall be approved by the GDN Operator within 15 calendar days.

⁹ Connection to GDN of the facilities with a capacity of up to 16 cubic meters per hour to a distance not exceeding 25 m for rural and 10 m for urban areas in a straight line from the point of provision of capacity to the point of connection.

¹⁰ Connection to GDN of the facilities with a capacity exceeding 16 cubic meters per hour to at a distance exceeding 25 m for rural and 10 m for urban areas in a straight line from the point of provision of capacity to the point of connection.



After approval of the external gas supply project and its part related to estimates in accordance with the procedure established by law, the GDN Operator shall send to the Client a supplementary agreement to the connection agreement within 10 business days, specifying the time frame for connection of the Client's facility to GDN and the respective connection fee.

If the Client appoints the GDN Operator as contractor, the GDN Operator shall, in particular, provide for:

- obtaining urban planning conditions and restrictions on development of the land plot under the external gas supply networks (if necessary);
- performance of engineering and geodetic surveys;
- development and approval of the external gas supply project and its part related to estimates;
- registration of land relations with respect to the route of laying of the external gas supply networks;
- obtaining permits for commencement of construction works;
- construction and commissioning of newly built (reconstructed) external gas supply networks;
- installation of the metering unit at the measuring point (at the Client's request);
- renewal of the amenities damaged as a result of construction;
- connection of external gas supply networks in the place of provision of capacity;
- connection of the Client's internal gas supply networks at the connection point;
- commencement of injection of gas to the Client's facility.

By the parties' consent, the connection agreement may specify a longer or shorter time frame for implementation of these measures, including the period required by the GDN Operator to agree and formalize the right to use the land plot under the external gas supply networks in compliance with the procedure determined by the effective laws.

3. If the Client appoints another business entity (other than GDN Operator) as contractor for the construction works related to such connection, the connection point shall be defined in the existing GDN of the GDN Operator and coincides with the place of provision of capacity, from which the Client is to construct the internal gas supply networks in accordance with the design premises of the GDN Operator, which are defined in the technical regulations for connection.

In this case, the measures implemented by the GDN Operator under the connection agreement and the cost of the service of the GDN Operator for connection of the Client's facility (connection fee) shall include:

- purchase, installation, and commissioning of the metering unit at the measuring point;
- development of the external gas supply project (if necessary and in case of appointment of the GDN Operator as contractor for development of this project);
- connection of the external gas supply networks in the place of provision of capacity (if any);
- connection of the Client's internal gas supply networks at the connection point;
- commencement of injection of gas to the Client's facility and entering into natural gas distribution agreement (technical agreement).

After signing of the connection agreement, the Client acting in the manner prescribed by law, shall ensure:

- formalization of land relations regarding the route of laying gas networks to be constructed by the Client from the point of connection;
- obtaining urban planning conditions and restrictions on the land plot development from the point of connection (if necessary);



- performance of engineering and geodetic surveys;
- development of the internal gas supply project taking into account the requirements of the GDN Code;
- obtaining permits in the manner prescribed by law to begin construction works;
- performance of preparatory and construction works for laying of the internal gas supply networks from the point of connection;
- commissioning, in the manner prescribed by law, of the internal gas supply networks from the point of connection;
- renewal of amenities damaged as a result of construction.

If the Client provides for performance of the preparatory, design, construction, installation, and commissioning works required for connection to the GTS, independently and at its own expense, the cost of these works shall not be included into the connection service fee.

4. On the basis of design data for design of the internal gas supply networks, which are defined in technical regulations for connection, the Client shall provide, in compliance with the procedure established by the effective laws, and its own expense, for development of the project of internal gas supply as well as construction and commissioning of the internal gas supply networks from the point of connection to its own gas devices and equipment.

If technical regulations for connection define the measuring point (location of the commercial metering unit) to be within the internal gas supply networks, the internal gas supply project should provide for the measures aimed at installation of the metering unit as well as for estimates related to the implementation of such measures, and such project for internal gas supply in terms of installation of the metering unit as well as estimates required for such installation, should be approved by the GDN Operator. Within 15 days, the GDN Operator shall either approve it, or provide the extensive list of its comments (if any) thereto.

5. Within 10 business days in urban areas and 15 business days in rural areas after commissioning of the internal gas supply networks, the GDN Operator shall be obliged to ensure connection of the Client's facility to GDN (physical connection of external and internal gas supply networks), provided that the Client paid the cost of such connection service and unless the connection agreement determines a later date.

When connecting facilities (installations) of gas producing companies and producers of biogas or other types of gas from alternative sources, the GDN Operator shall arrange for installation of a commercial metering unit, as well as devices that will continuously monitor physical and chemical parameters of gas (including chromatography recorder, flow density meter, dew point meter, etc.), with possibility of remote control, data transmission, and disconnection of poor quality gas supplies to GDN.

Injection of gas to the internal gas supply networks at the Client's facility shall be commenced by the GDN Operator within 5 business days in urban areas and 10 business days in rural areas subject to availability of the executed technical agreement and after the Client acquires confirmed natural gas volumes for the relevant period.

Construction of the external and internal gas supply networks must be carried out in compliance with legal regime set for lands of the protection zones of main pipelines and gas distribution systems, as well as requirements stipulated by the Rules of safety of gas supply systems, approved by Order of the Ministry of Energy and Coal Industry of Ukraine, dated 15.05.2015, No. 285.



The fact of performance of the service related to the connection of the Client's facility to GDN is the certificate of delivery of the connection service, which is executed by the Operator of GDN and the Client, and such execution shall be initiated by the Operator of GDN. The Client is not entitled to refrain from executing the certificate of delivery of the connection service without good reasons.

The GDN Operator shall acquire ownership of the external gas supply networks, including the metering unit, in accordance with Article 331 of the Civil Code of Ukraine.

4) Enter into technical agreement providing for the GDN terms of transfer-acceptance of gas

In order to transmit gas to/receive it from GDN, producers of biogas or other type of gas from alternative sources should enter into a technical agreement with the GDN Operator (to which their facilities are connected) subject to the terms of the GDN gas transfer-acceptance¹¹.

In order to enter into such technical agreement, the Client must have an EIC code. In its absence, such code is received simultaneously with execution of the technical agreement.

The form of the technical agreement is set forth in <u>Annex 2</u> to the GDN Code (in Ukrainian only).

The technical agreement providing for the terms of the GDN gas transfer-acceptance shall contain:

- personal EIC code of each party;
- parameters of natural gas quality and procedure for determining physical and chemical parameters (PCP) of natural gas;
- certificate confirming the parties' division of balance sheet attribution and operational responsibility pursuant to the scheme of gas flows to the GDN (Gas Loss Measuring Point));
- list of commercial and back-up gas metering units (Instrumentation Equipment);
- procedure for commercial metering of natural gas (procedure for determining the volume of natural gas transmitted to/from GDN);
- procedure for checking commercial gas metering units;
- procedure for the parties' interaction in case of emergencies;
- procedure for obtaining baseline information from commercial or back-up gas metering units.

Under the technical agreement stipulating the terms for the GDN gas transfer-acceptance, no payments are made for natural gas between the parties.

5) Conclude a natural gas distribution agreement (if necessary).

In the event that the Client needs to obtain gas from GDN, it must enter into a natural gas supply agreement with the relevant supplier and a gas distribution agreement with the GDN Operator.

The agreement for supply of natural gas to non-domestic consumers (including biogas producers and other industrial consumers) is concluded in compliance with the requirements of the effective laws of Ukraine¹². The draft agreement is posted on the website of the relevant supplier (<u>example</u>, in Ukrainian only).

¹¹ Pursuant to the second paragraph of Section 2 (chapter 1) of Article VI of the GDN Code.

¹² In accordance with the fourth paragraph of Section 3 of Article I of the Rules for the supply of natural gas, approved by the Regulator's Resolution No. 2496, dated 30.09.2015.

In addition, the Client must enter into natural gas distribution agreement with the GDN Operator by signing an application for connection. A standard natural gas distribution agreement is concluded according to the <u>form</u> approved by the Regulator.

1.4. <u>Procedure and terms for gas transmission through GTS</u>

Regardless of whether the Client's facility is connected to GDN or directly to GTS, in order to gain access to capacity, receive the service of natural gas transmission through GTS, including daily imbalances settlement services in GTS, the Client needs to:

1) Have/obtain EIC-code

To enter into a transmission agreement, the Client must have an EIC code. In case of its absence, an application for receiving the code can be submitted together with the application for conclusion of the transmission agreement.

To obtain the EIC-code, the Client provides the TSO with:

- application for EIC-code;
- application for placement on the website of ENTSO-E (European Network of Transmission System Operators for Electricity) for carrying out export and import operations.

If the EIC code issued by the GDN Operator is available, the Client provides:

- application for registration of EIC code on the TSO Information Platform;

Sample applications for EIC code assignment are available on the TSO website at the <u>link</u>.

2) Enter into transportation agreement with TSO.

To enter into the transportation agreement, the Client provides the TSO with the following:

- <u>application</u> for entering into the transportation agreement;
- in case the Client of transmission services is a non-resident of Ukraine, a document confirming its registration as an economic entity in the country of its permanent location shall be additionally submitted;
- scanned copies of documents confirming the representation powers vested with the respective
 persons, including performance of transactions, which are certified by the Client's authorized
 person (should be sent to the e-mail: <u>commercial@tsoua.com</u>):
 - Scanned copy of the Client's articles of association;
 - Excerpt from the Unified State Register of Legal Entities and individuals entrepreneurs (Commercial Register / State Register for Clients non-residents of Ukraine). The Excerpt should be received no later than one month before the date of contract conclusion;
 - Scanned copy of the order appointing the Client's executive;
 - Scanned copy of the minutes of the founders' meeting regarding appointment of the Client's executive;
 - Certified scanned copies of documents for signature verification;
 - Scanned copy of the signatory's power of attorney.
- originals of the agreement in two counterparts: completed, signed, and sealed by the Client.

The Client's documents must be duly certified by the Client's authorized person. The certification mark on a copy of the document shall consist of the words "Complies with the original", position,



personal signature certifying the copy, his/her initials and last name, and the date of certification of such copy. In case the documents were executed in a foreign language, their certified translation into Ukrainian shall also be submitted.

The draft transportation agreement with annexes thereto and other information pertaining to the execution of the agreement are available on the TSO website at the <u>link</u>.

The TSO shall review the application for conclusion of the transportation agreement and the documents attached thereto within 10 days. As a rule, the TSO adheres to this deadline, but in case of additional questions, entering into such agreement may take longer.

According to the transportation agreement, the TSO also provides services related to settlement of daily imbalance at the actual cost, which is determined in accordance with the procedure established by the GTS Code (see Section 3.2 of Article 3: Tariffs and costs associated with gas transmission services via GTS).

3) Create an account on the information platform of the TSO.

In order to work on the Information Platform, it is necessary:

- to get access to the platform by creating an account.
- to register the right to sign documents (Electronic Digital Signature ECDS) submitted through the information platform.

To gain access to the platform, the Client must provide TSO with the following documents:

- The <u>original notification</u> regarding creation (deletion or adjustment) of the account of the authorized representatives of the platform user (Annex 1 to the GTS Code).
- <u>Power of attorney</u> for authorized persons who have the right to access the information platform on behalf of the platform user (except for the executive acting on the basis of the articles of association).
- The <u>original power of attorney</u> for the persons authorized to sign documents submitted through the information platform on behalf of the platform user, including persons who have a power of attorney for access to the information platform.
- <u>Notification</u> on provision of specimen of digital signatures.

Detailed instructions on how to access the platform are available on the website of the TSO at the <u>link</u>.

4) Obtain a shipper code

In order to ensure performance of standard procedures for coordination, distribution, balancing, and logging of natural gas volumes at the interstate connections with operators of adjacent gas transmission systems, the Client must be assigned a shipper code.

For this purpose, the Client shall provide TSO with:

- application for assigning / registering a shipper code;
- shipper pair's registration form.

Forms of the documents are available on the website of the TSO at the <u>link</u>.



5) Issue financial security or make an advanced payment for the transmission services

1. In order to ensure that the Client fulfills its obligations to pay for the daily imbalance settlement services of natural gas supplied to, and withdrawn from, the GTS, the Client must provide financial security in the amounts specified in the GTS Code.

Such financial security shall be issued in one or several forms listed herebelow:

- bank guarantee (the issuing bank should comply with certain requirements);
- payment due to the TSO on the basis of the natural gas transportation agreement.

Financial security is not required from the Client receiving transmission services who has a long-term credit rating not lower than "BBB" confirmed by the Standard & Poor's and/or Fitch IBCA, and/or not lower than "Baa2" confirmed by the Moody's Investors Service.

For the Client (gas producing company), such amount of sufficient financial security is reduced by the cost of the daily volume of production, which is the lowest for the last three calendar months according to the gas supply allocations of the gas producing company.

Detailed information on financial security, a sample of the bank guarantee, and a calculator for calculation of financial security are available on the website of the TSO at the <u>link</u>.

2. Natural gas transmission services shall be provided subject to 100% advance payment in the amount of the allocated capacity (for the period of a gas month, quarter and/or year) or in the amount not less than the cost of access to capacity for the period of a gas day, which is planned to be used pursuant to nomination (for a period of one gas day).

6) Place an order for the respective services

To order transmission services, the Client must pre-order, and pay for, the appropriate capacity at entry/exit points at the domestic and/or interstate connections.

In order to participate in the capacity allocation procedure (annual, quarterly, and monthly) at the internal entry/exit points for the respective gas year, it is necessary to submit the relevant applications (in the form of Annex 1 to the natural gas transportation agreement) within the time frames specified by law. Ordering capacity per day shall occur during submission of a nomination. The calendar of distribution of capacity at the internal entry/exit points to/from the GTS for the gas year 2020-2021, the gas year 2021-2022, and the next fourteen gas years, as well as the application submission deadlines are available on the website of the TSO at the link.

Ordering capacity at the interstate connections, in addition to ordering interruptible capacity for a day, as well as capacity with restrictions, is done through auctions on <u>RBP</u> and <u>GSA</u> platforms. After the auction, annual, quarterly, and monthly capacity is allocated by submitting an annex to the agreement.

Payment for the contracted capacity is made subject to 100% prepayment within the time frames that depend on the type of auction and the type of capacity order (annual, quarterly and monthly/per day in advance/during the day).

The order for transmission services is made by submitting appropriate nominations/re-nominations for gas transmission through the IT platform of the TSO.

1.5. <u>Procedure and terms for storage of the Client's biomethane in the Gas Storage Facilities.</u>

For storage of biomethane in the Gas Storage Facilities, the Client should:

1) Enter into storage agreement with the Gas Storage Operator

To enter into an <u>agreement for storage</u> (injection, withdrawal) of natural gas, the Client provides the Gas Storage Operator with:

- <u>application</u> for entering into the storage agreement;
- EIC-code;
- documents confirming the powers vested with the respective persons representing the Client's company, including performance of transactions (Client's articles of association, power of attorney, etc.);
- <u>questionnaire</u> of the counterparty legal entity;
- <u>consent</u> to the processing of personal data.

Application forms, draft agreement, and other information for entering into the storage agreement are available on the website of the Gas Storage Operator at the <u>link</u>.

Please note that the precondition for entering into the storage (injection, withdrawal) agreement is availability of the executed natural gas transmission agreement with the TSO.

The Client may apply for capacity allocation at the same time as the application for concluding a storage (injection, withdrawal) agreement.

The Gas Storage Operator shall review an application for entering into the gas storage (injection, withdrawal) agreement and the documents attached thereto, within 10 days. In the case of simultaneous submission of an application for entering into the storage agreement and an application for capacity distribution, the storage agreement is concluded only if the parties consent to distribution of the capacity.

2) To create an account on the Information Platform of the Gas Storage Operator

In order to be able to work on the Information Platform, it is necessary:

- to gain access to the platform by creating an account.
- to register the right to sign documents (Electronic Digital Signature) submitted through the information platform.

In order to gain access to the platform, the Client should provide the Gas Storage Operator with the following documents:

- <u>application for the</u> creation of account for the authorized persons of the I-platform user;
- <u>written Power of Attorney</u> for each authorized person, acquiring the right to access the I-platform on behalf of the platform user;
- <u>Power of Attorney</u> for the persons who have the right to sign documents submitted through the I-platform on behalf of the platform user;
- <u>notice</u> regarding signature of the user in the person of the direct manager of such entity.



Detailed instructions on how to access the platform are available on the website of the Gas Storage Operator at the <u>link</u>.

3) Order respective services

To receive the services related to gas injection, storage, and withdrawal from the Gas Storage Facilities, the Client must pre-order the relevant annual or monthly capacity (if the Client has not submitted an application together with the application for the storage agreement) through the IT platform of the Gas Storage Operator and/or send its application in paper form.

The Gas Storage Operator publishes daily information on its <u>website</u> in relation to the allocated and free capacity of the Gas Storage Facilities, calculations regarding online injection/withdrawal curves and a calculator for calculating the cost of booked capacity.

The gas injection, storage, and withdrawal services in the Gas Storage Facilities is ordered by submitting respective nominations/re-nominations for gas injection/withdrawal through the IT platform of the TSO and the IT platform of the Gas Storage Operator.

1.6. <u>Licensing terms applicable to the business operations in the natural gas market.</u>

According to the Gas Law, the following activities are subject to licensing¹³:

- transmission of the natural gas through the GTS for the benefit of third parties;
- storage (injection, withdrawal) of natural gas using one or more Gas Storage Facilities for the benefit of third parties (clients);
- provision of LNG installation services for the benefit of third parties (clients);
- supply of natural gas: business operations that are subject to licensing and consist in the sale of natural gas directly to consumers on the basis of agreements concluded with them;
- distribution of natural gas: business operations that are subject to licensing and related to the transmission of the natural gas through GDN for the purpose of its physical delivery to consumers, but which does not include the supply of natural gas.

In the instances when gas is sold or transmitted for the purpose of its sale/delivery to consumers in the territory of Ukraine, the Client is obliged to obtain a license from the Regulator and comply with the relevant license terms posted on the Regulator's website.

In particular, the Client's operations may be eligible for supply of natural gas when the gas produced is directly sold to consumers. According to the Gas Law, a consumer is an individual, individual entrepreneur or a legal entity that receives natural gas on the basis of an agreement for the supply of natural gas for its own use, rather than for resale or use as a raw material. Licensing terms for conducting business operations related to the supply of natural gas, define the territory of Ukraine as the place of conducting such business operations.

If the Client's operations are eligible for the licensed operations related to the natural gas supply, it will be obliged to create an insurance reserve of natural gas, the amount of which is set annually by the decision of the Cabinet of Ministers of Ukraine. In 2021, there is no obligation to create an insurance reserve, but the Gas Law provides for the possibility of setting it at the level of up to 10 percent of the planned monthly supply of natural gas to consumers for the next month.

¹³ Pursuant to Article 1 of Section 1 of the Gas Law.

In the instances when the Client produces biomethane, sells it to another business entity (non-resident) on the basis of purchase and sale agreements not for its own consumption and further export to the EU countries, such activities of the Client will not require a license. If a non-resident plans to use biomethane for its own needs or as a raw material, formally, the producer of biomethane may be required to obtain a license to supply natural gas, as the Gas Law does not expressly state that only Ukrainian residents can be consumers. However, it is established in the preamble of the Gas Law that such Law determines a legal basis for functioning of the specific market: natural gas market of Ukraine. Thus, it can be argued that the supply of gas to consumers outside the territory of Ukraine should not be governed by the Gas Law. To reduce the risk of recognizing this transaction as requiring the availability of the Client's gas supply license, we recommend that you should obtain relevant explanations from the Regulator.

1.7. <u>Reporting of the gas producing companies.</u>

1) The business entities operating in the natural gas market (except for consumers) are obliged to prepare reports approved by the Regulator with respect to each type of the business operations in the natural gas market, which is subject to licensing, and to submit the same to the Regulator, along with the annual financial statements¹⁴.

In the instances when the Client carries out activities which are subject to licensing in the territory of Ukraine, the obligations regarding reporting set by the licensing terms shall be applicable to the Client.

In particular, the natural gas suppliers shall enter the below data into the information platform of the TSO¹⁵:

- the Client's own consumers and periods of natural gas supply to them;
- nominations/re-nominations.

2) Regardless of the fact, whether the Client is to carry out the activities which are subject to licensing, the below reporting requirements shall be applicable to it.

The Client shall be obliged to enter the following data into the TSO information platform subject to the <u>forms</u> of the TSO¹⁶:

- information regarding its own company connected to the GTS/GDN (form No. 6);
- information on the volume/amount of natural gas supplies at the virtual entry point (form No. 7).

The gas producing company shall submit to the TSO¹⁷:

- information pertaining to the results of verification of the conformity of a nomination or renomination at the points of entry from the gas producing company (exclusively for the adjacent gas producing company);
- information on the occurrence of interruptions in the gas networks of the gas producing company, which may affect the terms of cooperation with GTS, containing information on the cause of interruptions, their expected duration, reduction of capacity at the GTS

¹⁴ Pursuant to part 2 of Article 57 of the Gas Law.

¹⁵ Pursuant to section 7 (chapter 4) of Article IV of the GTS Code.

¹⁶ Pursuant to section 6 (chapter 4) of Article IV, section 4 (chapter 5) of Article XII of GTS Code.

¹⁷ Pursuant to section 4 (chapter 3) of Article XVI of the GTS Code.

connection points, values of parameters that do not meet the contractual terms, confirmation of changed nominations that occur due to such interruptions;

- information on the planned works in the gas networks of the gas producing company, which may affect the terms of cooperation with the GTS, in order to agree with the TSO the possible time frame for, and duration of, the works.

The Client receiving the transmission services, shall submit to the TSO¹⁸:

- information on planned (ordered) volumes of natural gas transmission;
- nominations and re-nominations of natural gas transmission volumes;
- information on interruptions on the part of the consumer and/or suppliers of the Client receiving the transmission services, which may affect the operating conditions of GTS, including the cause of interruptions, their expected duration, values of parameters that do not meet contractual terms, and issuance of respective re-nominations for volumes, which are changing due to interruptions;
- for entry points and exit points to/from GTS in connections to the gas transmission systems of neighboring countries (interstate connections): every Thursday no later than 10:00 am to provide a forecast for daily volumes of natural gas to be submitted for transmission of each gas day next week, from Monday through Sunday.

In addition, the Client is obliged to submit a <u>report</u> regarding its own production and transmission of natural gas to GDN/GTS for a gas month, by the 8th day of the month following the reporting month, in paper or electronic form through the TSO information platform¹⁹.

3) In the instances when gas is sold in the territory of Ukraine/gas exported from Ukraine to the EU, the following reporting requirements shall be also applicable to the Client.

According to the Regulator's Resolution No. 1234 dated 7 July 2016 *On approval of the Regulator's reporting forms related to monitoring in the natural gas market, and instructions for their completion,* the business entities operating in the natural gas market, which are engaged in wholesale of natural gas are required to submit the report to the Regulator by the 20th day of the month following the reporting quarter. The report must contain information on the production, wholesale purchase, and sale of natural gas (in thousands of m³), as well as the wholesale price of purchase and sale of natural gas (UAH per thousand m³).

The report form assumes that the information is provided for each counterparty, indicating the name of each counterparty. If Form No. 4 contains information and/or data of a confidential nature that constitutes a trade secret, in order to ensure the protection of confidential information by the Regulator, the wholesaler shall determine the list of such information, terms, and procedure for its dissemination by the Regulator and submit it together with Form No. 4.

In addition, in accordance with paragraph 7 of Chapter I of Order of the Ministry of Energy and Coal Industry of Ukraine No. 686 dated 02.11.2015 *Rules on security of natural gas supplies*, business entities operating in the natural gas market (except for consumers) shall submit - by May 1 each year - a report on internal documents, providing for the implementation of safety standards for natural gas

¹⁸ Pursuant to section 6 (chapter 3) of Article XVI of the GTS Code.

¹⁹ Pursuant to section 9 (chapter 7) of Article III of the GTS Code.



supply stipulated by the Rules. In general, the standards apply to natural gas suppliers for protected consumers and pipeline owners (GDN, GTS). However, preventive measures determined by the Ministry of Energy and Coal Industry can also be applied to the wholesalers.

Currently, information on preventive measures is available only for 2019/2020, and it obliges all natural gas market participants to comply with gas use rules, technical and other standards, fulfill obligations under relevant gas agreements, etc., as well as notify the Ministry of Energy and Coal Industry of Ukraine of the facts or circumstances that may threaten the security of gas supplies in Ukraine.

2. Conditions and requirements for producers and sellers of biomethane for the sale of biomethane to foreign companies and transmission of biomethane as a commodity from Ukraine to the EU under gas purchase and sale agreements, including licensing requirements, agreements with Operators of GTS and Gas Storage Facilities, transaction documentation, reporting, etc.

In order to sell biomethane to another business entity (non-resident) and to transmit biomethane as a commodity from Ukraine to the EU under gas purchase and sale agreements, the Client needs:

- to have a gas transportation agreement with the TSO;
- for the purpose of selling such gas to the buyer, to enter into an appropriate foreign economic agreement, to order capacity at the interstate connections, and to submit a trade notification to the TSO or the Gas Storage Operator through the appropriate IT platform;
- to prepare and submit a periodic customs declaration and an additional customs declaration;
- to prepare and submit a tax invoice;
- to report the sales of gas to the Regulator, and in some cases, to the Ministry of Energy and Coal Industry of Ukraine, as defined above.

According to the explanations to the Ukrainian Classification of Goods for Foreign Economic Activity (UCGFEA), biomethane (biogas) falls within category 2711 29 00, which includes gas (in gaseous state) obtained from biomass²⁰.

The rate of duty on the transmission of biogas (biomethane) through the customs border of Ukraine, if classified by the customs authorities as falling into category 2711 29 00, is 0%.

More detailed information on the tax and customs aspects of biomethane sales is given below.

2.1. <u>Customs clearance of sales of biomethane as a commodity from Ukraine to the EU.</u>

Transmission of goods through the customs border of Ukraine via pipeline is carried out on the basis of the completed periodic customs declaration²¹.

²⁰ Pursuant to the explanations to the Ukrainian Classification of Goods for Foreign Economic Activity (UCGFEA) approved by Order of the State Customs Service, dated 14.07.2020, No. 256.

²¹ Pursuant to Section 2.2 of Article II of Order No. 629.

When transmitting goods through the customs border of Ukraine by pipeline, the documents stipulated by paragraph 5 of the first part of Article 335 of the Customs Code of Ukraine²² are to be submitted to the customs authority:

- a) a foreign economic agreement (contract) or other documents confirming the right of possession, use and/or disposal of goods;
- b) a certificate of delivery and acceptance of goods or a certificate confirming quantity of goods;
- c) commercial and accompanying documents (if available to the owner of the pipeline transport) for the goods transmitted through the customs border of Ukraine, and, at the time of customs clearance, an invoice;
- d) name and address of the consignor of the goods;
- e) name and address of the consignee;
- f) documents (permits, certificates) confirming the relevant parameters pertaining to the goods.

The following documents issued as a result of transmission of goods through the customs border of Ukraine in the relevant customs regime (gas is sold/transmitted from Ukraine) for the previous calendar month may be used as certificate of delivery and acceptance of natural gas:

- certificate of delivery and acceptance of natural gas by carriers²³;
- certificate of delivery and acceptance of natural gas in accordance with the foreign economic agreement (contract)²⁴;
- general certificate of delivery and acceptance of natural gas by carriers²⁵;
- certificate of the TSO, attached to the general certificate of delivery and acceptance of natural gas by carriers, signed by the operators of the gas transmission system of Ukraine and the adjacent state, which contains data on the distribution of gas imported into the customs territory of Ukraine, between the business entities engaged in a foreign economic activity;
- general certificate of delivery and acceptance of natural gas between the parties to a foreign economic agreement (contract) for gas transit/import²⁶ etc.

In addition, together with the customs declaration, an invoice or other document determining the value of goods and, in the instances established by the Customs Code, a declaration of customs value²⁷ shall be submitted to the customs body. In the manner prescribed by the Customs Code, the declarant or its authorized person shall include the below information into the customs declaration:

- 1) documents confirming the powers vested with the person filing the customs declaration;
- 2) foreign economic agreement (contract) or other documents confirming the right of possession, use and/or disposal of goods;
- 3) transportation documents;
- 4) commercial documents available to the person filing the declaration;

²² Pursuant to Section 2.5 of Article II of Order No. 629.

²³ Document containing data on the volume of natural gas transmitted through the customs border of Ukraine and delivered through a separate gas reception and transfer point, which is signed by the operators of the gas transmission system of Ukraine and a neighboring state or a party to a foreign economic agreement (contract) for transit/import of natural gas, and operator of the gas transmission system of the adjacent state;

²⁴ Document containing data regarding amount of the natural gas supplied on the basis of a foreign economic agreement (contract), signed by the parties to a foreign economic agreement (contract).

²⁵ Document signed by operators of the gas transmission system and the neighboring state or a party to a foreign economic agreement (contract) for transit/import of natural gas and the operator of the gas transmission system of a neighboring state, which contains data on the volume of natural gas transmitted through the customs border (if available, the volumes of balancing of natural gas and the volumes of natural gas under backhaul operations should be stated), indicating the conditional alphanumeric codes for identification of senders and recipients (shipper pairs) of such volumes of natural gas.

²⁶ Document prepared after expiry of a foreign economic agreement (contract) for the customs clearance pursuant to the relevant customs regime of balancing volumes of natural gas as a result of its transmission via pipeline transport through the customs border of Ukraine.

²⁷ Pursuant to part 3 of Article 335 of the Customs Code.



- 5) if necessary, documents confirming compliance with measures of non-tariff regulation of foreign economic activity;
- 6) documents confirming compliance with the restrictions caused by the application of protective, anti-dumping, and compensatory measures (if any);
- 7) in the instances stipulated by the Customs Code: documents confirming the country of origin of the goods;
- 8) if necessary, documents confirming payment and/or securing payment of customs duties;
- 9) if necessary, documents confirming the right to benefits in relation to the payment of customs duties, application of full or partial exemption from payment of customs duties in accordance with the selected customs regime;
- 10) if necessary, documents confirming changes in the terms governing payment of customs duties;
- 11) if necessary, documents confirming the declared customs value of goods and the chosen method of its determination in accordance with Article 53 of the Customs Code.

By the 15th day of the month following each calendar month of transmission of goods through the customs border of Ukraine according to the periodic customs declaration, the declarant or the person authorized by it is obliged²⁸:

- to submit an additional declaration(s) containing accurate information on the goods transmitted through the customs border of Ukraine under the periodic customs declaration in accordance with the declared customs regime during the relevant calendar month;
- to submit the documents required by law, necessary for the customs clearance of goods, except for the documents submitted together with the periodic customs declaration;
- to pay the customs duties that need to be paid during, or as a result of, transmission of goods through the customs border of Ukraine.

In the instances of exporting goods (except for those transported by stationary means of transport) outside the customs territory of Ukraine according to the periodic customs declaration, the calendar month of transmission of goods through the customs border of Ukraine is the month, in which the customs body allowed the goods to be transported outside the customs territory of Ukraine.

2.2. <u>Tax aspects related to biomethane transmission, biomethane storage in the Gas Storage</u> <u>Facilities, and its sale as a commodity from Ukraine to the EU.</u>

The provision of biomethane transmission services via GTS, GDN, and gas storage in the Gas Storage Facilities, which is carried out in the territory of Ukraine by residents of Ukraine, VAT payers, is subject to VAT at a rate of 20%.

The sale of biomethane by a resident of Ukraine to a non-resident (for example, to the EU resident company) is subject to 0% VAT provided that biomethane is exported outside the customs territory of Ukraine pursuant to the customs regime of export, duty-free trade or free customs zone.

According to the Tax Code, profit of a legal entity in the general taxation system with a source of origin from Ukraine and abroad is taxed at a standard rate of 18%, which is calculated as a difference between income and expenses incurred during the reporting period in accordance with national regulations (standards) of accounting or international financial reporting standards.

²⁸ Pursuant to Section 26 of Resolution of the Cabinet of Ministers of Ukraine No. 450 dated 21 May 2012, *On Issues Pertaining to the Application of Customs Declarations.*



3. Applicable tariffs and costs related to the GTS and GDN connection services, biomethane storage, and transmission.

3.1. <u>Tariffs and costs related to the services of connecting the Client's facility to GDN and GTS.</u>

The cost of connection services provided by the Operator of GDN/GTS consists of the cost of connection of the Client's facility to GDN/GTS and individual services (works) related to the connection and current activity of the Operator of GDN/GTS²⁹.

Depending on the contractor for design and construction works of the external gas supply networks, some services (works) related to the connection include:

1) granting permission to connect the Client's facility to GDN/GTS;

- 2) providing technical regulations for connection or reconstruction of the gas metering unit;
- 3) submission of a draft connection agreement;

4) approval of project documentation for compliance with the provided technical regulations and legislation;

5) technical supervision over the construction of the internal gas supply networks;

- 6) connection of the external gas supply networks in the place of provision of capacity;
- 7) connection to GTS or GDN of the internal gas supply networks;
- 8) commissioning of the metering unit as a commercial metering unit;
- 9) commencement of injection of gas to the Client's facility;
- 10) termination (restriction) of transmission or distribution of natural gas;
- 11) resumption of transmission or distribution of natural gas;
- 12) registration and supervision of works in the GDN protection zone.

The cost of connection of the Client's facility is determined by the Operator of GDN/GTS in the connection agreement in accordance with the *Methodology for setting a fee for connection to the gas transmission and distribution systems*, approved by the Regulator's Resolution No. 3054, dated 24.12.2015.

The standard connection fee includes, in particular, the service of installing a metering unit at the metering point to ensure its protection from adverse weather conditions and unauthorized access, as well as services for connecting external and internal gas supply networks, and commencement of gas injection. If the Client orders GDN or GTS connection services, organization and installation of a commercial gas metering unit from other entities, the cost of these works is not included into a calculation of the cost of the connection service ordered from the Operator of GDN/GTS.

The cost of standard connection is calculated according to the type of connection, location (rural, urban), ordered capacity for connection, etc. The maximum level of payment for connection, which is standard, to the gas distribution systems for 2021 is approved by the <u>Regulator's Resolution No.</u> 2488, dated 16.12.2020. A standard connection fee calculator is available on the Regulator's website.

The maximum level of fee due for the connection, which is non-standard, is determined by the Operator of GDN/GTS in the connection agreement, taking into account:

- 1) the cost of developing the external gas supply project and its part related to estimates, if the project was developed by the Operator of GDN/GTS;
- 2) the cost of construction of external gas supply networks;

²⁹ In accordance with paragraph 1 of section IV of the *Methodology for setting a fee for connection to the gas transmission and distribution systems*, approved by the Regulator's Resolution No. 3054, dated 24.12.2015.



- 3) the cost of installation at the point of measurement of the metering unit;
- 4) the cost of connecting gas networks of external and internal gas supply, as well as the cost of commencement of gas injection.

According to the calculation approved by the TSO, the cost of work pertaining to the development and issuance of technical regulations for connection to the GTS in 2021 is UAH 19,345.32, incl. of VAT (approx. EUR 645).

3.2. <u>Tariffs and expenses related to the gas transmission services through the GTS</u>

From January 1, 2020, the following tariffs for the services of the TSO for natural gas transmission for the regulatory period 2020 - 2024 have been set³⁰:

1) Tariffs for natural gas transmission services for entry and exit points to/from GTS at the interstate connections:

No.	Point of entry into the GTS of Ukraine/Point of	Tariff for the entry point	Tariff for the exit point
	exit from the GTS of Ukraine	USD per 1,000 cubic	
		meters per day, excl. of	1 .
		VAT	VAT
1.	Virtual or physical points (Hermanovichi,	4.45	9.04
	Drozdovichi, Ustyluh) at the interstate connection		
	with Poland		
2.	Virtual or physical points (Budintse,	4.45	9.68
	Uzhhorod/Velky Kapushany) at the interstate		
	connection with Slovakia		
3.	Virtual or physical points (Berehdarots, Berehove)	4.45	9.25
	at the interstate connection with Hungary		
4.	Ananiyiv	-	8.17
5.	Hrebeniky	0.00	8.17
6.	Kaushany	0.00	1.13
7.	Lymanske	4.45	8.17
8.	Oleksiyivka	-	9.71
9.	Orlivka/Isakcha	4.45	1.13
10.	Sokhranivka	16.01	-
11.	Sudga	16.01	_
12.	Tekove/Mediash Aurit	4.45	8.78
13.	Virtual point in the Republic of Moldova	-	0.56

2) Tariffs for the natural gas transmission services for internal entry point to, and exit point from, the GTS:

No.	Point of entry into the GTS of Ukraine/Point of	Tariff for the entry point	Tariff for the exit point
	exit from the GTS of Ukraine	UAH per 1,000 cubic	
		meters per day, excl. of	meters per day, excl. of
		VAT	VAT
1.	Entry points with physical location from adjacent gas companies (through the networks of which natural gas of another gas company or group of gas companies can be transmitted)	101.93	-
2.	Virtual entry points with an unspecified physical location from the GDN (place of gas supply from the gas producing company at the point of its connection to the GDN, through which, inter alia,	101.93	_

³⁰ Pursuant to the Regulator's Resolution dated 24.12.2019, No. 3013 (as thereupon amended).

	gas of another gas producing company or group of gas producing companies may be transmitted)		
3.	Virtual entry points with an undefined physical location from adjacent gas companies (through the networks of which natural gas of another gas company or group of gas companies can be transmitted)	101.93	-
4.	Points with physical location to/from the Gas Storage Facilities	0.00	0.00
5.	Virtual points with undefined physical location to/from gas storage facility or group of gas storage facilities	0.00	0.00
6.	Virtual points with an undefined physical location to/from the customs warehouse gas storage facility or group of gas storage facilities	0.00	0.00
7.	Exit points with physical location to direct consumers	-	124.16
8.	Exit points with physical location to gas distribution systems	-	124.16
9.	Virtual exit points with an undefined physical location to the gas distribution systems	-	124.16
10.	Virtual exit points with an undefined physical location for operations of the TSO related to the purchase of natural gas by the TSO for its own needs and production and technological costs	-	0.00

- 3) Depending on the capacity ordering period, the following coefficients apply to the tariffs for natural gas transmission services for internal entry and exit points to/from GTS:
- from March 1, 2020, the coefficient used when ordering capacity for a day in advance at the level of 1.10 conventional units;
- from April 1, 2020, the coefficient used when ordering capacity for a monthly period at the level of 1.04 conventional units;
- from October 1, 2020, the coefficient used when ordering capacity for the quarterly period is at the level of 1.02 conventional units.
- 4) Depending on the capacity ordering period, the following coefficients apply to tariffs for natural gas transmission services for entry and exit points to/from GTS at the interstate connections:
- coefficient used when ordering capacity for a day in advance at the level of 1.45 conventional units;
- coefficient used when ordering capacity for a monthly period at the level of 1.2 conventional units;
- coefficient used when ordering capacity for the quarterly period at the level of 1.1 conventional units, except for ordering capacity for the period of the first quarter of the gas year 2020 2021, when the coefficient is applied at level 1.
- 5) Decreasing coefficients for capacity with restrictions, which are applicable to the tariffs for natural gas transmission services for entry and exit points to/from GTS at the interstate connections:

No.	Point of entry into the GTS of Ukraine/Point of	8	8
	exit from the GTS of Ukraine	capacity with restrictions,	capacity with restrictions,
		for the point of entry,	for the point of exit,
		conventional units	conventional units



1	Virtual or physical points (Hermanovichi,	0.66	0.49
	Drozdovichi, Ustyluh) at the interstate connection		
	with Poland		
2	Virtual or physical points (Budince, Uzhhorod/	0.66	0.36
	Velky Kapushany) at the interstate connection with		
	Slovakia		
3	Virtual or physical points (Berehdarots, Berehove)	0.66	0.44
	at the interstate connection with Hungary		
4	Tekove/Mediash Aurit	0.66	0.41

Calculation of coefficients applied for ordering a capacity within a day

In the instances of non-approval of the coefficient, which takes into account the period of ordering capacity during a day, such coefficient is accepted at the level of 1.1 times higher than the approved coefficient, which takes into account the period of ordering capacity for a day in advance³¹:

- coefficient used when ordering capacity during a day at the entry and exit points to/from the gas transmission system(s) at the interstate connections is equal to 1.595 (1.45 * 1.1).
- coefficient used when ordering capacity during a day for internal entry and exit points to/from the gas transmission system(s) is equal to 1.21 (1.1 * 1.1).

Application of coefficients when booking capacity with restrictions.

In the instances of booking capacity with restrictions, the coefficients that take into account a period of ordering such capacity and the season when such order is made, shall not be applied³².

Balancing neutrality charge.

Gas transmission services include a <u>balancing neutrality charge</u>, which is determined in proportion to the volume of the Client's gas transmission according to a special formula stipulated by the GTS Code. The rate of balancing neutrality charge may be:

- a positive value (≥0) in this case the balancing neutrality charge is charged from the Client in favor of the TSO;
- a negative value (<0) in this case the balancing neutrality charge is paid to the Client.

Daily imbalance fee.

In addition, gas transportation services include a <u>daily imbalance fee</u>³³, which is also calculated for the Client according to a special formula stipulated by the GTS Code. If an amount of daily imbalance is positive (≥ 0), the payment due for imbalance is made to the Client; if an amount of daily imbalance has a negative value (<0), the fee for imbalance is paid by the Client to the TSO.

3.3. <u>Tariffs and expenses related to the gas storage services in the Gas Storage Facilities</u>

³¹ In accordance with paragraph 12 of Section VI of the *Methodology for determining and calculating tariffs for natural gas transmission services for entry and exit points on the basis of long-term incentive regulation*, which was approved by Resolution of the Regulator No. 2517, dated 30.09.2015.

³² In accordance with paragraph 6 of section 10 of Article VI of the *Methodology for determining and calculating tariffs for natural* gas transmission services for entry and exit points on the basis of long-term incentive regulation, which was approved by Resolution of the Regulator No. 2517, dated 30.09.2015.

³³ The difference between the volumes of natural gas supplied by the Client for transmission at the point of entry and those withdrawn by the Client from the GTS at the point of exit, determined according to the allocation.



The following tariffs and coefficients for services of storage of the Gas Storage Operator should apply³⁴:

- 1) Tariffs for services (excl. of VAT):
- natural gas storage in the amount of UAH 0.19 (approx. EUR 0.0063) per 1,000 m³ per day;
- injection of natural gas in the amount of UAH 110.16 (approx. EUR 3.66) per 1,000 m³ per day;
- withdrawal of natural gas in the amount of UAH 63.41 (approx. EUR 2.11) per 1,000 m³ per day.
- 2) Coefficients applicable to tariffs for natural gas injection, withdrawal, and storage services:
- coefficient that takes into account the order for individual services of storage, injection, withdrawal of natural gas for a period of one month at the level of 1.1;
- coefficient, which takes into account the order for individual injection services, natural gas withdrawal per day in advance at the level of 1.2.

The client ordering natural gas storage (injection, withdrawal) services, to which the annual capacity has been allocated is obliged to make 100% advance payment in the amount of the cost of the booked annual capacity for the period of a gas month, five banking days prior to the commencement of a gas month, in which such service is to be provided.

4. Analysis of customs formalities related to the export of biomethane in accordance with the Customs Code of Ukraine and taxation issues faced by exporters.

Please refer to Section 2 of the Memorandum.

5. Formation of the list of legal issues and potential barriers for the injection of biomethane into natural gas systems, its transmission and further export from Ukraine to the EU, based on legal analysis and comments provided by technical/economic advisers, as well as recommendations for resolving such issues pursuant to the effective laws of Ukraine.

5.1. Definition of the notion "biomethane"

As noted at the beginning of the present Memorandum, the recent amendments to the effective laws of Ukraine introduced the definition of "biomethane" regulating it as a biogas, which in its physical and chemical characteristics corresponds to the regulations on natural gas.

Although the Gas Law, GTS and GDN Codes rather use term "natural gas", the provisions of the Gas Law shall apply on a non-discriminatory basis to biomethane, if biomethane meets the requirements for access to GTS.

5.2. <u>Units for determining a volume of natural gas</u>

In addition, pursuant to the effective laws of Ukraine, a volume of natural gas is determined in cubic meters, while in the European Union the measurement is made in units of energy (kilowatt-hours). Although this does not affect the ability to export and import gas, in practice there may be issues with variations in the recalculation of natural gas at the customs and so on.

³⁴ Pursuant to the Regulator's Resolution No. 1150 dated 24.06.2020.



In order to eliminate this issue and to ensure transition of the Ukrainian natural gas market to calculations and balancing in units of energy, Ukrainian parliament recently adopted a Draft Law No. 2553, dated 06.12.2019 that sets May 1, 2022 as the date to shift measurement from cubic meters to units of energy. The Draft Law is expected to be signed by the president.

5.3. Issue regarding certification of equipment

There is currently some uncertainty as to whether changes to the equipment certification standards and certain regulations will be required in terms of the possibility of extending such standards and regulations in order to be applied to biogas, biomethane, and other types of gas from alternative sources.

As the Gas Law was amended to extend the term "natural gas" to biogas, biomethane, and other types of gas from alternative sources, it is expected that certification standards and regulations will not require significant changes.

5.4. Draft technical regulation of natural gas

Based on the requirements for natural gas, and, respectively, biomethane, the maximum oxygen molar fraction is 0.02 percent, but almost no technology currently on the market can achieve this level in the process of producing biomethane or it would be extremely expensive. Nevertheless, the adoption of the Technical Regulation of Natural Gas, which is currently being prepared by the Ministry of Energy of Ukraine, should hopefully allow for some flexibility in the parameters of natural gas. The <u>draft</u> regulation provides for a maximum oxygen molar fraction of 0.02 percent (at the points of entry into the network and at the points of interstate connection) or an upper limit of up to 1 percent (if it can be proved that the gas does not enter the installations sensitive to higher oxygen levels, for example, the Underground Gas Storage Facilities) may be applied.

* * *

We hope that the information set forth herein meets your immediate needs. If you have any additional questions, please, do not hesitate to contact us.

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