

FOURTH UKRAINIAN GAS FORUM

The future of the European gas market. The Quo vadis Project

12 October 2018

Table of Contents



A.	Objectives and scope of the study	2
B.	Project approach overview	3
C.	Key principles of four alternative scenarios	4
D.	Results of the analysis	5
E.	Main conclusions and recommendations	6

Objectives and scope of the study

Quo vadis EU gas market regulatory framework – Study on a Gas Market Design for Europe was created in 2017/2018 and involved interactions with 100+ stakeholders

Objectives:

- ▶ To assess whether market functioning and overall welfare within the EU can be improved through a revision of the current internal market regulatory framework
- ▶ If so, what specific regulatory measures will lead to such improved welfare

Task 1: Assessment of the current regulatory framework for the EU gas sector from the point of view of maximizing overall EU welfare

- ▶ Identify shortcomings & limitations of the current EU regulatory framework

Task 2: Identification of possible recommendations for amending the regulatory framework

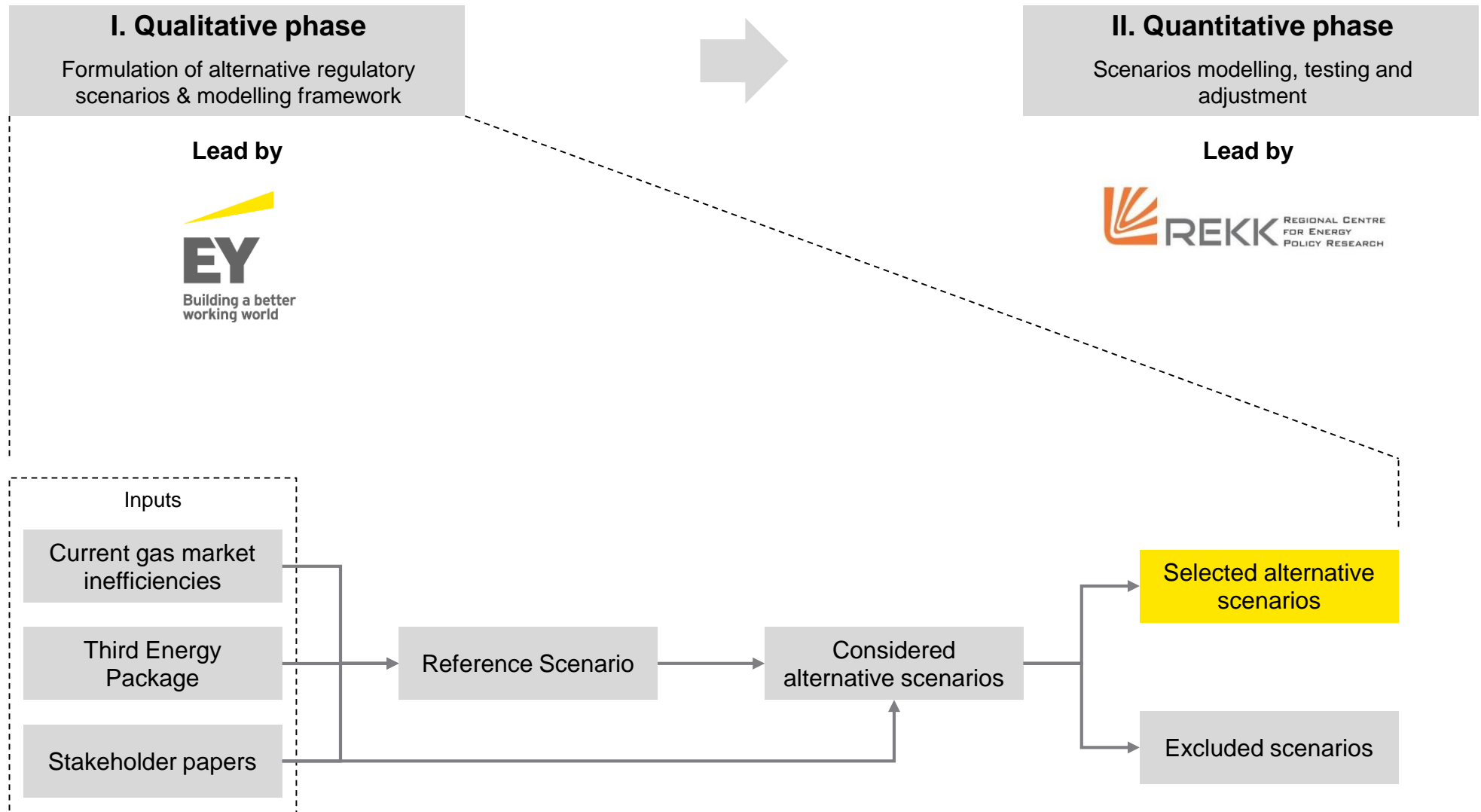
- ▶ Propose options to overcome potential shortcomings to the regulatory framework
- ▶ Options should have a positive overall impact

→ Using qualitative and consequent quantitative approach

Study was elaborated by EY (Czech Republic) in cooperation with REKK (Hungary) in the period of 04/2017 – 02/2018

Project approach overview

EY lead the qualitative part of the analysis, formulated a reference scenario and alternative regulatory scenarios to be quantitatively analysed in Phase II



Key principles of four alternative scenarios

Four scenarios were analysed in detail, 7+1 additional scenarios have been considered

▶ 1. Tariff reform scenario

- ▶ Intra-EU cross-border tariffs set to zero
- ▶ Gas storage entry/exit tariff set to zero
- ▶ Harmonised EU entry/exit tariff
- ▶ Increasing gas supply competition & wholesale market liquidity

▶ 2. Trading zone merger (market merger)

- ▶ Merging of existing market zones with suitable network topology
- ▶ Reduction in contractual congestion and location spreads
- ▶ Increase in liquidity

▶ + Extra-EU upstream – EU downstream strategic partnership concept

- ▶ Mutually beneficial agreement between the EU and Russia to integrate their gas markets
- ▶ Joint application of EU Third Package rules by the EU and Russia; Russia to liberalize its upstream sector for foreign investors, including EU majors and also to liberalize its pipeline exports to the EU
- ▶ No EU market share limitations on Russian molecules in its upstream sector

▶ 3. Conditional market merger

- ▶ Merger of neighbouring zones separated by transmission capacities
- ▶ Single price as long as transmission capacity is available
- ▶ Gap in TSO revenues collected in higher tariffs at non-merged borders

▶ 4. Combined Capacity-Commodity Release

- ▶ Increase up to 50% in the share of short term transmission capacities for both existing and new infrastructure
- ▶ Obligation for gas producers/importers to sell at least 50% of their gas at the nearest VTP to their entry into the transmission grid in the EU

Results of the analysis

Quantitative and qualitative analysis of the four main scenarios lead to recommend considering full implementation of the Combined Capacity-Commodity Release

Scenario

▶ 1. Tariff reform scenario

- ▶ Enhance price convergence and insure against the risk of future gas market segmentation in the EU
- ▶ Rather redistribute than increase welfare through increased cross-border trading
- ▶ Implementation turns highly beneficial under more turbulent sensitivity scenarios, which bring increased price divergence
- ▶ Design challenges (TSO Compensation Fund)

▶ 2. & 3. Market merger scenarios

- ▶ Moderate EU welfare improvements in those cases when wholesale price differences were still present before the merger
- ▶ 2 factors can undermine social benefits:
 - ▶ Additional cost of expanding the infrastructure for the merged zone (if needed)
 - ▶ Potential price increase in the countries neighbouring the merged zone due to the additional tariffs put on the zone's outside entry/exit points

▶ 4. Combined Capacity-Commodity Release

- ▶ A robust and focused measure which improves EU consumer welfare by an annual EUR 1.5-3 billion across the different sensitivity scenarios
- ▶ Sources of welfare improvements:
 - ▶ Increasing product market competition in less liquid CSEE countries (commodity release)
 - ▶ Improved efficiency in using the EU gas transmission infrastructure (capacity release)

▶ + Upstream – downstream strategic partnership

- ▶ Potential to significantly decrease EU gas wholesale prices
- ▶ However, this concept is highly hypothetical and intends only to initiate further thinking and research into potential cooperative solutions for the EU gas markets' most important problem that is high import dependence and simultaneous high market concentration

Main conclusions and recommendations

Besides implementing the Combined Capacity-Commodity Release Scenario, we recommend to consider further adjustments and solutions to current shortcomings

▶ Resulting policy recommendations



Amend Regulation 2017/459 to **increase the share of existing technical capacity** that TSOs are obliged to set aside and offer for auctioning for yearly or shorter durations to 50% or more.

The same approach of **increasing the share of yearly or shorter durations** from 10% to 50% should also be considered for incremental capacity within the EU to prevent future market foreclosure



Consider the full implementation of the **Combined Capacity-Commodity Release Scenario**.

This would entail the amendment of Regulation 2017/459 as indicated in the former recommendation and the implementation of gas release programs for existing and future LTCs in the EU countries of entry for LTC commodity.



Consider the implementation of the **Tariff Reform Scenario** after further refining the design and implementation conditions of it as presented in the study.

Designs with add-on tariffs differentiated by EU entry, EU exit and domestic exit points as well as TCF (TSO Compensation Fund) implementation issues should further be considered.



Include the concept of a potential Strategic Partnership – and the corresponding liberalization of the Russian gas sector – on the agenda of **future EU-Russia energy dialogue** and negotiation process on Nord Stream 2 or DG Competition cases with the objective to promote a competitive EU gas upstream sector.

Thank you for your attention.

Link for download of the full study or the executive summary of the study:

<https://ec.europa.eu/energy/en/studies/study-quo-vadis-gas-market-regulatory-framework>

Jiří Mlynář | Senior Manager | Advisory Services

Ernst & Young, s.r.o.

Mobile: +420 739535810 | jiri.mlynar@cz.ey.com

About EY

EY is a global leader in assurance, tax, transaction and advisory services. The insights and quality services we deliver help build trust and confidence in the capital markets and in economies the world over. We develop outstanding leaders who team to deliver on our promises to all of our stakeholders. In so doing, we play a critical role in building a better working world for our people, for our clients and for our communities.

EY refers to the global organization, and may refer to one or more, of the member firms of Ernst & Young Global Limited, each of which is a separate legal entity. Ernst & Young Global Limited, a UK company limited by guarantee, does not provide services to clients. For more information about our organization, please visit [ey.com](https://www.ey.com).

© 2018 Ernst & Young, s.r.o. | Ernst & Young Audit, s.r.o. | E & Y Valuations s.r.o.
All Rights Reserved.

This material has been prepared for general informational purposes only and is not intended to be relied upon as accounting, tax, or other professional advice. Please refer to your advisors for specific advice.

ey.com