

Ukraine's Gas Sector Reform: A Future Win-Win for Ukraine and Europe

Policy Brief







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EXECUTIVE SUMMARY

Gas sector reform in Ukraine is a success story in the making that has the potential to improve energy security in Central and Eastern Europe.

Following the recent adoption of a new Gas Market Law, Ukraine is now closer to compliance with EU legislation. Since October 2015, the law has introduced a liberalized and competitive gas market in which all customers are free to choose suppliers and fair prices reflect actual costs. By early 2016, Ukraine had adopted most of the secondary acts and by-laws and approached restructuring the state-owned holding Naftogaz, seen to be a source of corruption and state debt, but turned back to the path of solvency and better corporate governance. Ownership unbundling of the gas transmission business from trading and supply business of Naftogaz will be completed by mid-2016.

Moreover, Ukraine effectively uses opportunities of commercial gas imports from the EU. With over a dozen of active contractors, the European share of imports into Ukraine increased to 64 percent in 2015. This re-positioned Ukraine on the European gas market from a transit country to a reliable trading partner, one that is fully integrated into the European market structure.

With the gas transmission system almost unaffected by the conflict in Donbas, Ukraine's gas operator — Ukrtransgaz — reached an unprecedented level of transparency by publishing its operations data daily. The government has secured sustainable revenues through the entry/exit tariff system.

RECOMMENDATIONS:

- German companies should consider ramping up their activity in Ukraine as liberalization of one
 of the biggest gas markets in Europe provides good business opportunities in gas supply,
 transportation and storage, production, and infrastructure development.
- As a major power in Europe, Germany would benefit from deeper integration of Ukraine into the EU energy market. Using the full available capacity of reverse gas flows is key. This requires Germany's political support of Ukrtransgaz in negotiations with the Slovak operator Eustream.
- The German government should use its leverage in the EU Council and Commission to provide assistance needed for cross-border infrastructure projects with Ukraine. If supported, interconnections would add to energy security and stability.
- German policymakers and companies should review their position on the Nord Stream 2
 project in light of recent developments in Ukraine. The country's gas transmission system is
 now more transparent and secure than ever. It will soon be fully compliant with EU legislation.
 After upcoming technical upgrades, Ukraine's pipelines will become the most sustainable and
 feasible route for Russian gas supply to Europe.
- Ukraine and Germany would benefit from making the Energy Union a successful policy framework for cooperation. This can only be achieved if Ukraine becomes an essential component of Energy Union. Changing gas transfer points from the western to the eastern border of Ukraine would provide the EU and Ukraine with an advantage in reviewing supply contracts with Gazprom. Moreover, German counterparts might use this as a precedent for developing alternative (non-Gazprom) supplies from Russia and Central Asian countries.

1. WHY THE GAS SECTOR MATTERS

Given the fact that approximately 15 percent of the EU's gas imports¹ and 38.8 percent of Russian gas supplies reach European markets via Ukraine,² reforms in this sector are relevant for the security of supply in Ukraine and other Central and Eastern European countries.

Second, natural gas reform serves as a positive example of EU-Ukraine cooperation. This process was off to a rough start following the 2006 and 2009 gas disputes but was re-energized after the change of government in 2014. Both sides have invested much effort into liberalizing the gas market, regulatory reform, and supporting vulnerable consumers through better-targeted social assistance.

Finally, the experience of this reform can be replicated for similar initiatives – for instance, reform of the electricity market³ – and can serve as a useful model for other countries in transition.

2. SCOPE OF REFORMS

2.1. Commitments and positive conditionality

Ukraine made a commitment to reform its gas market to comply with European standards as early as 2009.⁴ Ukraine also adopted framework legislation on gas sector reform that included basic requirements and principles of the EU legislation, but it had a number of discrepancies and exclusion clauses.⁵ In reality, the government took no actual steps to open the gas market and undertake tariff reform, to say nothing of unbundling vertically integrated companies.

Only after the change of government in 2014 did Ukraine begin implementing its key commitments in the gas sector under the Third Energy Package, a set of European legislation applicable since 2009, aiming to complete the process by April 2017.⁶ These commitments included reorganization and financial rehabilitation of the state-owned gas holding Naftogaz, a comprehensive reform of tariff mechanisms for energy and fuel prices, elimination of cross subsidies in gas and heat supply, modernization of the gas transmission system (GTS) through cooperation with the European Bank for Reconstruction and Development and European Investment Bank, and investment in several critical projects, such as the liquefied natural gas (LNG) terminal and Ukraine-Poland interconnection projects.⁷ The international community made sure the government clearly articulated these commitments in 2015 through the Gas Sector Reforms Implementation Plan.⁸ The plan's implementation became a condition for continued loan support worth over \$20 billion from the International Monetary Fund and World Bank.⁹

¹ International Energy Agency, "Energy Policies of IEA Countries: European Union," 2014 Review, p. 7.

² Transit across Ukraine to Europe (including to Moldova and Turkey) amounted to 86.1 bcm in 2013 and 62.2 in 2014. See "Russian Gas Transit Across Ukraine Post-2019: Pipeline Scenarios, Gas Flow Consequences, and Regulatory Constraints," Oxford Institute for Energy Studies, February 2016, https://www.oxfordenergy.org/wpcms/wpcontent/uploads/2016/02/Russian-Gas-Transit-Across-Ukraine-Post-2019-NG-105.pdf

³ DiXi Group along with partner experts has completed a comprehensive study, "Ukraine And Energy Community: On The Road To Reforms," which evaluates the progress achieved from December 2014 to October 2015. Further periods are covered by quarterly reports. All materials are available at the Energy Reforms coalition website: http://enref.org/en/books/

⁴ At the Joint EU-Ukraine International Investment Conference on the modernization of Ukraine's Gas Transit System.

⁵ See detailed analysis here: http://ua-energy.org/post/1662 , http://ua-energy.org/post/25120.

⁶ For example, Directive 2009/73/EC and Regulation (EC) 715/2009.

⁷ See the Sustainable Development Strategy: Ukraine – 2020 (http://zakon1.rada.gov.ua/laws/show/5/2015), the Coalition Agreement "European Ukraine", (http://zakon4.rada.gov.ua/laws/show/n0001001-15/paran2#n2), and the Action Program of the Cabinet of Ministers of Ukraine (http://zakon4.rada.gov.ua/laws/show/695-2014- "D0%BF/paran5#n5).

⁸ http://zakon4.rada.gov.ua/laws/show/375-2015-%D1%80#n9

⁹ Energy Community Country Brief Spotlight on Ukraine. Issue 1, April 10, 2015.

2.2. Price adjustment

Gas sector reform had to address gas prices for households that were five times lower than the actual market price. The government has compensated for the difference in the form of a subsidy from the national budget to Naftogaz, the gas provider, to households; in 2014 the subsidy reached 5.7 percent of GDP. The 10-times range in gas prices¹⁰ for different consumers was fertile ground for corruption and discouraged reasonable consumption and investment. In March 2015, the National Energy and Public Utilities Regulatory Commission (which oversees the sector) raised retail gas prices. It provided households and district heating producers with a two-year transition period¹¹. However, the government has decided to introduce full market prices not by mid-2017, as planned, but as early as since May 1, 2016¹².

Adopted on October 1, 2015, the new Gas Market Law complied with the EU Third Energy Package, abolished price regulation, and provided the legal basis for "unbundling" (that is, separating gas transmission from gas production and supply) and opening to suppliers' free access to the gas infrastructure.¹³ It also liberalized the gas market so that all customers are free to choose gas suppliers and cost-reflective prices will ensure competition.

By early 2016, Ukraine – with the support from the Energy Community and other partners – has adopted over 50 secondary acts and by-laws required to ensure full enforcement of the law, including network codes, standard agreements, new licensing conditions, methodologies for tariff calculation, settlement and review procedures, reporting forms, compliance programs.¹⁴

2.3. Naftogaz conundrum

Since the Revolution of Dignity, the government has focused its attention on Naftogaz, which was infamous for inefficient procurement and shadowy deals with oligarchs. The pernicious cycle worked the following way: the government had to subsidize Naftogaz to cover low gas prices for households, whereas distribution companies inflated the amount of gas they received from Naftogaz for these needs to benefit from actual sales of these volumes to industry at market prices. In the end, Naftogaz often ended up in the red. Given its importance to the country, the government was forced to recapitalize the company from the state budget, which in 2014 brought Ukraine's consolidated fiscal deficit to 10.1 percent of GDP. This unsustainable system was bankrupting the country.

To reform Naftogaz, the parliament adopted several other laws in 2015 that set out strict requirements to encourage financial discipline, with consumers' obligation to pay Naftogaz as a guaranteed supplier in advance and tools to recover debts. In the framework of the IMF program, the government plans to help the company reach a break-even point by 2017, by reducing

 $^{^{10}}$ According to Naftogaz, by the end of 2014, average household prices amounted to 580 UAH/tcm, and industry prices equalled 5,900 UAH/tcm. See the 2014 Naftogaz Annual Report,

http://www.naftogaz.com/files/Zvity/Naftogaz%20Annual%20Report%202014.pdf

¹¹ http://www.kmu.gov.ua/control/uk/cardnpd?docid=248524451

¹² The new prices reflect 100 percent parity with prices for imported gas, and are based on a formula linked to prices on the German hub NCG plus transportation. For details see Ministry of Economic Development and Trade, How and why will the prices for gas and heating change from May 1?,

https://issuu.com/mineconomdev/docs/ministrypresentation11-2

¹³ Energy Community Secretariat, "Annual Implementation Report", 2015, pp. 210–212.

¹⁴ Development of secondary legislation is supported by the Secretariat of the Energy Community as well as consultants within the technical support project of the European Commission-World Bank Trust Fund. Network codes are developed by NEURC working groups in cooperation with representatives of the Ministry of Energy, the Anti-Monopoly Committee, Ukrtransgaz, and natural gas distributors.

¹⁵ For example, the "Boyko rigs" scandal, which was a controversial \$400 million deal with Highway Investment Processing LLP and several intermediaries to supply offshore drilling rigs, whereas the actual price was \$150 million cheaper.

¹⁶ http://www.worldbank.org/content/dam/Worldbank/document/eca/ukraine/ua-focus-april-2015-en.pdf

subsidies to zero¹⁷. The final unbundling model of Naftogaz did not take place by the agreed-upon deadline of February 2016 as it took additional time to agree on a model within the government and with donors. The new arrangement would include a full ownership unbundling, thereby the transmission system operator (TSO) and other assets will be owned and coordinated by different government agencies. The government is expected to finalize the process by mid-2016.

As part of corporate governance reform at Naftogaz, ¹⁸ the government transferred its supervision authority from the Ministry of Energy to the Ministry of Economic Development, ¹⁹ which is seen as decreasing strict state control, and banned any political or administrative interference in its corporate activity, with an independent Supervisory Board serving as a guarantor of impartiality. ²⁰ The holding company also joined the e-procurement system ProZorro and started practicing extensive disclosure of relevant gas market data on extraction, transportation, storage deposits, prices, consumption etc. ²¹

These reforms are beginning to bear fruit. Naftogaz's financial statement in 2015 posted a loss of 1.036 billion euros²²; for the same period in 2014, it had 5.727 billion euros in losses.²³ Although gas sales to households remain unprofitable, income from transportation services and sales to industry enabled Naftogaz to pay its current liabilities on time. Prime Minister Yatsenyuk declared that Naftogaz was expected to reach solvency in 2016.²⁴

2.4. Next steps

Setting a solid legislative and regulatory framework enabled the government to start solving the issue of Naftogaz debt and improve its own performance in balancing the national debt. The restored liquidity on the gas market has created an opportunity for generating revenues for investment. The next steps on the reform agenda should include the unbundling of distribution system operators (DSOs) – regional monopolies also in charge of supply – that started in mid-2015. The domestic expert community and donors should monitor the process to ensure free access to distribution networks by other suppliers. The government also continues discussions with market players on the payment model for using the distribution networks, which are state owned. Options include either a monthly service fee or a single payment for both distribution and transportation, which both should serve the consumers' ability to switch suppliers.

3. IMPACT OF THE REFORM ON SUPPLY

3.1. Security of domestic supply

As part of the gas sector reform, the government approved rules that comply with European regulations and introduced a system of risk-forecasting assessment and emergency planning and prevention mechanisms.²⁵ Following extensive debates with market participants,²⁶ the government established a gas reserve that covers 50 percent of anticipated monthly gas supply and 20 percent of financial guarantee for this supply as security requirements for all suppliers.

¹⁷ http://economics.lb.ua/state/2015/03/12/298361 mvf obnarodoval memorandum.html

¹⁸ The reform aims full compliance with G20/OECD Principles of Corporate Governance.

¹⁹ http://zakon4.rada.gov.ua/laws/show/1002-2015-%D0%BF

²⁰ See also the 2014 annual report of Naftogaz, which explains its development strategy within the general framework of natural gas market reform in Ukraine.

²¹ http://naftogaz-europe.com/ua

²² http://www.naftogaz.com/www/3/nakweb.nsf/0/3F928C3E7375F33DC2257F840052731F?OpenDocument&year=2 016&month=03&nt=%D0%9D%D0%BE%D0%B2%D0%B8%D0%BD%D0%B8&

²³ For conversion, the National Bank of Ukraine official average exchange rates for 2015 and 2014 were used.

²⁴ http://ukranews.com/news/198504.V-2016-godu-Neftegaz-vpervie-prineset-pribil---Yatsenyuk.uk

²⁵ Natural Gas Supply Security Rules and the Natural Gas Supply Emergency Action Plan,

http://mpe.kmu.gov.ua/minugol/control/uk/publish/article?art_id=245075916&cat_id=35109

²⁶ http://zakon4.rada.gov.ua/laws/show/1088-2015-%D0%BF

Although the Ministry of Energy aims to decrease these requirements as it sees them as too tough for suppliers, they lay the groundwork for sustainable operation of Ukraine's gas infrastructure, in particular storage facilities. Finally, the government made a commitment to issuing annual monitoring reports on the gas supply.²⁷

3.2. Diversification of imports

The government has confirmed that in 2015, Ukraine finally achieved energy independence from Russia. That year, Ukraine purchased from Russia only 37 percent of its total gas imports from Russia, which is less than Italy's imports from Russia. This became possible in part due to temporary gas trade agreements reached after trilateral negotiations between Ukraine, the EU, and Russia in 2014 and 2015. These deals envisioned discounts for the contract price and non-application of the "take or pay" principle and allowed Ukraine to save money, accumulate reserves significant enough to be able to suspend gas imports from Russia altogether in November 2015, and strengthen its negotiating position in further talks with Russia on gas prices.

Diversification of imports represents a major shift in Ukraine's position on the European gas market. Whereas earlier Kyiv was mostly a transit partner, from 2015 Ukraine has fully integrated into the European gas market trade. According to the Ministry of Energy and Naftogaz, Russia's share of imports decreased from 92 percent in 2013 to 37 percent in 2015, with the import volume dropping to a quarter: from 25.8 to 6.1 bcm. Over this period, the share of European supplies grew from 8 percent to 64 percent.³²

3.3. Plans to increase energy security

The President and the government of Ukraine made a political decision to limit the supply from a single supplier to 30 percent.³³ Ukraine has the opportunity to continue gas business with the EU on several routes: Polish (with capacity of up to 1.5 bcm per annum), Hungarian (up to 5.5 bcm per annum), and Slovak (up to 15 bcm per annum). Romania might also become a route. Given the reduced gas consumption in 2015, these capacities can substitute Gazprom supplies if fully used.

Following the adoption of the amendments to the Customs Code, Ukraine is now able to run backhaul operations; that is, replace gas on a certain pipeline with no need to receive it on specific cross-border points.³⁴ Such operations, called a "virtual reverse flow", are possible under commercial supply contracts and interconnection agreements of TSOs.

By early 2016, Ukrtransgaz, the Ukrainian system operator, had signed an interconnection agreement with the Hungarian TSO. However, it continues to negotiate with TSOs in other EU countries, and Slovakia with largest transmission capacity, although blocked by Gazprom, is the major focus for Ukraine.

With further liberalization of the domestic market and increased competition among gas suppliers, Ukraine's market attractiveness for other European players will only increase. The potential of higher demand from Ukrainian consumers and greater liquidity within the gas market might encourage some European suppliers to enter Ukraine directly or develop their subsidiaries there.

²⁷ http://mpe.kmu.gov.ua/minugol/doccatalog/document?id=245045993

²⁸ http://www.kmu.gov.ua/control/uk/publish/article?art_id=248801311&cat_id=244274130

²⁹ https://www.facebook.com/max.bilyavskiy/posts/784581368338415

³⁰ In 4Q2015 alone, Ukraine gained 35 million euros in savings from gas discounts granted.

³¹http://www.naftogaz.com/www/3/nakweb.nsf/0/34EA0D3AEF808C86C2257F080036BADB?OpenDocument&year=2 015&month=11&nt=%D0%9D%D0%BE%D0%B2%D0%B8%D0%BD%D0%B8&

 $[\]frac{^{32}}{\text{http://www.naftogaz.com/www/3/nakweb.nsf/0/DDF058F6412F06C8C2257F4900584C01?OpenDocument\&year=2}}{016\&month=01\&nt=\%D0\%9D\%D0\%BE\%D0\%B2\%D0\%B8\%D0\%BD\%D0\%B8\&}$

³³ See the Sustainable Development Strategy: Ukraine – 2020 and the Coalition Agreement "European Ukraine"

³⁴ http://zakon4.rada.gov.ua/laws/show/813-19

Finally, Ukraine joined the Central and South-Eastern European Gas Connectivity initiative,³⁵ which allows it to negotiate higher volumes of gas transit; build interconnectors with Poland, Hungary and Romania; launch the full reverse flow from Slovakia and thus enable increasing gas imports; and continue diversifying supply routes.

Key players in gas imports to Ukraine

According to Naftogaz, supplies from the EU are commercially attractive, with the price difference only slightly higher than on key gas hubs in Europe. Under the EBRD loan, Naftogaz qualified 11 major companies as suppliers.³⁶ Following a public tender in early 2016, Naftogaz concluded contracts for gas supply with Noble Clean Fuels Limited (UK), Engie SA (France), Axpo Trading AG (Switzerland), E.ON Global Commodities SE (Germany) and Eni trading&shipping S.p.A. (Italy).³⁷

Among the gas suppliers to Ukraine in 2015 were GDF SUEZ (now ENGIE, France), Statoil ASA (Norway), Trailstone (U.S.), E.ON Energy (Germany)³⁸, Shell Energy (Netherlands-UK), MET Gas, and DufEnergy (both Switzerland).³⁹

Although the domestic market is still dominated by Naftogaz, gas from the EU is imported by other entities, namely big industrial groups such as DTEK,⁴⁰ Odessa Port Plant,⁴¹ ArcelorMittal Kryvyi Rih,⁴² and private traders such as ERU, Ukrgaz, and Metida.⁴³ This allows large consumers to seek better prices and conditions and thus become more competitive.

4. SUSTAINABLE TRANSIT FOR ALL

Ukraine remains a major gas transit route to Europe, accounting for up to 15 percent of total gas imports to the EU. It is therefore an important partner in developing the structure for energy security. Despite the proximity to the active combat zone in Donbas, the gas transmission system remains unaffected and operates in a sustainable way. ⁴⁴ In addition to the data regularly released by Naftogaz, Ukrtransgaz daily reports on the transportation volumes at entry and exit points and the storage inventory on its own website and the Gas Storage Europe association website. ⁴⁵ It is the only non-EU actor to have all relevant data publicly disclosed. This is an unprecedented level of transparency that creates trust and supports early warning mechanisms applied by the EU in emergency cases.

The new tariff system for gas transportation and transit, fully compliant with the Energy Community rules, was introduced in2016.⁴⁶ In contrast to the previous fixed-tariff model that was based on gas volume and transportation distance, the new system focuses on allocations of capacity between entry and exit points, thus better reflecting the operator's cost. The tariffs

<u>europe.com/article/ua/%D0%BF%D0%BE%D1%81%D1%82%D0%B0%D0%BD%D0%BE%D0%B2%D0%B0%D1%82%D0%B0%D1%82%D0%B0%D1%80%D0%B8%D1%84%D0%B8</u>

³⁵ https://ec.europa.eu/energy/sites/ener/files/documents/CESEC MoU signatured.pdf

 $[\]frac{36}{\text{http://www.naftogaz.com/www/3/nakweb.nsf/0/69C1484A5C63C9BFC2257F1400567E6B?OpenDocument\&year=2}}{015\&\text{month=12\&nt=\%D0\%9D\%D0\%BE\%D0\%B2\%D0\%B8\%D0\%BD\%D0\%B8\&}}$

³⁷http://www.naftogaz.com/www/3/nakweb.nsf/0/0C62989694E611EBC2257F3A004214DF?OpenDocument&year=2 016&month=01&nt=%D0%9D%D0%BE%D0%B2%D0%B8%D0%BD%D0%B8&

³⁸ http://www.theinsider.ua/business/kto-prodaet-gaz-ukraine-rossiya-bolshe-ne-monopolist/

³⁹ http://www.theinsider.ua/rus/business/kto-prodaet-gaz-ukraine-rossiya-bolshe-ne-monopolist/

⁴⁰ http://www.dtek.com/ru/media-centre/press-releases/details/dtek-vozobnovil-import-prirodnogo-gaza-iz-evropi#.VrwqDV5tHEY

⁴¹ http://www.theinsider.ua/rus/business/kto-i-otkuda-postavlyal-gaz-v-ukrainu/

⁴² http://www.theinsider.ua/rus/business/kto-prodaet-gaz-ukraine-rossiya-bolshe-ne-monopolist/

⁴³ http://biz.liga.net/all/tek/stati/3271195-novyy-trend-chastnyy-biznes-osvaivaet-import-gaza-iz-es.htm

⁴⁴ With a small portion of pipelines in the area of conflict, which where abandoned and conserved several years ago, as Russia – their main user – constructed bypassing routes.

⁴⁵ http://transparency.gie.eu/

⁴⁶ http://naftogaz-

increased by over 50 percent⁴⁷ and reached the European average, thereby securing sustainable revenues and investments in safety.

The increase in tariffs would enable better management of the Ukrainian GTS, higher technical reliability, and modernization through Ukrtransgaz's investment program and long-term loans. In 2015, Ukraine signed two 150 million euro loan agreements with the EIB⁴⁸ and the EBRD to modernize the Urengoy-Pomary-Uzhgorod gas pipeline.⁴⁹ These projects are a significant step toward ensuring that the Ukrainian gas transmission system remains a reliable transportation route.⁵⁰

Ukraine now aims to amend the transit contract with Gazprom.⁵¹ Maros Sefcovic, the Vice President of the European Commission, said the EU was ready to act as a facilitator and "honest broker" in this process.⁵² According to the Naftogaz position, these talks would change gas trade rules in the region. First, Gazprom would no longer act as a virtually present operator between Ukrtransgaz and TSOs of neighboring countries, allowing free gas flows in both directions between Ukraine and Slovakia, Hungary, Poland, and Romania. Second, gas transfer points would be changed from the western to the eastern border of Ukraine (which are located far away from the war zone), allowing Ukrtransgaz to take full contractual responsibility for gas transit through the territory of Ukraine and thus reducing the associated risks to European companies.

In the long-term perspective, gas purchase at entry points of Ukraine's GTS would also mean an opportunity for Europeans to contract cheaper gas from independent Russian and Central Asian producers (although that is possible only if Europeans and Ukrainians create enough pressure on Russia to lift the export monopoly of Gazprom).

In this way, the new model of Ukrainian transit corresponds to EU policy goals in Central and Eastern Europe and toward Ukraine; that is, establishing strategic partnerships, integration of markets, and diversification of supply. Projects that could potentially undermine these goals, namely Nord Stream 2, may be reviewed.⁵³ If European stakeholders aim to establish a functioning Energy Union, with diverse sources of supply and interconnected markets, Ukraine would be number one option to demonstrate its feasibility.

5. OPPORTUNITIES FOR JOINT BUSINESSES IN THE GAS MARKET

With increased liquidity, efficiency, and transparency, the Ukrainian gas market has much to offer, in particular to German businesses.

Gas supply. Ukraine remains one of the largest European markets. According to the Ministry of Energy and Coal Industry, in 2015 the domestic consumption level of gas amounted to 33.727 bcm. Despite energy-efficiency measures, there will be heavy gas consumption in the industrial sector, which is likely to recover with the growth of whole economy. Sub-national supplier companies may become a subject of investment interest, as well.

⁴⁷ Differentiated tariffs include 12.47 USD/tcm for every entry point, and from 16 to 33 USD/tcm for different exit points. For details, see the NEURC decision http://www.nerc.gov.ua/web/get_zip.php?fid=18635&lang=UA

⁴⁸ http://ua-energy.org/post/49111

⁴⁹ http://www.eurointegration.com.ua/news/2014/12/15/7028766/

⁵⁰ http://www.kmu.gov.ua/control/uk/publish/article?art id=247820028&cat id=244276429

⁵¹http://www.naftogaz.com/www/3/nakweb.nsf/0/21D6495FCDCE4BDBC2257F2C0037AA5D?OpenDocument&year= 2015&month=12&nt=%D0%9D%D0%BE%D0%B2%D0%B8%D0%BD%D0%B8&

http://www.kyivpost.com/article/content/ukraine-politics/european-commission-positive-about-invitation-to-act-as-honest-broker-in-ukraine-russia-gas-transit-talks-sefcovic-407897.html

⁵³ See Agata Loskot-Strachota. "The Case against Nord Stream 2," Energy Post, November 23, 2015, http://www.energypost.eu/case-nord-stream-2/

Gas trading. With powerful infrastructure connected to European and Turkish-Balkan markets, Ukraine could become a cross-border trading hub. Its GTS is a complex system, with 307.6 bcm of annual "entry" capacity (including 21.4 bcm on the border with the EU) and the largest European storage capacity, of 32 bcm.⁵⁴ It can offer gas supplies from various sources, contracted and stored in close proximity to the EU.

Gas transportation and storage. In the mid-term perspective, following the unbundling of Naftogaz and the adoption of the extensive legislative package, the EU-based and U.S.-based companies should be invited as partners in the transmission and storage business. The government made a clear commitment to engaging strategic investors, and Naftogaz will be offering different investment options, including corporatization of core assets and asset-light investments⁵⁵.

Gas production. In 2015, the government reduced the rent (royalty) rate for gas production to levels applicable before 2014,⁵⁶ which is a strong signal for investors that Ukraine is serious about increasing its own production. The Ministry of Energy developed a draft action plan to facilitate gas production via deregulation.⁵⁷ German investors may seek opportunities in such areas as petroleum engineering, maintenance, rehabilitation of depleted fields, and exploration of new fields.

Gas infrastructure. Given the potential of regional infrastructure initiatives, German investors can look at such projects as the Ukraine-Poland interconnector or the LNG terminal project in Odessa. Contracts for modernization of gas transmission and storage facilities would be particularly interesting for German producers of equipment and technologies. Once the regulatory authority decides on the DSOs income model, regional distribution networks might become a subject of acquisition.

6. CONCLUSIONS

Within two years, the Ukrainian gas market has approached a level of financial liquidity and openness typical of those in European markets, which makes it attractive for investment. European and in particular German companies should consider ramping up their activity in this market. Taking advantage of these opportunities would deepen in practice Ukraine's association with the EU. Germany, as one of the pivotal powers in Europe, could help in this process.

First, Germany can engage with the Slovak government to prod the Slovakian national operator Eustream to use its full capacity for cross-border gas flows. Second, as Ukraine's gas transmission system becomes more transparent and secure, German policy makers and companies may want to review their position on new infrastructure like Nord Stream 2 which as it aims to offset Ukraine as the shortest and most reliable way of gas delivery to the EU. Also, given the reforms of Ukrainian gas sector, it would be much easier to achieve EU policy goals in terms of security of supply and diversification. Third, the Energy Union between Ukraine and the EU could benefit both parties by allowing for effective review of supply contracts with Gazprom, hedging transit risks, and unlocking potential alternative suppliers. Finally, if supported in cross-border infrastructure projects, Ukraine can turn into a true European energy policy success story, which contributes to the energy security of the continent. It is high time to bring this special relationship to a new level.

⁵⁴ Presentation of Naftogaz's Business Development Department for the conference "EU-Ukraine energy relations" (October 1, 2015; Vilnius, Lithuania).

⁵⁵ The term used by Naftogaz top management, for details see http://biz.liga.net/all/tek/intervyu/2788234-yuriy-vitrenko-esli-my-nichego-ne-izmenim-pridetsya-uezzhat.htm

⁵⁶ http://www.asterslaw.com/upload/medialibrary/newsletters/asters newsletter ukr 12 01 16.html

⁵⁷ http://mpe.kmu.gov.ua/minugol/control/uk/publish/article?art id=245069933&cat id=35082