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# Assessment of Belarus' energy strategic situation in 2020-2022 and its likely consequences

Kari Juutilainen

- Belarus' energy strategic situation has gone through drastic changes after August 2020.
- Belarus' room for maneuvering in energy matters is very limited after the new sanctions were implemented, and time is not on Belarusian side. Lack of financing from sources other than Russia is another limiting factor.
- Astravets NPP will likely cause more financial problems than improvements, and Belarus' overreliance on Russian natural gas will be replaced with a new dependency on Russian nuclear fuel.

Since early 2020, Belarus' energy policy has gone through a roller coaster of events. The year started with a rapprochement between the West and Belarus along the promises of energy supply diversification. But new energy relations turned the opposite direction due to an internal crisis following the August 2020 Presidential elections. Belarus has been living under President Lukashenko's authoritarian rule since 1994 and Belarusian policy and energy actions are tightly intertwined with Lukashenko's personality, his political aims and his regime's survival.

### Belarus - hydrocarbons without hydrocarbons

Belarus' does not have significant oil and gas resources, but hydrocarbons are the regime's mainstay – in both import and export sense. Petrochemical production represented approximately 10% of Belarus' GDP, 25% of its exports, and 20% of its budget revenue in 2020.<sup>2</sup> Firstly, Belarus imports about 85% of the nation's primary energy supply, making Belarus one of the least energy self-sufficient countries in the world (See Figure 1).<sup>3</sup> Secondly, Belarus has also been an important part of Russia's oil and gas transit corridor to Western Europe. Beside transit incomes, Belarus has benefited when it has bought Russian crude oil with cheap internal Russian prices and then refined and exported the oil by charging market prices. However, due to Russian tax reforms, which were implemented starting in 2019, the price difference and this source of income is drying up. In addition, the Russian Druzhba oil pipeline is bringing transit incomes to Belarus while transporting Russian crude oil to the West. The economic significance of the gas transit is minor when compared to the oil sector, but the Yamal-Europe pipeline, which transports Russian gas to Europe, brings about 250-300 million dollars to Belarus in transit fees.<sup>4</sup>

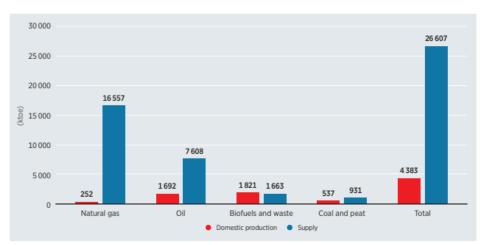


Figure 1: Domestic energy production vs. supply by source, 2019. (Source: Irena.org - Renewables Readiness Assessment: Belarus (2021).<sup>5</sup>

## Nuclear power as an energy security and energy income solution

At first glance, the plan of building the Astravets nuclear power plant (NPP) made sense after 2007 Russia-Belarus energy dispute. In theory, it would have improved Belarus' energy security, decreased dependency on Russian gas and brought export income from selling electricity to neighboring countries, especially after Lithuania closed its Ignalina NPP in 2009 and become a net energy importer. However, due to perceived safety risks of the Astravets' NPP, Lithuania legislated a law in 2017, which prohibited the country from buying electricity from the Astravets NPP. Also, Latvia and Estonia joined the boycott later. Finally, in May 2021, Ukraine also stopped buying electricity from Belarus at least until October 2021. Russia is also an unlikely buyer of Belarusian energy, since the Smolensk NPP,

which is close to the Belarusian border is, has a surplus of electricity. Therefore, it is likely that Belarus will have to consume all of its excess electricity from the Astravets NPP. <sup>6</sup> However, there are grand plans to increase domestic use of electricity at the cost of reducing the consumption of natural gas.<sup>7</sup>

#### Belarus – union state with Russia, but still looking for energy security

Even before the August 2020 events, it was often claimed that Belarus was under Russia's thumb and it was about to become absorbed into the Union State, but the situation has been more complex. Belarus has a turbulent history of energy conflicts with Russia, and Belarus was the first country that Russia opted to punish by cutting of its oil, and gas supplies in February 2004. Before the August 2020 events, Belarus was keenly diversifying its energy imports, building energy security infrastructure inside Belarus, while also continuing to develop its own energy production. The steps towards greater energy security can also be viewed from the perspective that Belarus has rejected Russia's proposals of allowing it to build air bases on Belarussian soil. The most important signs of Belarusian maneuvering were the new oil imports from Norway, Saudi Arabia and United States through Lithuania. Belarus also started to import oil from Azerbaijan through the Ukrainian port of Odessa. This kind of oil import diversification was not in interests of Russia. Lukashenko also received from Beijing a \$500 million loan in 2019 after discussions for a similar loan from Russia was rejected.

After the August 2020 internal turmoil, Lukashenko was seeking support from Russia while relations with the West deteriorated further. However, some of the recent steps indicate that Belarus is still looking towards increasing its room for maneuvering vis-à-vis Russia. Due to Russian pressure, Belarus has started to export its oil products via the Russian harbor of Ust-Luga at Gulf of Finland in late 2020, despite the fact that it makes less economic sense than to export the oil products via the Lithuanian port of Klaipeda. Depending on the oil products, the transshipment costs may be over 50 percent higher on the Russian route compared to the Lithuanian one. The level of transshipment tariffs in Russian ports and transit is based on the ship-or-pay formula, which favors Moscow. Because the oil export agreements favors Russia, Belarus is continuously trying to renegotiate its oil and gas supply, and gas transit contracts with Russia. Because Russian oil extraction taxation has been reformed (due to the so-called tax maneuver), the price discount for Belarusian importers have been gradually reduced annually and price for Belarus will reach 90% of the market value in 2021.

## The planned way forward

There are two ways how Belarus can strengthen its energy security: it can increase its domestic energy production and it can diversify energy supplies from abroad.

The main priorities of the Belarusian energy policy and strategy are to provide reliable and sustainable energy for the national economy, while reducing energy import dependence and improving the sector's financial stability. Besides nuclear power, the long term goal of Belarus is to increase the share of power generated from coal and renewables. To this end, in 1994 it has introduced a green feed-in tariff (FIT) to attract more investment in renewables. <sup>17</sup> Belarus has been producing oil and gas since 1965 and it found new oil fields in 2020, but size of the proved reserves are insignificant on a strategic level. <sup>18</sup> In 2019, the country's crude oil production was about 1.7 million tons and gas production stood at 252,000 tons (oil equivalent). Only 2% of Belarus' natural gas is produced locally. <sup>19</sup> Belarus is also the world's third-largest producer of peat with 537 kilotons of oil equivalent in 2019 (the country's total energy demand was 27 million tons of oil equivalent). <sup>20</sup>

The Astravets NPP will provide domestic energy to Belarus, but it will need to rapidly convert its key industries and sectors from fossil fuels to electricity, while dramatically increasing the country's electricity consumption. In the current conditions of a deepening economic crisis and growing international pressure on the regime, a rapid increase in electricity consumption does not seem to be feasible. It is not an easy task to create new electricity-intensive industries or scale up existing ones on a tight budget. These kinds of conversions usually require a lot of time and demand multibillion dollar investments.<sup>21</sup> The loan payment is also additional problem for Belarus. In 2012 Russia issued a loan of up to \$10 billion to Belarus and this loan financed 90% of the construction costs of the Astravets NPP. The remaining 10% would be paid by Belarus. The repayment was supposed to begin six months after the

power plant was put into operation, but no later than 1 April 2021. Also, the repayment was to be in 30 equal shares every six months with 50% of the overall amount attracting interest at a rate of 5.23% a year and the rest at the LIBOR rate for 6-month deposits in US dollars, increased by a margin of 1.83% a year. The restructured loan protocol was ratified by Russian parliament in March 2021. The protocol extends the period of use of the loan until the end of 2022 (by two years). In addition, a fixed interest rate on the loan is set at 3.3% a year, and the start date of the repayment of the principal debt on the loan has been deferred from 1 April 2021 to 1 April 2023. If debt is not repaid on time, after 180 days, the entire amount, including any interest on the loan will be consolidated and must be repaid immediately.<sup>22</sup> Finally, while the Astravets NPP might in the long run somewhat reduce the country's acute reliance on Russian natural gas, Belarus will remain dependent on Russian nuclear fuel supplies and waste utilization for decades to come. In addition, Russian nuclear experts will be required to run the Astravets NPP for the foreseeable future.<sup>23</sup>

Regarding import diversification, Belarus has started to build an oil trunk pipeline, which will connect Gomel and Gorki in 2023 (see map 1) and thus enable inter-Belarusian crude oil deliveries between its two oil refineries at Mazyr and Novopolotsk (also known as Naftan-refinery) and their oil storages.<sup>24</sup> This trunk pipe will allow the Novopolotsk oil refinery to receive oil not only from Russia, but also from Poland and Ukraine significantly cheaper and quicker than before.<sup>25</sup> Belarus is also continuing to build strategic oil reserves, which, at least in theory, should not be a priority, if Belarus was indeed seeking unification with Russia.<sup>26</sup> When Belarus started crude oil imports from countries other than Russia, it was transported by railway cars from Lithuania and Ukraine.<sup>27</sup> As late as September 2020, there were mentions about potential reverse oil flow arrangements via Druzhba oil pipeline between Poland and Belarus, as well as between Ukraine and Belarus. However, these plans are now in hold due to the current political situation.<sup>28</sup>

#### Sanctions and other new developments in 2021

Belarus' room for maneuver in energy security is quickly diminishing despite all of its efforts. The August 2020 events alienated Belarus from the West and in May 2021 the aerial hijacking of the Belarusian journalist and dissident Roman Protasevich brought sanctions that hit Belarus' energy strategy and future economic prospects increasingly hard.

The European Union imposed a ban on any new contracts for the import or transfer of all Belarusian petroleum products, including liquefied petroleum gas (LPG) and bitumen. Belarusian companies will be unable to renew current agreements with their EU-based clients, which accounted for the majority (56 percent) of Belarus' oil products exports. In addition, when the existing contracts will expire, Belarus will be cut off from cooperation with the Baltic States' railway companies and transshipment terminals. This will cause significant trouble for Belarus, as Russian ports are likely to have limited capacity in the near future for handling transshipments of Belarusian oil products. There are also Western sanctions against Belarusian oil companies like OAO Naftan, the Belarusian Oil Trade House and Belneftekhim. On top of that, there is also a general impasse from EU-originating financing and insurance.<sup>29</sup> Additionally, there are might be difficulties for providing crude oil to Novopolotsk (Naftan) refinery, since it is 100% owned by Belarusian state. Rosneft and Surgutneftgaz had not reserved any pipeline volumes for transporting oil to the Belarusian refinery Naftan for the third quarter of 2021 due to US sanctions. The Mozyr refinery is not targeted by US sanctions since Belarus co-owns the Mozyr refinery with Russia's Slavneft, a 50-50 joint venture between Rosneft and Gazpromneft.<sup>30</sup> Most recently, in August 2021, the US, the UK and Canada introduced additional sanctions on the Belarussian energy sector. In general terms, Western sanctions are not yet all-encompassing and there is still room for expansion against specific petroleum products.<sup>31</sup>

Nord Stream 2 is yet another challenge for Belarus. At the end of the 2020, with uncertainty around the future of Nord Stream 2 at its height, the Belarusian segment of the Yamal-Europe pipeline was fully booked (Q4: approx. 8.9bn cubic meters) for the delivery of Russian gas to Europe. This year Gazprom decided to dramatically reduce the transit through Belarus in the last quarter of 2021 to 1.9 billion cubic meters, in the anticipation that Nord Stream 2

will be completed by the end of the year. <sup>32</sup> These diminishing transit incomes will make Belarus' economical position more dire as it will lose hundreds millions of dollars in annual gas transit income.

#### Conclusion and outlook to 2022

The energy security situation of Belarus is worsening and it will very likely have grave politico-economic consequences. Western sanctions will increasingly effect Belarus' once existing oil contracts will end and new ones will be prevented from being signed. In fact, it is estimated that sanctions have already caused a 2.9% loss of Belarus' GDP.<sup>33</sup> Furthermore, Nord Stream 2 will decrease gas transit incomes and the Astravets NPP has huge challenges in exporting electricity abroad. While the Astravets NPP could potentially replace some of the natural gas that is being imported from Russia, Belarus will not likely have the time and money to implement this kind energy transformation. Also, the loan, which financed the construction of the Astravets NPP, will be difficult to pay, if electricity cannot be exported. The sanctions against Belarus are perfectly justifiable, but it is likely they will drive Belarus even more into Russia's grip.<sup>34</sup> While Putin and Lukashenko are officially promoting the excellent relations of Russia and Belarus, Putin is doing everything to take advantage of Belarus' increasing international isolation and increasing Russian influence in Belarus. Time is not on the Belarusian side, and it is likely that Belarus has to make concessions like allowing Russian bases on Belarusian soil (besides existing communications and early warning sites). From a purely energy security point of view, Belarussian steps of the past few years were made in the right direction (with exception of the Astravets NPP), but its political actions domestically and abroad have jeopardized its own energy security and diversification plans.



Map 1: Oil pipelines and oil refineries of Belarus. (Source: Esperis https://rusi.org/commentary/belarus-and-russian-oil-all-not-it-seems)



Map 2: Gas pipelines of Belarus. (Source: https://www.gazprom.com/f/posts/29/284322/map\_belaruss\_eng.jpg)

<sup>&</sup>lt;sup>1</sup> https://www.voanews.com/usa/pompeo-says-us-can-supply-belarus-100-oil-gas

<sup>&</sup>lt;sup>2</sup> https://www.osw.waw.pl/en/publikacje/analyses/2020-05-22/belarus-a-difficult-start-to-oil-supply-diversification

<sup>&</sup>lt;sup>3</sup> https://www.belstat.gov.by/en/ofitsialnaya-statistika/real-sector-of-the-economy/energy-statistics/annual-data/energy-balances-/; https://www.iea.org/reports/belarus-energy-profile

<sup>&</sup>lt;sup>4</sup> https://www.gmfus.org/blog/2021/07/23/belarus-energy-sector-faces-challenging-times; https://charter97.org/ru/news/2021/7/5/428481/

<sup>&</sup>lt;sup>5</sup> https://irena.org/publications/2021/Jul/Renewables-Readiness-Assessment-Belarus

<sup>&</sup>lt;sup>6</sup> https://www.gmfus.org/blog/2021/07/23/belarus-energy-sector-faces-challenging-timesD

<sup>&</sup>lt;sup>7</sup> https://eng.belta.by/economics/view/belenergo-talks-about-broader-use-of-electricity-in-belarus-140208-2021/

<sup>8</sup> https://vilniusinstitute.lt/wp-content/uploads/2020/06/Anais-Marin-Union-State-of-Belarus-and-Russia.pdf

<sup>&</sup>lt;sup>9</sup> https://jamestown.org/program/belaruss-role-in-east-european-energy-geopolitics/

<sup>&</sup>lt;sup>10</sup> https://www.reuters.com/article/us-russia-belarus-airbase-idUSKBN1WB1NT

<sup>&</sup>lt;sup>11</sup> https://www.lrt.lt/en/news-in-english/19/1186684/a-significant-shift-us-oil-for-belarus-reaches-lithuania

<sup>12</sup> https://www.azernews.az/oil\_and\_gas/167660.html

<sup>&</sup>lt;sup>13</sup> https://chinaobservers.eu/the-curious-timing-of-chinese-loan-to-belarus/

<sup>&</sup>lt;sup>14</sup> https://www.reuters.com/article/us-belarus-oil-russia-idUSKBN26Z1N9

<sup>&</sup>lt;sup>15</sup> https://www.osw.waw.pl/en/publikacje/analyses/2021-02-25/attempt-a-new-start-energy-cooperation-between-belarus-and-russia

<sup>&</sup>lt;sup>16</sup> https://www.osw.waw.pl/en/publikacje/analyses/2021-02-25/attempt-a-new-start-energy-cooperation-between-belarus-and-russia

<sup>&</sup>lt;sup>17</sup> https://www.iea.org/reports/belarus-energy-profile

<sup>&</sup>lt;sup>18</sup> https://www.ogj.com/exploration-development/discoveries/article/14177155/new-oilfields-discovered-inbelarus

<sup>&</sup>lt;sup>19</sup> https://irena.org/publications/2021/Jul/Renewables-Readiness-Assessment-Belarus

<sup>&</sup>lt;sup>20</sup> https://www.iea.org/reports/belarus-energy-profile; https://irena.org/publications/2021/Jul/Renewables-Readiness-Assessment-Belarus

<sup>&</sup>lt;sup>21</sup> https://www.gmfus.org/blog/2021/07/23/belarus-energy-sector-faces-challenging-times

<sup>&</sup>lt;sup>22</sup> https://www.neimagazine.com/news/newsrussia-amends-terms-for-belarus-npp-loan-agreement-8633297

<sup>&</sup>lt;sup>23</sup> https://www.nytimes.com/2020/03/21/world/europe/belarus-russia-nuclear.html

 $<sup>^{24}\</sup> https://eng.belta.by/economics/view/construction-of-pipeline-to-connect-northern-southern-oil-trunk-lines-begins-in-belarus-134458-2020/$ 

<sup>&</sup>lt;sup>25</sup> https://eng.belta.by/printv/economics/view/construction-of-connecting-pipeline-between-belarusian-oil-refineries-to-begin-in-october-132547-2020/

<sup>&</sup>lt;sup>26</sup> https://eng.belta.by/president/view/lukashenko-orders-to-create-strategic-petroleum-reserve-129578-2020/; https://eng.belta.by/economics/view/plans-to-increase-oil-tank-farm-storage-capacity-in-belarus-up-to-1m-tonnes-by-2025-134462-2020/

<sup>&</sup>lt;sup>27</sup> https://www.lrt.lt/en/news-in-english/19/1136372/belarus-calls-for-regular-oil-imports-via-baltics-as-first-shipment-arrives-in-lithuania

<sup>&</sup>lt;sup>28</sup> https://eng.belta.by/economics/view/gomeltransneft-druzhba-comments-on-reverse-oil-supply-agreements-133356-2020/

<sup>&</sup>lt;sup>29</sup> https://jamestown.org/program/eu-sectoral-sanctions-put-a-heavy-burden-on-lukashenkas-regime/

<sup>&</sup>lt;sup>30</sup> https://jamestown.org/program/russian-energy-companies-halt-oil-supplies-to-naftan-refinery-in-belarus-because-of-us-sanctions/

<sup>&</sup>lt;sup>31</sup> https://www.argusmedia.com/en/news/2242540-us-uk-and-canada-fortify-belarus-sanctions-effort

<sup>32</sup> https://www.gmfus.org/blog/2021/07/23/belarus-energy-sector-faces-challenging-times

<sup>33</sup> https://www.kommersant.ru/doc/4935608

<sup>&</sup>lt;sup>34</sup> https://www.washingtonpost.com/outlook/2021/07/20/can-sanctions-change-behavior-belarus/