Support to Energy Security Cooperation Between Ukraine and Europe

4 th SEEGAS JSC Meeting - Crisis Response Meeting

Vienna, June 30, 2022

Sukru Bogut, Senior Energy Advisor, USAID/Ukraine

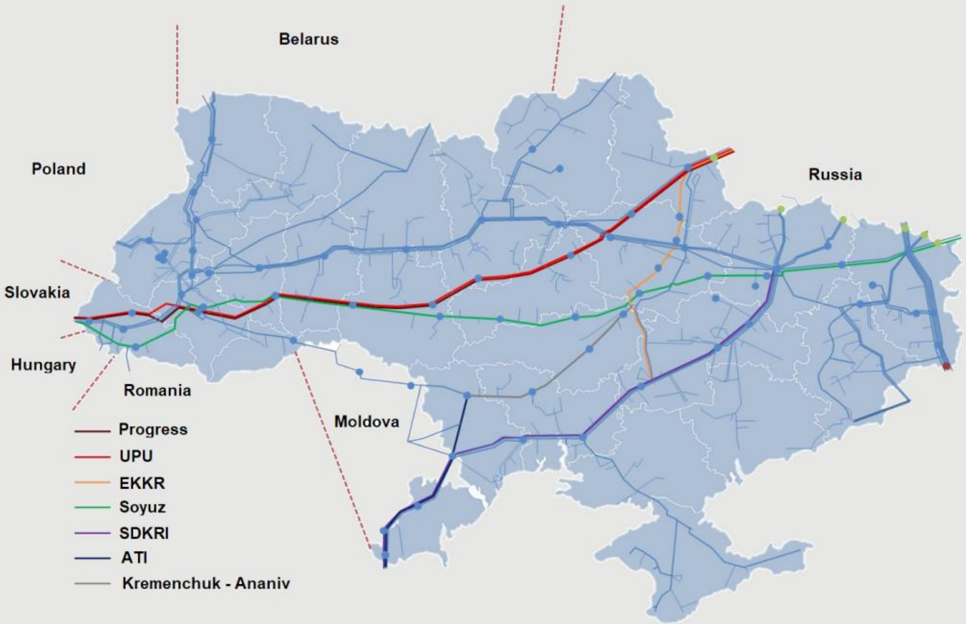
Background – How is Cooperation Beneficial to All Partners?

Ukraine

- The Ukrainian Gas Transport System (GTS) has historically transited the majority of natural gas from Russia to Europe, as well as to domestic consumers in Ukraine.
- Given Russian aggression, there is a need to urgently prepare for zero transit. However, firm transportation routes from the West are rather limited and multiple issues limit the potential for a ‘reverse flow’ supply.

Europe

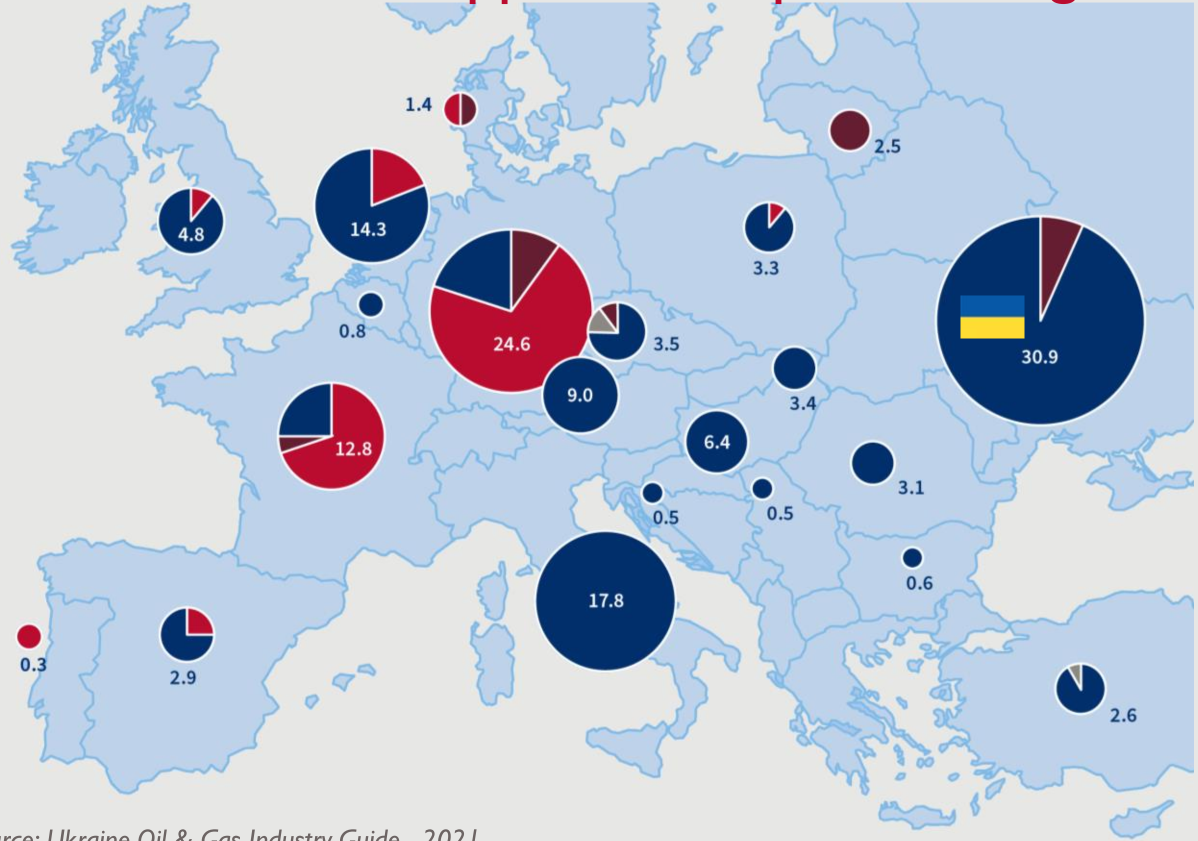
- Europe is also preparing to end the Russian supply of natural gas as demonstrated by the European Commission releasing a wide range of toolbox measures, which member states can use to improve security of supply.



Map source: UAGTSO TYNDP

European use of Ukraine’s underutilized gas transmission and large storage capacities can create multiple benefits for all parties, such as increasing liquidity in the Ukrainian gas sector, facilitating reverse flow investments and rapidly supporting regional security of supply. All benefits don't require large infrastructure investments in the European Union (EU).

Ukrainian Gas Storage Facilities are the Largest in the EU and can Support European Storage Obligation



- **30.9 bcm** – total designed capacity of Ukraine's gas storage facilities.
- Ukraine's storage capacity accounts more than **20%** of total EU storage capacity.

Types of Storage, by Origin

- Aquifer
- Salt cavity
- Depleted oil & gas fields
- Other

Source: Ukraine Oil & Gas Industry Guide - 2021

The Largest Ukrainian Gas Storage Sites are Strategically Located in Western Ukraine

- UGS continue to operate, low risk zone, 25,320 mcm
- UGS continue to operate, medium risk zone, 4,500 mcm
- UGS temporarily stopped, 730 mcm
- UGS on the territory w/o UA control (before Feb 24, 2022), 400 mcm

Source: UTG Transparency Platform

Firm Interconnection Capacity with Poland is Small and Based on Short-Term Agreements Between TSOs (can end at any time)

- ***2 of 9 (potential) entry points from Russia utilized – network significantly underutilized***

Source: UAGTSO TYNDP

Potential Workstreams to Coordinate Infrastructure and Supply Activities

Capacity Required

- Clarify capacity needs

Supply contract

- Understand likely supply contract (Naftogaz)

Engage with PL

- Support relevant ministry, regulator and TSO negotiations

Legislation

- Promote legislative and technical changes in NCs and taxation, based on studies

Financial

- Potential partial financial assistance (with donors) for critical infrastructure

Engage EU/EnC

- Work with institutions to facilitate necessary change

Storage

- Build confidence in Ukraine's storage facilities and develop new technologies

Bundling

- Conclude agreements between TSOs to bundle capacity and appoint single booking platform

A Plan for UA-PL Increased Trades

UA & Polish Ministries of Energy	**Topics:** • Political support for resolutions and safeguarding stakeholder confidence • Necessary changes to legislation (e.g., energy units and licensing)
UA & Polish Energy Regulators	**Topics** • Regulatory changes to enable cross-border bundled capacity • Licensing issues and double charges transmission issue
UA & Polish Gas TSOs	**Topics:** • Capacity needs and solutions based on possible supply contract • Improve cross-border capacities enable bundle capacity and contracts, appoint a platform
Market Players	**Topics:** • Work with Naftogaz UTG on storage workstreams and Naftogaz Supply for x-border • Engage with market and ensure solutions are fit for the purpose
Supranational-USAID, EU, ACER, EnC, EFET	**Topics:** • Solutions to cross-border issues between EnC and EU Member States • Possible investment assistance for new capacity, including political support

Recent Studies Assessed the Potential of Increasing Firm Capacity from West to East and Found Investments are Needed

Poland – Ukraine Interconnection Study (USAID; 2020/21)	USAID and UAGTSO studied how to improve integration between the Poland and UA gas markets. The study found that UA would enjoy better diversity of supply via Poland, but diversity will depend on availability of firm capacities. Absence of firm capacities would preclude utilization of UA gas storages by Polish market.
Study of Bundled Capacity Products (USAID; 2020/21)	Identified numerous barriers to improve interconnection, including VAT misalignment, licensing in Poland, misalignment of TSO conditions and network codes.
Security of Gas Supply, Impact Assessment (Energy Community; 2022)	Assessed potential for enhancing supply routes to UA in early 2022. Study found UA needs to imports from EU to get through winter of 2022/23- but capacity at EU borders may not be sufficient. Recommended measures- maximizing capacities, implementing network codes, and joint procurement of gas volumes with EU.

- Recent studies and market tests for interest (open season) have evaluated investment in capacity- no investment decisions have been taken.
- Doubts regarding market demand result in lack of contracted volumes.
- UA and Polish TSOs launched an incremental capacity study just before the war- has not been finalized.
- **NOW,** the situation has radically changed, and the time may be right to conclude a **firm** arrangement.

Investment is needed to maximize available capacities!

This document is made possible by the support of the American people through the United States Agency for International Development (USAID). The contents of this document are the sole responsibility of Tetra Tech ES, Inc., and do not necessarily reflect the views of USAID or the United States Government. This document was prepared by Tetra Tech ES, Inc., USAID Contractor for the Energy Security Project (ESP), USAID contract 72012118C00003.

USAID
FROM THE AMERICAN PEOPLE