Regional stability through energy cooperation: The case of the EU and Ukraine

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Abstract
Despite the progress Ukraine has made in the energy sector since the 2014 revolution, there are still many internal and external challenges that have to be overcome. Recently the government has adopted a new energy strategy, which aims to establish a comprehensive approach to developing the energy sector, both to meet the EU's standards and to cope with existing challenges. However, development strategies in Ukraine usually face problems at the implementation stage due to political and economic obstacles. This article argues that regional cooperation in the energy sphere, which would lead to successful reforms and the implementation of Ukraine's new energy strategy, would not favour just one party, but the region in general, especially in terms of standing up to the common geopolitical threat from Russia. Collaboration between the EU and Ukraine will bring better interdependence and will contribute to strengthening regional energy security.

Keywords
Ukraine, EU, Interdependence, Energy security

Introduction
Regional security, including energy security, depends on collaboration between energy partners in terms of the creation of common markets and the strengthening of trust-based relations—resulting in a readiness to help each other when necessary. Ukraine, despite its geopolitical importance, is a relatively weak part of the regional energy puzzle due to its lack of a comprehensive and holistic policy for the protection of its international energy interests and improvements in this sphere. As a result, Ukraine’s energy sector...
needs to be modernised and reformed. EU support in this is crucial for geopolitical and economic reasons. Such changes would (1) provide new markets and additional energy security assurances, and (2) make Ukraine more interdependent, thus giving Russia fewer opportunities to destabilise the country. However, such changes would require a rapid reform of Ukraine’s energy sector to meet EU standards. While Ukraine has recently adopted an updated energy strategy, which will bring it closer to meeting these standards, there are numerous challenges which could hinder the strategy’s implementation. To overcome them, Ukraine needs EU assistance in both the political and economic domains. The article argues that only close cooperation can bring the most beneficial outcomes to the region and will make a significant contribution to tackling common threats effectively.

Ukraine’s energy challenges

Ukraine inherited a powerful energy sector after the Soviet Union collapsed. However, due to inefficient policy, this sector is now in a critical state. Among the main problems are the deterioration of energy assets and a lack of investment, low energy efficiency and environmental acceptability, and high dependence on foreign supplies.

Ukraine is one of the biggest nuclear power producers in Europe: it has 15 nuclear power plants, with a capacity of more than 13 gigawatts, meaning that the country derives about 60% of its electricity from nuclear energy (Energoatom 2017). In comparison, since 2011 Germany has had eight reactors, producing about 14% of its electricity. The volumes of oil extracted domestically are decreasing every year and Ukraine is extremely dependent on imported petroleum. Most of the country’s oil refineries are not operating. The military conflict has hugely affected the country’s extraction of anthracite coal, which is only available in the temporarily occupied Donbas region. All the mines located in the area of the military conflict are beyond Ukrainian control. Thus, today Ukraine has to import coal. Furthermore, all the state-owned mines are unprofitable and the coal industry needs to be reformed. The share of renewable energy sources in the energy mix is around 3% of the total domestic primary supply (Ukrstat 2016) and equates to just over 1% (excluding big hydro) of the total electrical power generated in the country (Ukraine, Ministry of Energy and Coal Industry 2017). The power sector requires huge investment, but this will not happen unless it becomes absolutely transparent.

However, Ukraine’s energy sector has made notable progress in the last three years. Prior to 2013, the policy to diversify the country’s energy supplies had been enforced in the wake of political conflicts with Russia: now all Ukraine’s imported gas comes from the EU (Naftogaz 2016). Forty-six per cent of nuclear fuel is now provided by Westinghouse, an American nuclear power company. Before 2013, all nuclear fuel had been imported from Russia, which was also the only external supplier of gas and was responsible for about two-thirds of Ukraine’s total gas consumption. The construction of a centralised storage facility for used nuclear fuel has begun. This will reduce Ukraine’s dependency on Russia and decrease its opportunities to influence Ukrainian politics, especially considering the ongoing military tension. Also, the reform of the gas and
electricity markets has been launched and procedures for supporting renewable energy have been improved. However, despite the progress, more needs to be done.

Ukrainian energy is strongly tied to the Russian and European markets. Russia still plays a critical role in energy supplies for the EU. In 2015 it provided 29.4% of the EU’s natural gas, 25.8% of its solid fuels and 27.7% of its oil imports; this is rather impressive considering that 54% of the EU’s energy consumption is covered by imports (Eurostat 2017). The transit countries between the EU and Russia play an important role in the energy supply chain. About a third of all Russian energy supplies to the EU transit through Ukraine. The critical dependence of the EU on the Ukrainian transit network is believed to be one of the factors that restrained Russia from provoking and supporting a full-scale war in Ukraine. But the status quo cannot be taken for granted. Should the Nord Stream 2 and the Turkish Stream pipelines be built, Ukraine could lose its status as a critical gas transporter and lose almost all of its transit revenues, which could eventually lead to Ukraine becoming less important as a partner to the EU.

The new energy strategy

In August 2017, Ukraine’s new energy strategy was adopted (Ukraine 2017). This document not only addresses the main issues with the production, supply and consumption of energy resources, but includes important elements such as energy efficiency, renewables development, market integration with the EU and so on. The strategy defines three stages of implementation: to 2020, to 2025 and to 2035. During the first stage it is planned to complete a reform of the gas and electricity markets, to increase domestic production of natural gas, to develop the coal market and to reform coal mining in general. By 2020, renewables should amount to 8% of the primary energy supply. The strategy also mentions the need for environmental compliance in energy production, in line with the commitments made by Ukraine to the Energy Community.3

The main task of the second stage is the complete integration of the Ukrainian electricity system with the European Network of Transmission System Operators (ENTSO-E), which will determine most of the changes to the Ukrainian energy sector during 2020–5. In addition, it is planned to attract new investment, to create a new energy infrastructure, to launch new power-generating sources in order to replace existing ones that have reached the end of their useful lives, and to increase the efficiency of district heating utilities. By 2025, it is intended that gas demand will be covered by domestic production.

The last stage of the strategy’s implementation requires Ukraine to launch a national greenhouse-gas trading system, decrease pollution and increase the share of renewables in the total primary energy supply to 25%. The Ukrainian gas transmission system should be modernised to match that of the European market. During all stages, according to the strategy, it will be necessary to take measures to develop nuclear power generation, which will help to decarbonise the energy supply.
However, it is difficult to ascertain whether the strategy addresses all the current threats and offers all the necessary solutions. It makes reference to plans for other state programmes. For instance, a decision on whether to construct a nuclear fuel factory in Ukraine is planned for 2020. Furthermore, a detailed plan for the implementation of the strategy is yet to be developed. At the moment the strategy resembles a decision-making timetable, but it does not provide enough answers. The aforementioned internal and external challenges create strong pressure for immediate action.

**Implementation challenges**

Implementing such strategies has been challenging for Ukraine in the past. Despite the fact that the necessary programmes and plans have been prepared and approved, they have not been fully executed, which has resulted in few effective changes in the energy sector. This is what happened with the 2006 and 2013 energy strategies. Neither was fully implemented, mostly because unrealistic goals and objectives were specified, without consideration for the existing economic conditions. This new strategy, in contrast, mostly does not include specific quantitative goals, but describes desired qualitative changes to the energy sector.

Thus, the new strategy makes progress. It relates to what will be very challenging times for Ukraine, which has so far managed to survive and provide energy to its population without Russian gas supplies by using nuclear power and coal. The new strategy considers Ukraine’s energy sector as an integral mechanism, functioning in accordance with EU principles. Thus, the Ukrainian energy sector will be developed as an essential part of the EU energy system, rather than as a separate one. Therefore, the strategy is balanced and well-adjusted to the current trends and conditions in the EU’s energy sector. There are also high expectations regarding the current energy strategy due to the need to preserve national sovereignty and dignity.

The new strategy faces similar challenges to previous ones. Moreover, it has a non-binding character, which further complicates implementation. In terms of Ukrainian legislation, the energy strategy has been adopted by the Cabinet of Ministers of Ukraine, but this does not ensure mandatory implementation. During discussions in parliament, some deputies proposed that this strategy be adopted as law (NF 2017). This would have increased its importance and made it legally binding. However, the idea was not properly considered, which is why, similarly to previous strategies, it might not be implemented. However, despite this, the new strategy has a better chance of being implemented due to ongoing significant market-based energy reforms and the continuous supervision of the process by Western partners.

The strategy features a step-by-step approach towards implementation based on clearly defined goals and the elaboration of separate action plans for each of the national energy sectors. While this may be a good approach for achieving considerable progress in certain sectors, the current energy challenges require immediate action. Development of the aforementioned action plans will require additional time and this will postpone the
resolution of the existing problems. Therefore, the action plans may have become irrelevant by the point at which they are ready to be implemented.

Another implementation challenge is related to the absence of economic planning for the country’s development. The lack of understanding of the national economic strategy is negatively influencing the possibility of achieving the suggested goals in the energy sector. Without a predictable policy for the economy, it will not be possible to achieve considerable progress in the energy sector. Ukraine’s economy made a modest 2.3% recovery in 2016 despite existing difficulties. The World Bank forecasts gross domestic product growth in 2018 and 2019 at 3.5% and 4% respectively (World Bank 2017). The economy also demonstrated a minor revival after a deep recession in 2014. But to achieve the mid- and long-term goals of the energy strategy, it is crucial that it is firmly connected to economic planning. Some of the strategic goals in the energy sector depend on investment, and the lack of strategic thinking in economic development is certainly affecting how attractive the country is to investors. Investment is the key driver for the energy sector and in the current circumstances investors are waiting for economic and political stability, transparency and predictability. Ukraine has every chance of achieving such progress, given current economic tendencies, but without mutually beneficial cooperation with the EU it will be difficult.

The importance of regional cooperation

Ukraine’s national policy on European integration requires reforms based on the agreed provisions within the EU–Ukraine Association Agreement and the Treaty Establishing the Energy Community. These legal frameworks not only establish a solid fundament for Ukrainian energy policy improvement, but transpose the best European practices and experience to Ukraine’s current energy system, which has been stagnating for years. The driving force of these changes lies in the mandatory character of the commitments made. Based on the recent assessment by the Director of the Energy Community Secretariat, Janez Kopač, Ukraine has already achieved considerable progress in implementing the necessary reforms. However, additional efforts are required, for example, unbundling in the gas and electricity sectors and improving energy efficiency policy (YouTube 2017).

The energy strategy incorporates the necessary actions to achieve full compliance with our Euro-integration commitments in the energy sector. Cooperation with our European partners will help Ukraine to overcome all its difficulties and to become fully integrated into the EU energy sector, which will bring mutually beneficial results.

The EU–Ukraine Association Agreement clearly defines the scope of cooperation, which is aimed at ‘the enhancement of energy security, competitiveness and sustainability’, and focuses on the importance of the cooperation for the ‘promotion of economic growth and to making progress towards market integration’ (EU 2014). These core principles are the basis for successful regional cooperation, especially in gas and electricity. It would potentially be possible to unite the technical capacity of Europe’s gas infrastructure and Ukrainian gas storage and related infrastructure to form a strong and reliable Eastern European gas hub, which would facilitate our common
efforts to withstand energy security threats and create a competitive regional gas market. On 28 June 2017, on accession to ENTSO-E, Ukraine signed an agreement which creates a framework for the integration of the Ukrainian power network with that of continental Europe. According to Ukrenergo’s estimates, synchronisation with ENTSO-E could potentially increase the export of Ukrainian electricity to European countries by 18–20 billion kilowatt hours (CMS Law Now 2017). This will have a positive effect on the establishment of a competitive market in Ukraine and will strengthen regional energy security.

Cooperation with the EU is driving Ukrainian energy markets from deadlock towards efficient operation. Within the existing legal framework, the EU is closely controlling the process of implementing the necessary steps for reforms in the energy sector, which is ultimately intensifying Ukraine’s progress with reforms. Both sides have agreed to pursue a policy of cooperation based on mutual trust and solidarity. Therefore, if one of the parties is not fulfilling its obligations within existing commitments, then the efficiency of cooperation decreases. Maintaining cooperation based on mutual trust and solidarity is a win–win situation, particularly since the regional energy security and geopolitical challenges are pronounced.

The largest stumbling block in EU–Ukraine energy relations is the Nord Stream 2 pipeline project. Construction of the pipeline will not only undermine regional stability, but will also have a negative effect on stability within the EU. The good news is that the EU ‘will continue supporting Russian gas imports transiting through Ukraine’ (European Commission 2017) and Ukraine’s gas transmission system will continue to be in demand by the EU. A common policy for a future vision regarding gas imports, based on legal superiority and recognised rules, will significantly increase the positive effect of the mutually beneficial interdependency between both sides.

In the context of the Gas Directive amendment, the EU has also recently emphasised that its ‘preference is a strong regional cooperation’ (European Commission 2017). It is clear that such an intention will have a positive influence in terms of market relations and economic benefits. We should also see this as an opportunity to strengthen joint capabilities to confront the existing challenges of energy security.

Conclusions

The most effective tool for implementing Ukraine’s new energy strategy is regional cooperation. This could help Ukraine conduct vital reforms and strengthen its position in the region, which would further increase its security and its ability to resist existing threats. Ukraine clearly has great potential in the energy sector and closer Ukraine–EU cooperation will only make both stronger. Additionally, cooperation will enable the creation of new energy markets, lead to an exchange of experiences and best practices that will strengthen existing norms and standards, and facilitate the building of cross-border interconnections with the purpose of withstanding energy security challenges. EU assistance in implementing the energy strategy will help Ukraine through the turbulent times
it is currently facing. This assistance will also help the country to finish the ongoing reforms that will ultimately strengthen its position in the region. At the same time, the relationship will strengthen the EU’s own energy security. However, to speed up this cooperation, Ukraine has a huge amount of work to do in the energy sector, including achieving the goals outlined in the strategy.

Notes
1. Diversification means increasing the number of energy suppliers to the country and correspondingly reducing the importance of each or just decreasing the risk from a certain supplier.
2. Information obtained in correspondence from a request to the Ukraine State Statistics Service, dated 2017.
3. The Energy Community is an international organisation which brings together the EU and its neighbours to extend the European Energy market and to establish a stable regulatory framework.

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