

I. EBRD & Energy Community Gas Exchange project

- The EBRD, the Energy Community and Baringa were engaged in a project to structure the development
 of a gas exchange in Ukraine
- Several meetings were held and major European established exchanges have provided their expression
 of interest to support the development of a gas market in Ukraine
- · Due to the elections, unbundling and the transit negotiations this initiative stopped
- · During that time the situation of the development of the gas market in Ukraine changed
- The development of the Ukrainian Energy Exchange (UEEX) is showing strong progress towards the
 establishment of a well functioning gas exchange
- In order to support and accelerate the process, the EBRD and the Energy Community are standing ready to help



I. The importance or a gas exchange for Ukraine's economic development

- · Ukraine is one of the largest gas markets both in terms of size and infrastructure (storage) in Europe
- The gas price in Ukraine was historically traded at premium compared to EU markets, while following
 the logic of the transportation routes and own gas production it should be at discount
- The gas infrastructure in Ukraine was built in Soviet times to serve European consumers, a successful
 market liberalization could revalue some of the assets that can fit the current forecast of gas demand in
 the EU
- Through the availability of 300 traders, own gas production and large storage facilities gas exchange trading would enable Ukraine to provide a strong Eastern European gas market index

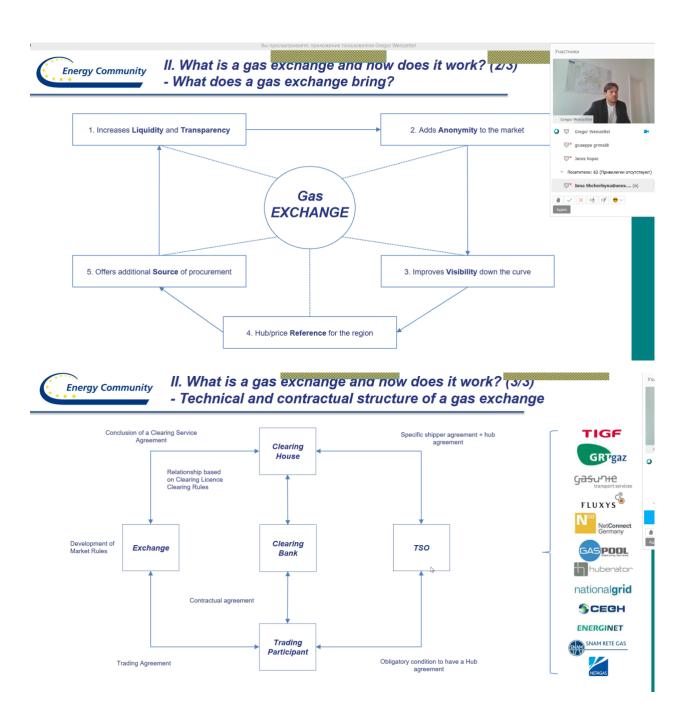
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II. What is a gas exchange and how does it work? (1/3)

- A gas exchange can be seen as a service provider for the TSO as the TSO can interact as a market
 participant on the exchange to balance its system using the provided liquidity by all market participants
- · A gas exchange is different from a broker/trading platform, through:
 - · centralized clearing
 - · standardization of traded products
 - · Direct nominations and integration to the system of the TSO
- The products traded on the exchange are divided into two main categories:
 - Spot markets: immediate or near time transactions with physical delivery (within day, day ahead products)
 - Futures markets: Month ahead and contracts with further duration (mostly used for hedging purposes and are in the most cases not going into physical delivery)







III. Example of the European market development - It always follows the same approach





III. Looking back in nistory – the example of the French gas exchange creation

STEP 1: Creation of a balancing platform with the French TSO

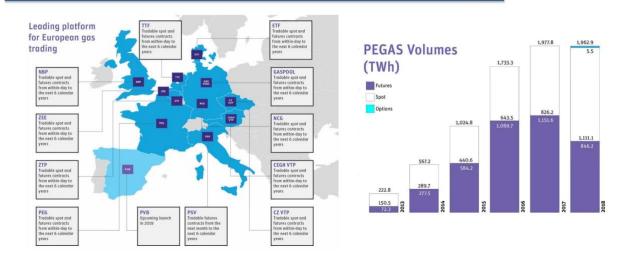
- December 2006: Consultation by GRTgaz (TSO) and CRE (regulator) on the implementation of a market-based balancing to cover the TSO's balancing needs
- April 2007: Powernext launched a balancing platform with GRTgaz
 - Powernext designed a platform solely dedicated to the TSO needs
 - GRTgaz is systematically the counterpart of every trade
 - 2 auctions per day (within-day at 11:15 and Day-Ahead at 16:15)

STEP 2: Launch of a gas exchange

- 2007-2008: In-depth study from Powernext with 40 market participants on how to set up a gas exchange in France
- November 2008: Powernext launched a physical gas exchange on spot and futures:
 - Continuous market
 - Spot: within-day, day-ahead futures, months, quarters, seasons, calendar



III. Example of European market development - PEGAS – Now EEX Gas



Source: Powernext Annual Report 2018



IV. Ukraine's market development – 2020, the window or opportunity to accelerate the market development

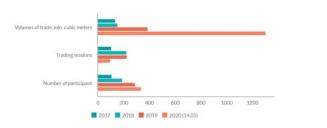
- Independent gas TSO established following the unbundling of Ukrtransgaz from Naftogaz
- · New gas transit contract with Russia
- Further liberalisation steps such as releasing households from the PSO regulation from July 2020
- · Introduction of daily balancing but without an accurate balancing platform
- · The development of UEEX, successfully providing services for gas trading (OTC market)
- · UEEX statement to be technically ready for trading of short-term standardized products
- · Accreditation on UEEX of the gas TSO of Ukraine for balancing operations

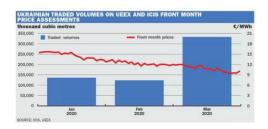
Energy Community

IV. 2020 - The Ukrainian Energy Exchange



- UEEX was established in 2010 and is operating in different commodity segments
- Today, UEEX is the only platform in the country where most of the liquidity is concentrated (OTC auctions)
- UEEX has 335 participants accredited in the section of natural gas trading
- UEEX quotations are becoming market price indicators, which are used by state authorities, market participants, international and Ukrainian analytical agencies
- UEEX became a member of Europex Association of European Energy Exchanges





Canada Information annial at Lattery

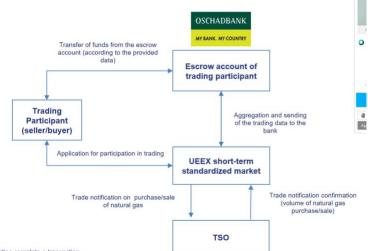


IV. 2020 – Proposed solution for the short-term standardized market by UEEX



UEEX states to be technically ready for trading of short-term standardized products:

- Integration with the TSO platform
- Working with escrow accounts (CCP-light)*
- Accreditation of the TSO on UEEX



* An escrow account is an account where funds are held in trust whilst two or more parties complete a transaction

Source: Information provided by UEEX



IV. Daily balancing in Ukraine - Not a market yet

. Marginal gas prices should be brought to a stimulating level

The weighted average price of gas (including marginal prices) has been very different from market prices, as it was calculated at the level of the purchase price of the TSO balancing services. This led to abuses by market participants, which could artificially create negative imbalances and additionally earn at the expense of the TSO.

- 1. The TSO shall support the liquidity on the platform of UEEX and take part in daily trading (sell and buy)

 The TSO is the main beneficiary, as participants will be able to balance their portfolio themselves.
- . The tolerance limit should be decreased

The tolerance of 10% should be significantly reduced, this does not encourage participants to balance themselves and allows them to speculate at the expense of the TSO.

I. The daily balancing on the market is the necessary precondition for the creation of the spot market

_____ The main and most effective method for determining the level of marginal prices is the trading platform!



IV. Remaining show stoppers

- Amendments to the Law of Ukraine "On Public Procurement" are of crucial importance (reg. No. 3176), which will allow the TSO to use trading platforms and energy exchanges for balancing purposes and not be obliged to use Prozorro
 - → No obligatory initial liquidity provision possible by the TSO
- **Pending adoption** of "Law of Ukraine on Capital Markets and Organized Commodity Markets", which is enabling a **clearing setup** in Ukraine (Draft Law 2284)
 - Missing legal framework to develop a clearing house



V. Conclusions - Gas Exchange Project 2.0 - The role of the EBRD and the Energy Community

- The gas exchange in Ukraine is definitely not a pipedream but close cooperation and a strong commitment
 of all market participants is needed
- · In order to support the development, the EBRD and the Energy Community will join forces
- The main aspect will be the support of the launch of the spot/balancing market:
 - · Supportive schemes for trading:
 - · Know-how and best-practices on how to operate the market
 - · Support of the development of market surveillance tools
 - Supportive schemes for clearing:
 - Support for the setup of a clearing system and execution of a central counterparty operated by the exchange or a separate exchange structure
 - Providing of know-how and best practices on how to establish a clearing system including cooperation with experienced international and local companies