



MEMORANDUM OF UNDERSTANDING

between the European Union and Ukraine

on a Strategic Partnership on Biomethane, Hydrogen and other Synthetic Gases

I. Introduction / political context

1. Objectives

The European Union and Ukraine (hereinafter ‘the Sides’) wish to expand their ongoing and deep cooperation on energy and to launch a Strategic Partnership on Renewable Gases (hereinafter ‘the Partnership’). They share a common interest in reducing their dependency on fossil fuel imports, in market integration, decarbonisation, achieving climate neutrality on the continent, and in boosting their economic recovery. They also share the desire to speed up the green transition of their energy sectors in an environmentally and socially responsible way¹.

Deepening cooperation on the promotion of renewable energy is one of the priorities set out in the Ukraine - EU cooperation mechanism under the Association Agreement/DCFTA². It is a priority under the Ukraine – EU Strategic Energy Partnership, established in 2006 and renewed in November 2016³. It is also one of the key areas of work of the focused Ukraine – EU Green Deal Dialogue, launched in February 2021⁴.

Russia's war of aggression against Ukraine and its people has increased the urgent need to diversify supplies and phase out the dependency on energy imports from Russia.

¹ Communication on the European Green Deal, COM(/2019) 640 final.

² Association Agreement between the European Union and the European Atomic Energy Community and their Member States, of the one part, and Ukraine, of the other part (OJ L 161, 29.5.2014, pp. 3-2137).

³ Memorandum of Understanding on a Strategic Energy Partnership between the European Union together with the European Atomic Energy Community and Ukraine, signed at Brussels on 24 November 20016, https://ec.europa.eu/energy/sites/ener/files/documents/mou_strategic_energy_partnership_en.pdf.

⁴ Joint statement following the 23rd EU-Ukraine Summit, 12 October 2021.

Consequently, EU leaders agreed in the European Council in March 2022 to phase out Europe's dependency on Russian energy imports as soon as possible⁵. To accelerate this process and achieve a more resilient energy system, the REPowerEU Plan of the European Commission proposes increasing energy efficiency, speeding up and scaling up renewable energy, including biomethane and hydrogen. It notes that it is essential to join forces with EU partners, including Ukraine⁶.

Given its vast potential for the sustainable production of renewable energy, including sustainable biogas and biomethane and hydrogen it makes sense for Ukraine to be closely associated to EU initiatives to increase the share of renewable energy consumption significantly by 2030 and to strengthen the sustainability framework for renewable energy, while recognising that nuclear plays a significant role in Ukraine's energy mix.

This is crucial to reach the objectives set under the Paris Agreement, which has been ratified by both Sides. The Sides intend to pursue action to limit the temperature increase to 1.5 °C by reducing their greenhouse gas emissions. Both Sides are committed to achieving rapid, deep and sustained reductions in their greenhouse gas (GHG) emissions by 2030 and to designing long-term low emission development strategies aligned with the continent's aim of achieving net zero emissions by 2050. This Memorandum will contribute to meeting both Ukraine's and the EU's GHG emission targets as described in their updated nationally determined contributions.

Ukraine confirms its interest in joining the EU's efforts to increase energy security, energy system resilience and market integration. It echoed this in its application for EU membership, to which the European Council meeting of 23-24 June 2022 responded by granting EU candidate status to Ukraine. It is also echoed in the joint commitment to work closely together on the resilience and reconstruction⁷ of Ukraine with the aim of building back better.

Specifically, the Sides see an opportunity for cooperation by seeking to:

- support reconstruction strengthening energy security, security of supply and resilience of the energy systems and infrastructure;
- accelerate the deployment and use of renewable energy sources in line with the EU's sustainability framework for bioenergy and the EU definitions, requirements and methodologies for hydrogen, including requirements yet to be developed by the EU;
- speed up the replacement of natural gas imports;
- jointly develop economies of scale as needed to roll out innovative technologies to decarbonise the energy sectors and economies in Ukraine and the EU;
- minimise investment costs by providing sustainable and effective use of the regional, national and macro-regional biomethane potential and well-developed gas infrastructure, storage and interconnections;
- support the economic and social recovery of Ukraine by encouraging Ukraine – EU public and private-sector cooperation and investment in Ukraine, facilitating job

⁵ European Council Conclusions (24-25 March 2022).

⁶ Communication on REPowerEU Plan, COM(2022) 230 final.

⁷ Commission Communication COM(2022) 233 'Ukraine Relief and Reconstruction', 18.5.2022.
https://ec.europa.eu/info/sites/default/files/ukraine-relief-reconstruction_en.pdf

creation in the renewable energy sector, and the export of renewable energy, notably renewable gases, hydrogen and their derivatives to the EU;

- provide a stable long-term framework for the development of sustainable renewable gases sector, and aim to harmonise the regulatory framework even beyond the Association Agreement;
- support greater regional cooperation on renewable gases, in particular with Ukraine's neighbouring EU Member States;
- support the integration of corresponding markets and the development of cross-border trade;
- support research and innovation, and the development of Ukraine's domestic market for renewable energy sources in Ukraine and find climate-neutral solutions to integrate these sources in local energy grids.

2. Scope of the Partnership

This Partnership should be focused on the green transition and on decarbonising the energy sectors of both Sides. In particular, it should promote the production, trade, transportation, storage and use of renewable gases such as biomethane, hydrogen, its derivatives, and other synthetic and sustainably produced gases.

Long-standing Ukraine – EU cooperation on energy, including in natural gas and nuclear energy sectors, is well developed. This is ongoing under the Association Agreement/ DCFTA and in the framework of the Ukraine – EU Strategic Energy Partnership.

The Sides envisage the Partnership to include activities along the entire value chain of renewable energy, notably biomethane, hydrogen and its derivatives. This should include the development, production, transport and storage of these gases, improved access to markets and domestic consumption. It should specifically focus on regulatory issues to help implement EU legislation in Ukraine, such as the Renewables Directive and the Gas and Hydrogen Package (after its adoption by co-legislators). The Partnership should also cover sector integration and the cross-sectoral aspects and synergies with non-energy sectors of the economy (such as agriculture, industry, environment protection, water and waste management, and others) and other industrial partnerships. This Partnership should be part of the broader dialogue with the EU on energy market reforms.

The scope may be adapted further, subject to agreement between the Sides during the biannual Partnership meetings.

3. Principles

The Sides envisage the Partnership to be part of the Ukraine – EU Strategic Energy Partnership, the Ukraine – EU Dialogue on the European Green Deal and the Ukrainian green transition. The sides acknowledge the importance of nuclear in the Ukraine energy mix.

Stepping up cooperation between Ukraine and the European Union on hydrogen and its value chain, as well as on biomethane / biogas, should strengthen security of supply and boost trade in sustainable renewable gases between the Sides. It should also support the reconstruction of Ukraine's energy system, recovery and significant expansion of renewable energy production in Ukraine and the gradual process to set up a hydrogen market to facilitate the decarbonisation of Ukraine's energy sector and economy.

The Partnership should be conducted in a way that is fully consistent with the Ukraine – EU Association Agreement and the DCFTA, as well as the Energy Community Treaty and the cooperation of both Sides under the Ukraine’s EU accession process. The Partnership should be open and inclusive, fostering close public-private multi-level engagement between representatives of EU institutions and bodies, industry, business associations and civil society from both Sides, ministries Ukraine and in the EU Member States (economy, trade and finance, agriculture, mining and geology, environment), public organisations, financial institutions and investors.

To reach the objectives of the Partnership, the Sides should explore and tap the potential to provide support under all relevant Ukraine – EU cooperation formats, financial instruments (macro-financial assistance, Horizon Europe, EFSD+, technical assistance, the new TEN-E guidelines and recovery funds etc.) and sectoral dialogues. This includes also cooperation on R&D, environmental policy, climate, industrial cooperation, agriculture and transport.

The Partnership should be open and inclusive for all energy-related Ukrainian and EU Member State institutions, including in climate policy, environment, agriculture and industry. It should involve stakeholders along the entire supply and demand value chain of hydrogen, as well as biomethane/biogas, energy market players, industry, business associations and social partners, international financial institutions, investors and others.

Both Sides would encourage cooperation between market participants, experts and civil society.

The Sides also plan to report regularly on the action taken under this Partnership in order to fulfil the mutual objective of full transparency.

II. Key work streams under the Partnership

In view of the above and without prejudice to obligations under the Association Agreement, the Sides intend to take action in the following work streams.

1. Renewable energy

With a view to improving the policy, regulatory, financial, technical and environmental conditions needed to increase investment and scale in the sector and to significantly accelerate the deployment of renewable energy in Ukraine, the Sides intend to step up cooperation in the field of renewable energy production and use. The Sides intend to discuss this topic, and others, in the High-Level Working Group on energy market integration set up in 2021 under the bilateral Strategic Energy Partnership. Both Sides aim to improve the regulatory framework and market mechanisms that will support the uptake of renewable energy in relevant industries and market segments.

2. Demand-side action

The Sides intend to exchange information and assessments on scenarios and forecasts of demand for hydrogen and its derivative, as well as renewable gases, in particular biomethane and biogas. The aim is to provide potential investors with maximum clarity on the development of the industry and on the market for these gases.

3. Regulatory cooperation

The Sides envisage promoting cooperation on regulatory approximation and regulatory issues. With this regard, dialogue between the National Energy and Utilities Regulatory Commission (NEURC) and EU energy regulators and should be encouraged. The EU is developing a comprehensive regulatory framework for the nascent hydrogen industry. This includes issuing standard definitions of hydrogen, methodologies for calculating greenhouse gas emissions generated by the production and transport of hydrogen, certification systems, rules for competitive and transparent markets and international trade.

Both Sides aim to harmonise certification processes in line with EU requirements for importing biogas, biomethane, hydrogen and other synthetic gases and full lifecycle GHG-emission approaches, to ensure a level playing field with such gases produced in the EU.

Cooperation should also focus on:

- Identifying and removing administrative, technical and regulatory barriers to the production, transport, storage and use of biomethane, hydrogen and other synthetic gases including licencing, permitting and technical requirements. It will cover action to streamline procedures and build capacity at national, regional and local levels. Cooperation will also involve exploring options for representatives of Ukraine to take part in the work of the biomethane industrial partnership at institutional and corporate level.
- Creating a predictable and reliable investment framework for energy investments, diversification and stability of investments and new market entrants.
- Creating a regulatory and administrative framework for the development of ecosystems for local production and consumption of biomethane, hydrogen and other synthetic gases in Ukraine.
- Creating a regulatory and administrative framework for the development of competitive and transparent cross-border markets and trading ensuring the traceability and full disclosure of sources.
- Integrating economic operators from Ukraine into the EU-recognised global certification system to enable sustainably produced and certified gases from Ukraine to access the EU energy market.
- Integrating economic operators from Ukraine in the global EU traceability system for renewable gases to ensure transparency and avoid the risk of irregularities and double counting of sustainable energy units.

4. Infrastructure development

The Sides envisage:

- Stepping up cooperation, including between regulators and network and storage operators, on the use of biomethane, hydrogen and other synthetic gases, in gas networks and future hydrogen networks. The aim is to improve network planning, infrastructure connections, priority corridors, and to harmonise infrastructure rules between Ukraine and the EU.
- Working together on biomethane infrastructure and to develop by 2030 a Ukraine – EU hydrogen corridor as one of the three major hydrogen corridors identified as key

actions by 2030 in the REPowerEU action plan⁸. This will include cooperation to identify and tackle cross-border infrastructure framework issues, and on quality requirements for biomethane and hydrogen for transport and storage.

- Exploring ways to involve Ukraine (its national regulatory authority for energy and its potential future certified Hydrogen Network Operator) in EU-level cooperation on hydrogen on topics related to market operation and technical questions, as proposed in the EU Hydrogen and Gas Markets Decarbonisation package.
- Assessing the scope and the necessary technical adjustments on the basis of a cost-benefit analysis to use Ukrainian gas storage and existing infrastructure for storage and transport to enable the use of biomethane and hydrogen by taking into account of different deployment patterns and the impact on the design of competition and regulatory frameworks.

Both Sides intend to identify and implement suitable means to avoid distorting bilateral trade and investment and to avoid export restrictions and anti-competitive practices, in particular related to hydrogen interconnectors.

5. Research and innovation

The Sides aim to increase the involvement of Ukrainian research, innovation and industrial bodies (private/public) in particular under Ukraine's association to Horizon Europe, the EU's framework programme for research and innovation, and by facilitating the development of specific Ukraine – EU initiatives.

6. Fostering investment in sustainable projects

Acknowledging the importance of the goals set out in the above Partnership work streams, the Sides intend to work together to mobilise funding and investment from major financing and investment organisations while following the EU's rules on sustainable financing⁹.

The Sides envisage supporting:

- action to match sustainable and innovative projects across the renewable gases value chain in Ukraine with private-sector investors and prepare a pipeline of viable projects;
- action to meet the specific infrastructure needs of the hydrogen sector and to facilitate the integration of renewable gases into the gas network;
- the preliminary screening of project proposals by community experts;
- action to increase transparency and stakeholder involvement;
- the promotion of pilot projects for renewable gases.

The use of the above-mentioned financial and investment instruments should meet strict (international and EU) standards and follow good practices, including regarding investment protection, governance and the rule of law. This should apply not only to financial risks and bankability, but also to environment protection, sustainability in line with relevant EU legislation, international trade law, transparency and governance. This includes:

⁸ Staff working document, Implementing the REPowerEU Plan: investment needs, Hydrogen Accelerator and achieving biomethane targets, SWD(2022) 230 final.

⁹ Regulation (EU) 2020/852 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088.

- Access to commercial and institutional financing, including through the involvement of European Financial Institutions, in particular the EIB and EBRD, the latter in particular on biomethane;
- Additional support for investment via the EU and Ukraine-EU concessional finance available, de-risking mechanisms and guarantee schemes, such as those provided under the EFSD+ in the context of the EU-Ukraine neighbourhood policy;
- Additional support to improve institutional capacity and share know-how as needed, by EU and bilateral and regional technical assistance, support instruments and projects;
- Ukraine's association to Horizon Europe, Life (and other programmes).

III. Implementation and governance

The Sides plan to draw up a roadmap to guide work on the Strategic Partnership. The roadmap should echo the general intentions expressed by the Sides, as laid out in the work streams described in Section 2 of this Memorandum.

The Sides intend to use the collaboration structure established under the Ukraine – EU Strategic Energy Partnership and its High-Level Working Group on energy market integration, and the Ukraine – EU Focused Dialogue on the EU Green Deal and Ukraine's Green Transition as well as the Ukraine – EU Joint Committee on Research and Innovation - to monitor and discuss any matters relevant to the Memorandum by the Sides and respective actors (as specified in the Partnership Roadmap).

The Sides envisage holding regular meetings on this Partnership (at least once per year under the High-Level Working Group on energy markets integration and at least once per year under the Ukraine – EU Focused Dialogue on the EU Green Deal and Ukraine's Green Transition). They will report on progress during EU-Ukraine Energy Ministerial and other Ukraine – EU meetings between Ukraine's government and the European Commission.

In order to enable the involvement of stakeholders in the implementation of this Partnership and to facilitate effectively industry cooperation and investments, the Sides intend to organise business forums – events bringing together representatives of the industrial sectors concerned, including state-owned and private companies, regulatory authorities, financial institutions and experts. Such business forum events are also expected to provide advice and recommendations on significant industrial, market and innovation trends, on bottlenecks and barriers to investment and on potential solutions to overcome them.

Given the need to draw on technical expertise to support implementation of this Partnership, the European Union's technical assistance, capacity building and strengthening instrument may be used as appropriate and available.

The Sides intend to inform the joint bodies established under the Association Agreement of progress in implementing this Strategic Partnership, in particular the Sub-Committee on Transport, Environment and Energy.

The Sides intend to take account of and coordinate with other bilateral partnerships between Ukraine and the EU Member States.

IV. Final considerations

This Memorandum of Understanding does not create rights or obligations under international or domestic law. In particular, nothing in this Memorandum represents a commitment of financing for either Side. The Sides should endeavour to ensure that any information exchanged under this MoU and all activities undertaken pursuant to this MoU are consistent with their policies and procedures on the disclosure of information. In addition, both Sides may make this MoU publicly available.

This Memorandum does not intend to constitute a commitment from either Side to give preferred treatment to the other Side in any matter contained herein or otherwise.

The activities described in this Memorandum are to commence on the day after it has been signed by both Sides.

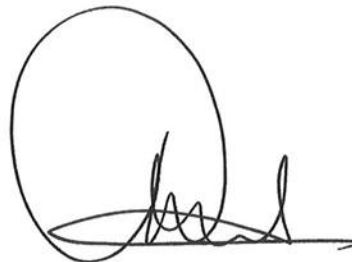
Signed at Kyiv on 2 February 2023 in two copies, in English.

For the European Union,

For Ukraine,



Ursula von der Leyen
President of the European Commission



Denys Shmyhal
Prime Minister