Hungary and the Czech Republic's Approach to Gas Security

Elias Langvad

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INTRODUCTION

The strategic role of natural gas has long coloured international relations and as a result, natural gas security has frequently remained a top concern for most governments. Since natural gas has historically been supplied through land-based pipelines, gas-importing countries have often had to rely on a limited number of suppliers. Because of their geographical position and historical past, many Central and Eastern European countries have been heavily dependent on Russia for their natural gas imports which has allowed Russia to use natural gas as a foreign policy tool to assert influence over these countries. The Czech Republic and Hungary, two countries in a similar position of being natural gas import dependent on Russia, are familiar with the problems that may arise when being too reliant on a single supplier. Russia’s decision to turn off the gas to Ukraine, which is an important transit route to the Czech Republic and Hungary, in 2006 and again in 2009 left the two countries without gas imports for a longer period of time, affecting their natural gas situation in various ways. The incidents showed the willingness of Russia to use its natural resources as a tool to assert influence, and revealed the insecurity of relying on a single source for natural gas supply.

The Czech Republic imports approx. 60% of its natural gas from Russia, with the rest mainly arriving from Norway, while for Hungary the numbers are around 80%. Natural gas constitutes around 31% of Hungary’s total primary energy supply (TPES), and 17% in the Czech Republic. These numbers show a vulnerability in terms of importing natural gas and the risks of disruption. Also visible through the numbers is the different approach the two countries have taken. The Czech Republic imports natural gas from Norway in addition to their Russian supplies, while Hungary remains almost completely dependent on Russia for their imports, either directly through Russia or through pipelines such as HAG via Austria, with the remaining gas usage coming from domestic production, and minor imports from Germany and France. The domestic production of Hungary has fallen by 41% since 2005, from 3 bcm/y to 1.8 bcm/y, revealing their increasing dependency on gas imports. The two countries have adopted different strategies in dealing with natural gas security, with supply diversification being one important factor. While diversification of supply is crucial when it comes to achieving natural gas security, other factors are to be considered as well. Gas storages, transit diversification, domestic issues, and whether the companies operating in the countries are private or government-owned are other issues to take into consideration. This paper will

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1 This study is based on the author’s thesis. See Langvad, 2017.
look at these factors and how the Czech Republic and Hungary have dealt with them, assuming they both strive to achieve natural gas security. An important element to consider is also the relation these two countries have with their main supplier, Russia, and what effect that might have on their strategies.

**Diversification of Supply and Transit Routes**

Hungary and Czech Republic were part of the so-called “Eastern Bloc” for decades which have had profound consequences for their domestic and international policies. Their economies were adjusted toward the Soviet Union and they were heavily dependent on gas imports from the Brotherhood pipeline.\(^5\) The Brotherhood pipeline stretched from the Urengoy gas field in Siberia to Austria via Ukraine and Czechoslovakia, and was later expanded with a branch to Hungary, quickly becoming the backbone of the Soviet Union – Central Europe gas dependency. Their infrastructure was therefore modelled after the gas imports from the East, and a diversification of supply and transit routes would consequently have to be mainly financed by each respective country.

One of the first goals of the independent Czech Republic was to diversify their import portfolio and seek alternatives to Russia for importing gas.\(^6\) Due to the infrastructure being adapted to the East, few options were viable. However, in 1997 the Czech government managed to conclude a contract with Norway for importing gas through Germany, a move that former Czech Foreign Minister, Josef Zieleniec labelled as a “key strategic decision”.\(^7\) This contract now supplies up to 35% of Czech Republic’s total gas imports.\(^8\) The Czech decision to diversify away from Russia was heavily criticised by the Russian government, who tried to persuade the Czech Republic not to diversify by offering low prices and supply stability for their gas, but to no avail. Several Czech politicians saw the diversification project as another way of loosening the country’s ties to the former Soviet Union which could then lead to membership of the European Union (EU) and the North Atlantic Treaty Organization (NATO). The diversification away from Russia occurred when the general anti-Russian sentiment was strong in the Czech Republic. This was enough to justify the diversification efforts even though they were expensive and would bring more expensive hydrocarbons from the west compared to Russian supplies. Nevertheless, the Norwegian gas is swapped for Russian gas in Germany. The important part however, is that Norwegian gas can be imported to the Czech Republic during a crisis, which happened in 2006 and 2009.\(^9\) This allowed the Czech

\(^{5}\) Dąborowski, 2015.
\(^{6}\) Vlček and Černoch, 2013.
\(^{8}\) Vlček and Černoch, 2013.
\(^{9}\) The term “Ukrainian crisis” refers to the gas crisis in 2006 and 2009.
Republic to come away relatively unscathed from the crisis, in comparison to other Central and Eastern European (CEE) countries.

The Czech Republic has further managed to diversify their supply. Small companies in the country are buying gas from the German spot market, where traders buy gas under short-term contracts from supplier such as Wingas, Wintershall, and Lumius.\textsuperscript{10} This gas can be up to 30% cheaper than the gas provided by Gazprom. This development is relatively new, and can be attributed to the increased connection with the western markets through pipelines and interconnectors. Moreover, the Czech Republic and Poland are planning to construct an interconnector, Stork II, which is planned to provide liquefied natural gas (LNG) from the Świnoujście terminal, a move that will diversify the Czech Republic’s gas supply further.\textsuperscript{11} The LNG will be imported from the USA and Qatar to Poland where it then will be transferred down to the Czech Republic. However, it should be noted that the Stork II project has

\textbf{Map 1}\textsuperscript{12}

\textbf{Nord Stream and the OPAL Extension}

\begin{center}
\includegraphics[width=\textwidth]{map.png}
\end{center}

\begin{flushleft}
\textsuperscript{10} Czech Government, 2014.
\textsuperscript{11} Ibid.
\textsuperscript{12} Source: OPAL, 2017.
\end{flushleft}
faced problems. It was close to being abandoned last year, but after efforts from the Czech Republic, the project was formally confirmed by a bilateral memorandum (which is not legally binding), although the project is progressing slowly.\footnote{Denková, 2016.} The Czech Republic has expressed hope for the project, and while the LNG imports from Poland are likely to be more expensive than gas from Russia, it seems like it is a price the country is willing to pay. The proposed pipeline is a Project of Common Interest (PCI), which are considered important for the energy security of the EU and allows the costs to be partly covered by the Union.\footnote{Gaz-System, 2016.} However, if the proposed Nord Stream II pipeline, running parallel to Nord Stream, from Russia to Germany is completed, the Czech Republic may focus more on it since it could allow the Czech Republic to be a major transit country through the OPAL pipeline extension, as can be seen on map 1.

While the Czech Republic has managed to diversify their supply to a relatively large extent, Hungary has not managed to do so. This vulnerability is noted in the Hungarian energy strategy where it says "Therefore, with a view to the security of... natural gas supply of the EU, both supply sources and transportation routes will need to be diversified in the medium term. This is all the more true of Hungary, one of the most vulnerable countries of the continent as far as traditional energy resources are concerned, being particularly dependent on Russian energy exports."\footnote{Hungarian Government, 2012 b, p. 108.} The vulnerability has been acknowledged by the government, but few actions have been taken to solve it prior to the Ukraine gas crisis. The crisis was a wake-up call and after 2009 the Hungarian government started the construction of interconnectors and pipelines with Romania, Slovakia, Serbia, and Croatia. The Arad–Szeged pipeline with Romania remains a problematic issue for the two countries since Romania is reluctant to export gas to Hungary, with Hungary also accusing Romania of delaying the construction of important infrastructure. The issue has been brought to the European Commission’s General Directorate for Competition, which has opened an investigation to assess whether Romania’s transmission system operator (TSO), Transgaz, has been hindering exports to Hungary.\footnote{European Commission, 2017.}

Although the interconnector with Slovakia can provide Hungary with up to 11 million cubic meters (mcm) a day, the gas is mostly Russian, which does not solve the issue of diversification of supply. While the 2011 Hungarian energy strategy considered the project a priority infrastructure project, there has only been minor flow from Slovakia and the utilization of the interconnector remains limited. The interconnector with Serbia is idle due to technical and pricing reasons, and when functioning it is more likely to be used to export gas from Hungary to the Serbian market than the other way around, as happened in 2009. The interconnector with Croatia is probably the one with the most potential. Croatia is currently planning to build a floating LNG terminal on the northern Adriatic island of Krk, which will have the capacity of 2 billion cubic meter (bcm) annually, with plans to eventually increase
The possibility of importing LNG from Croatia would see Hungary increasing their natural gas security by diversifying their supply. The interconnector with Croatia has already been built, but the completion of the terminal has been delayed and is expected to be finished in 2019. The interconnector is planned to be bi-directional, but at the time of writing only transmission from Hungary to Croatia takes place, because of lack of infrastructure in Croatia. Moreover, there remains political quarrels between Hungary and Croatia to be solved before potential gas trade can take place. Although, in late June, Hungary and Croatia signed a letter of intent on reverse gas flows between the two countries. According to the letter, reverse gas flows will be enabled by the first quarter of 2019. The Hungarian Foreign Minister, Péter Szijjártó, has called the document strategically important and crucial for Hungary’s energy security. However, many issues remain to be solved before the project can be finalised.

While Hungary is waiting for the interconnector with Romania and Croatia to work properly, the government has turned to Russia. In July this year, the Hungarian Foreign Minister signed an agreement with Gazprom on the preparatory work to build the Hungarian pipeline section of the southern gas transport route. Through this pipeline, gas will be transported from Turkey through Bulgaria and Serbia to Hungary, and may be able to transport up to 8 bcm by late 2019. Hungary will be able to diversify its transport routes, but the gas will remain Russian which does not solve their problem of mainly depending on a sole supplier.

Hungary has also constructed pipelines before the Ukraine crisis. The Austrian-Hungarian interconnector (HAG) was established in 1996, and can provide Hungary with other gas than Russian, mostly from the western markets. However, the capacity is relatively limited with a maximum technical capacity of 14.4 mcm/day and as of now, the gas arriving through the HAG interconnector is mostly Russian gas from a different supplier, providing little gas security in terms of supply diversification. The Czech Republic, in contrast to Hungary, can switch to Norwegian gas from its northern pipelines, giving the country more flexibility.

The Czech Republic and Hungary have managed to diversify their natural gas supplies to different extents. While Czech Republic has the ability to import gas from Norway, Hungary lacks the geographical advantage the Czech Republic enjoys, with its proximity to western European markets. Hungary has therefore opted for the construction of new interconnectors with many of their neighbours, which has yet to pay off.

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17 LNG Hrvatska, 2017.
18 Ministry of Foreign Affairs and Trade, 2016.
19 Ministry of Foreign Affairs and Trade, 2017.
20 Dunai, 2017.
GAS STORAGE

While the diversification efforts can be seen as somewhat lacking, the gas storage capacity of both the Czech Republic and Hungary are amongst the highest in Europe. As with the diversification of supply and transit routes, the importance of gas storage was evident under the Ukraine crisis, especially during 2009. The storages of both countries allowed them to weather the crisis, without imposing any restrictions on customers, even managing to export gas to their neighbours in acts of solidarity. However, after the crisis the governments made plans to expand the current storages and construct new ones, as a precaution for any possible further disruption of supply.

There are currently 9 gas storage facilities operating in the Czech Republic. They are located in Háje, Dolní Dunajovice, Lobodice, Tvrdoňice, Štramberk, Tŕanovice, Uhřice, Dolní Bojanovice, and Dambóřice. A 10th gas storage, in Rožná owned by Česká Plynárenská a.s. and financed by GSCeP a.s., is under construction and is expected to be completed in 2018. The Dolní Dunajovice gas storage is used to supply the Slovak gas market, and retailers sometimes also use the underground storage in Láb, Slovakia. Out of these ten, Innogy Gas Storage s. r. o. (previously RWE Gas Storage) owns six, which all are connected to the gas pipeline network and they are labelled as Virtual Gas Storage Reservoir and have a working gas volume of 2.9 bcm. Other operators are Moravia Gas Storage a. s., Moravské naftové doly Gas Storage a.s., and SPP Storage s.r.o., all Czech companies. A summary of the gas storages can be seen on table 1. In 2011, the overall capacity of the gas storages was around 3 bcm, which made up approx. 1/3 of the annual consumption in the country. With access to the gas storage in Láb, the capacity could reach 3.5 bcm. In 2014, the gas storage capacities had been increased and could boast 3.5 bcm without the access to Láb. If the storages are completely full, they would be able to supply peak demand for approximately 50 days. Moreover, the Minister of Industry and Trade, Jan Mládek, have said there are plans to expand the storages even further. The aim is to have enough capacity to cover 50% of the annual consumption, which would amount to approx. 4.5 bcm.

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22 Vlček and Černoch, 2013.
24 Vlček and Černoch, 2013.
Table 1
The Gas Storage Facilities in the Czech Republic

<table>
<thead>
<tr>
<th>Facility location</th>
<th>Operator</th>
<th>Capacity (mcm)</th>
<th>Operational*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lobodice</td>
<td>Innogy Gas Storage s. r. o.</td>
<td>177</td>
<td>1995</td>
</tr>
<tr>
<td>Štramberk</td>
<td>Innogy Gas Storage s. r. o.</td>
<td>480</td>
<td>1983 (1993, 2000)</td>
</tr>
<tr>
<td>Dolní Dunajovice</td>
<td>Innogy Gas Storage s. r. o.</td>
<td>900</td>
<td>1989</td>
</tr>
<tr>
<td>Háje</td>
<td>Innogy Gas Storage s. r. o.</td>
<td>72</td>
<td>1998</td>
</tr>
<tr>
<td>Třanovice</td>
<td>Innogy Gas Storage s. r. o.</td>
<td>530</td>
<td>2000 (2012)</td>
</tr>
<tr>
<td><strong>Virtual Gas Storage Reservoir</strong></td>
<td></td>
<td>2900</td>
<td></td>
</tr>
<tr>
<td>Uhřice</td>
<td>Moravské naftové doly Gas Storage a.s.</td>
<td>235</td>
<td>2001</td>
</tr>
<tr>
<td>Dolní Bojanovice</td>
<td>SPP Storage s. r. o.</td>
<td>576</td>
<td>1999</td>
</tr>
<tr>
<td>Damborice</td>
<td>Moravia Gas Storage a.s.</td>
<td>460</td>
<td>2016</td>
</tr>
<tr>
<td>Rožna</td>
<td>Česká Plynárenská a.s.</td>
<td>180</td>
<td>2018</td>
</tr>
</tbody>
</table>

* Year of expansions to the gas storages are in brackets.

However, it must be noted that the Czech government does not own these storages nor do they order the construction of them. What the government can do is to give incentives for companies to build gas storages. The Czech government had for example granted the Damborice facility an exemption from having to allow other gas suppliers to use it. However, the European Court of Justice rejected that exemption and the subsequent joint-appeal by the government and Moravia Gas Storage a.s., was rejected by the EC.27

Gas storage plays a similar important role for Hungary, where in the Hungarian energy strategy it says that "The Hungarian natural gas storage capacities and their development contribute to the security of the supply of the entire region".28 While Hungary’s diversification strategy has not resulted in a large increase in the gas security, their gas storages on the other hand have proved to be a bigger success. Hungary’s gas storage capacity is approximately 7 bcm, and it is maintained at approximately 4 bcm, which can cover 2/3 of Hungary’s winter gas demand. Hungary has, as of 2017, the fifth-largest storage capacity in the EU.29 Most the gas storages in Hungary is operated by the state company MVM Group, who bought them from the German company E.ON in 2013, giving the government control over

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26 Source: Compiled by the author.
28 Hungarian Government, 2012 b, p. 27.
29 Butler, 2017.
natural gas trading and storage.\textsuperscript{30} The other gas storage is operated by MMBF which is partly owned by Mol Group in which the Hungarian government has a 21% share. A summary can be seen on table 2.

<table>
<thead>
<tr>
<th>Facility location</th>
<th>Operator</th>
<th>Capacity (mcm)</th>
<th>Operational</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zsana</td>
<td>MVM Group</td>
<td>2170</td>
<td>1996</td>
</tr>
<tr>
<td>Hajdúszoboszló</td>
<td>MVM Group</td>
<td>1640</td>
<td>1981</td>
</tr>
<tr>
<td>Pusztaederics</td>
<td>MVM Group</td>
<td>340</td>
<td>1979</td>
</tr>
<tr>
<td>Kardoskút</td>
<td>MVM Group</td>
<td>280</td>
<td>1978</td>
</tr>
<tr>
<td>Szőreg-1</td>
<td>MMBF</td>
<td>1900</td>
<td>2009</td>
</tr>
</tbody>
</table>

This contrasts with the Czech Republic where private companies are constructing and operating the storages. This is in line with Hungary’s gas security strategy. In the Hungarian energy strategy, it is mentioned that “...\textit{it has been demonstrated that public good and the national interests cannot be efficiently represented on a purely market basis},” and it is further suggested that the government should acquire minority ownership in energy companies, that the state-owned energy companies (such as MVM Group) should be strengthened, and that “...\textit{a more definite, efficient and predictable government regulation is required...}” to assert national interests.\textsuperscript{32}

Hungary’s gas storage capacity allows them to mitigate the negative effects of supply disruption, such as in Ukraine 2006 and 2009 when the Russian gas supply was cut off to Hungary. They, like the Czech Republic, learned their lesson during the gas crisis in Ukraine in 2006. As a result of the significant Ukraine–Russia gas dispute, Russia cut its exports for four days in 2006. This emergency motivated the government in Budapest to take serious security measures and to invest in strategic storage capacity. Mol offered one of its production sites, Szőreg-1 to be converted into a strategic gas storage facility, only to be used during a clearly defined emergency.\textsuperscript{33}

The Szőreg-1 storage is dedicated for household purposes only, but it has yet to be tested since it was not online by the time of the 2009 crisis. However, Hungary has storages which cannot be fully utilised since the gas consumption in the country has dropped in recent years. Low storage utilisation is a factor in Hungary which can be tracked to overinvestment into storage between 2006–2010. The investment occurred at the same time the Hungarian gas consumption decreased from 14 bcm in 2006 to less than 10 bcm in 2013. Therefore, investments in gas storages remain a costly affair for the Hungarian government, but simultaneously it increases their gas security. In the Czech Republic, the tariffs are reflective of the winter-summer gas price spread, while in Hungary the storage services are cheap, and the total cost

\textsuperscript{30} Lehotský, 2015.
\textsuperscript{31} Source: Compiled by the author.
\textsuperscript{32} Hungarian Government, 2012 b, pp.100–101.
\textsuperscript{33} Regional Centre for Energy Policy Research, 2014.
is the highest on route through Hungary which may also be a contributing factor to why the gas storages in Hungary remain underutilised.\textsuperscript{34} Despite this, gas storage utility remains low in the Czech Republic as well, and companies are now making a loss.\textsuperscript{35} This might soon become a real concern for the Czech government which will need to keep creating incentives for gas storages to be built if they are to reach their declared aims, and it might prompt more state involvement or subsidies. This would make it a more expensive affair, but the Czech government has previously showed that they are willing to sacrifice price for higher security.

**Political Relations**

Since the Czech Republic and Hungary are both dependent on Russia for their natural gas imports, it is arguable to assume that the relationship with its main gas supplier plays a significant role in the two countries’ gas security. In the Czech Republic, Russia has traditionally been viewed as either a business partner or a hostile threat where security concerns trump economic benefits.\textsuperscript{36} The dominance of one or the other narrative has alternated depending on which party is the strongest in the government. However, ever since Russia’s war with Georgia in 2008, the public opinion on Russia as a threat has steadily increased.\textsuperscript{37} The people who adopt this view also tend to believe that a coherent EU strategy with all member states is the best way to deal with Russia. In 2014, the number of people who viewed Russia as a potential national security threat was 66%, a figure almost doubled from the previous year.\textsuperscript{38} A recent poll suggests that 36% in the Czech Republic view Russia as an external threat.\textsuperscript{39} So, while there are still many people in the political circle who view Russia in a pragmatic way, in which they are a business partner foremost, Russia’s recent aggressive actions have led to more people viewing them as the main threat to Czech national security.

In comparison, Hungary’s government is seen as having a friendlier stance, where the country’s dependence on Russia energy supplies translates into a pragmatic foreign policy towards Russia based on economic interests, irrespective of the party in government.\textsuperscript{40} Their approach to Russia has led to Hungary at times going against the common strategy of the EU, with the justification of self-interest.\textsuperscript{41} However, one must be careful not to label the government or the people of Hungary as pro-Russian as it would indicate a stance in which there is not enough evidence

\textsuperscript{34} Ibid.
\textsuperscript{35} Johnstone, 2015.
\textsuperscript{36} Kratochvil and Řiháčková, 2015.
\textsuperscript{37} Ibid.
\textsuperscript{38} Ibid.
\textsuperscript{39} International Republic Institute, 2017.
\textsuperscript{40} Győri, Hunyadi, Juhász and Krekó, 2015.
\textsuperscript{41} Nosko, 2013.
for. Nonetheless, Hungary is deemed to have a friendlier approach towards Russia than the Czech Republic.

These relations take different forms. For the Czech Republic, it has often led to the government being wary of too much Russian influence in the energy sector. The Czech government first denied the Russians the right to buy a gas transit route in 1994, giving no reasoning for the decision. The overall discourse of the Czech foreign policy at the time suggests the refusal to sell was due to historical experiences and reorientation towards the West, and selling it was politically unacceptable. The next offer came in 2002, after the start of the privatization period, but was once again refused for political concerns. The suspicion of Russia during that time is visible since the Czech government sold the transit route to the German company RWE, despite the offer being worth the same amount as the Russian one. It could be seen as a geopolitical reasoning from the Czech government, since Russian companies were the main suppliers of gas and it would have been unwise to also give them control of the transit. The acquisition by RWE made them a major player on the gas scene in the Czech Republic given that their subsidiary RWE Storage (now Innogy Storage) also controls six out of ten gas storage facilities in the country. However, there was no fear of Germany as was the case with Russia, despite similar positions of influence.

The perception of Russia and the Czech Republic’s wariness of Russia cannot explain all their decisions. While the Czech Republic may see Russia as a threat in some instances, they are clearly adopting a pragmatic approach to Russia in others. The Czech market is the most open and advanced in terms of competitiveness and organisation of all the V4 countries. The gas distribution companies are unbundled from the TSO, gas trading companies, and gas storage operations, indicating a competitive market where the Czech government does not have as much influence as before. This gives Russian companies the ability to operate on the market, as is the case with VEMEX s. r. o., which is a Gazprom subsidiary and active in gas trading in the Czech Republic. Moreover, in 2016, Gazprom and the Czech company Moravské naftové dolyGas Storage a.s. (MND Group), built a gas storage in Dambořice which cost over 90 million EUR. Gazprom will utilise the storage at 90% for 15 years with MND Group operating the storage, an agreement worth over 270 million EUR. This shows that despite the Czech Republic being wary of Russia and not letting them have too much influence, they adopt a pragmatic approach when it comes to gas supply. The combination of a pragmatic business approach and a fear of Russian influence based on identity coincide with Mark Leonard and Nicu Popescu's categorisation of the Czech Republic as a “Frosty Pragmatist”. The “Frosty Pragmatist” focuses on business interests but their approach to Russia

42 Vlček, 2015.
43 Ibid.
44 Vlček and Černoch, 2013.
45 Osička, Plenta and Zapletalová, 2015.
46 Vlček and Černoch, 2013.
is based on their values and identities, such as their promotion of democracy and human rights. Although, it is not to say the Czech Republic will remain a “Frosty Pragmatist”, with the current political climate in the country becoming increasingly divided. The relations with Russia, and Czech Republic's further integration in the EU have incurred a political divide where political parties' stances have hardened, for which the consequences will probably be felt after the next election.

Despite Hungary viewing Russia in a more positive way than the Czech Republic does, they are still wary of too much Russian influence. This can be seen when the Austrian energy company OMV bought a total of 20.2% of the shares in the Hungarian oil and gas company Mol in 2007. The Hungarian government and Mol saw the attempted takeover by OMV as hostile, and their fear of potential Russian involvement was realised when OMV sold their share to Surgutneftegaz, a Russian company with close ties to the Russian government, in 2009. This led the Hungarian government to develop protectionist legislation to help Mol maintain its independence and the government bought the shares from Surgutneftegaz, albeit 20% more expensively than what Surgutneftegaz bought them for. The Hungarian government had first sold its shares in Mol in 2006 to abide by EU’s privatisation regulations. The so-called “Lex-Mol” was specifically made to prevent foreign states from obtaining access to companies that Hungary deems to be of strategic national importance.

The episode also shows how Hungary securitises the large national companies (Mol was seen as a “national champion”) by taking a larger role in them. However, the fear of Russia alone cannot justify the Hungarian government’s reaction to OMV’s sale of the shares to Surgutneftegaz. More likely it is because Surgutneftegaz would have been in a position no Russian or other foreign states has had concerning potential influence over strategic decision concerning gas, which would have an impact on Mol and subsequently Hungary’s gas security. This reasoning is strengthened due to the numerous cooperation between Hungarian and Russian companies in the gas sector, such as with the gas supply company Panrusgáz which is owned by Gazprom Export, Centrex Hungária Zrt., and MVM. While Hungary sees Russian companies as partners in the gas sector, they are aware of their close connection with the Russian regime and are unwilling to give them too much influence in the domestic gas sector.

48 Butler, 2011.
49 Ibid.
DOMESTIC EFFECTS OF DEPENDENCE ON RUSSIAN GAS

Even though both the Czech Republic and Hungary are part of the EU, they differ greatly in their commitment to certain EU regulations and frameworks when it comes to gas security. The Hungarian government wants the state to have influence in the energy sector and decide upon important matters and not the EU. The reasons for this seem to be multi-fold. Firstly, the matter of energy prices (and by extension gas prices) is a politically loaded subject due to its importance in national elections. The gas prices, or more importantly the low cost of gas for household consumers, is an integral part of the platform the major political parties run on, since approximately 70% of Hungarian households use natural gas as the primary fuel for heating, which can be compared to the Czech Republic where 27% of households rely on natural gas for heating. Secondly, it allows the Hungarian government to sign favourable deals with Russia on natural gas. This contrasts with the Czech Republic, where the gas regulations are not politicised and the deals with Russia are primarily done without the involvement of the state.

An International Energy Agency report from 2014 outlined that the regulated energy prices in Hungary were cut by 20% in 2013, with further cuts occurring in 2014, for both electricity and gas. In 2012, 3.66 bcm of gas was purchased under regulated prices, of which 88% were sold to household consumers. This did not come as a surprise, since Prime Minister Viktor Orbán and the Fidesz party made the gas prices an integral part of the political campaigns, both in the 2010 elections and when he sought re-election in 2014. Both times he succeeded. The focus on lower gas prices decreases the overall energy security of Hungary. By aiming for ever-decreasing gas prices through regulations, Hungary omits other important factors that could improve their energy security, such as investments in biomass, geothermal, wind, and solar power. While this paper seeks to analyse gas security, it often connects closely with the wider notion of energy security. As Fanni Sáfián suggests, Hungary could cope well without the planned nuclear power plant expansion, Paks II, if they invested in the mentioned renewables, which could amount to 27% of Hungary's electricity consumption by 2030. While more people in Hungary seek insulation of their houses and solar panels on the roofs, it is not encouraged or made advantageous by the government. Instead, it seems like the focus is, and will remain, on the nuclear power plant Paks II and natural gas imports.

51 Ámon and Deák, 2015.
53 Ámon and Deák, 2015.
54 However, it should be noted that gas prices went down partially through Orbán's policies, but also because the prices are indexed to the price of oil which plummeted in the last few years.
55 Sáfián, 2015.
The actions by the Hungarian government make Hungary more dependent on Russia, something that is unlikely to increase their energy and gas security. András Deák summarises the current government policy as “Hungarian energy security must be first of all cheap, and only subsequently secure”. By relying on the people’s need to have access to cheap gas, Prime Minister Orbán and his party will continue to gain votes in exchange, making a trade-off between energy security and continuation in power. In comparison to other EU nations, Hungarian households pay less for their natural gas than the industrial users do. While this may not be compatible with EU regulations, it has allowed the Hungarian government to keep on decreasing the gas prices for, amongst other reasons, political purposes. In 2015, the residential sector consumed 34% of the natural gas in Hungary while the industrial sector consumed 21.9%. Other major consumer is heat and power generation (21.2%) and commercial and public services (17.8%).

Table 3

<table>
<thead>
<tr>
<th>Years</th>
<th>Czech Republic</th>
<th>Hungary</th>
<th>Czech Republic</th>
<th>Hungary</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>13.04</td>
<td>14.87</td>
<td>10.27</td>
<td>10.38</td>
</tr>
<tr>
<td>2011</td>
<td>15.12</td>
<td>15.57</td>
<td>10.45</td>
<td>10.74</td>
</tr>
<tr>
<td>2012</td>
<td>18.31</td>
<td>13.43</td>
<td>11.17</td>
<td>15.44</td>
</tr>
<tr>
<td>2013</td>
<td>17.80</td>
<td>12.01</td>
<td>11.29</td>
<td>14.61</td>
</tr>
<tr>
<td>2014</td>
<td>15.23</td>
<td>10.15</td>
<td>10.60</td>
<td>14.05</td>
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<tr>
<td>2015</td>
<td>15.95</td>
<td>9.80</td>
<td>9.97</td>
<td>12.96</td>
</tr>
<tr>
<td>2016</td>
<td>16.19</td>
<td>9.56</td>
<td>8.82</td>
<td>11.19</td>
</tr>
</tbody>
</table>

The gas price regulations also have important consequences for the companies operating in Hungary. The regulations are a non-profitable affair for several companies, with the major one being Mol (which the state has a 21% share in). The negative, for the companies, consequences are further emphasised in IEA’s 2014 report where it is mentioned that the regulated prices in combination with special taxes and market intervention by the state, have led to network operators and energy suppliers suffering financial losses. This has had the effect of foreign utilities selling their businesses to the state, which further cements the previous arguments of the Hungarian state wanting to take a larger role in the energy sector. The regulations therefore have two significant results: 1) It allows the government to lower the gas prices to gain votes in elections, and 2) It worsens the conditions for

57 Deák, 2006, p. 45.
59 Source: Data gathered from Pordata, 2016.
foreign companies to operate in the country, making it easier for Hungary to have a largely state-owned energy sector.

In contrast with the Hungarian government, market principles and fairly limited state involvement direct the Czech government. In Czech Republic, the transmission operator is NET4GAS, a company that is owned by NET4GAS Holding s. r. o., which operates 2,630 kilometres of pipelines.\textsuperscript{61} NET4GAS gained its independence certificate from the Energy Regulator Office (ERO) in 2013 after ownership of the company RWE was transferred to HYX Czech, which was lately renamed NET4GAS Holdings.\textsuperscript{62} The owners of NET4GAS Holdings are Allianz Infrastructure Czech HoldCo II S.à.r.l., and Borealis Novus Parent B.V., who both own 50% of the company.\textsuperscript{63} There is a visible difference between Hungary, where state-companies like MVM Group operate the transmission system, and the Czech Republic, where large global companies play the major roles. There is no central discourse in the Czech Republic that the state should take charge of the gas sector and increase state shares in energy assets. Instead, there is a business as usual scenario. Also, the main distribution system operator (DSO) selling 83% of the gas is RWE Group (which Innogy, the operator of most the gas storages in the country, is a subsidiary of), emphasising the role of international companies. The gas market in the Czech Republic is therefore driven by market principles and financial aspects rather than a political agenda, as in Hungary. This can largely be attributed to the lesser role gas plays for households in the Czech Republic in comparison to Hungary, which stops it from being elevated to a political issue.

However, like Hungary, the government of the Czech Republic plays a part, albeit a smaller one than in Hungary, in gas price regulations. It is the ERO, whose chairperson is appointed by the government, that regulates charges for gas transmission and distribution and charges for the market operator’s services.\textsuperscript{64} In the Energy Act of 2005 it says that “The Energy Regulatory Office shall decide on... Price regulation based on special legal regulations... [and] The granting of a licence, amendment thereto or revocation thereof...”.\textsuperscript{65} The charges for gas transmission are calculated from the adjusted permitted revenues for the TSO, and are allocated to the entry and exit points in the transmission system based on the anticipated use. The charges for gas transmission and gas distribution are integrated and are hence billed to customers as part of the distribution charge.\textsuperscript{66} Thus, like in Hungary, the government of the Czech Republic plays a role in the regulations of gas prices, although it is not as big of a role as the case with the Hungarian government. The gas sector in the Czech Republic can be considered as properly regulated in terms of legislation, and domestic and EU legislation do not contradict each other and do not deviate from the long-term course, which contributes to the stability

\textsuperscript{62} Ibid.
\textsuperscript{63} Net4gas, 2017.
\textsuperscript{64} International Energy Agency, 2016.
\textsuperscript{65} Energetický regulační úřad, 2005, p. 14, Section 17, paragraph 6e and 6a.
of the sector. Basically, all EU directives have been adopted and implemented in the Czech Republic’s laws, further emphasising the Czech government’s rational choice of integrating more with EU for market benefits and principles.

The main factors bringing gas prices down are instead the price of the imported commodity, the decreasing presence of long-term contracts, as well as the willingness of the supplier, in this case Russia. This can be noticed in the Czech Republic where their diversification of supply and shift to the western markets have allowed the price to decrease. Both countries have gas prices below the average of the member states in EU, with Hungary being among the lowest. A summary of the changes to the gas prices for medium households in respective countries can be found on chart 1. The chart illustrates the decrease in prices since the election of Viktor Orbán as the Prime Minister, and contrasts it with the Czech Republic.

Chart 1
Gas Prices by Type of User

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67 Vlček and Černoch, 2013.
68 Data gathered from Eurostat, 2017.
For the Czech Republic, the regulation of gas prices does not matter as much as for Hungary, since it is not an issue on the political level. An important factor to take into consideration regarding this is that in the Czech Republic only 27% of the households rely on gas, which is a significant difference from Hungary. The issue is therefore not as vital for the ruling Czech government when trying to run for re-election. As such, decreasing the gas prices is rational for Orbán and his party, since it gives more votes in the elections, while similarly it remains rational for the Czech government to allow competitive prices based on the market players. For the Czech Republic, it is difficult to have a state-ruled energy sector, but at the same time they do not want a single company to own the majority of the infrastructure and gain monopoly which would allow that company to set the prices. Therefore, the Czech Republic pursues the market option where many companies compete which may decrease the price. The two countries operate differently, with the importance of gas in their respective sectors playing a crucial role.

The Hungarian state's large presence in the energy sector has allowed it to sign favourable deals with Russia in terms of gas contracts. The biggest gas import contract is between Gazprom and Panrusgáz which initially lasted from 1994 to 2015 until it was extended to 2021, with a decrease in cost for Hungary. MVM Group bought their share from E.ON in 2013, effectively making the state responsible for the negotiations of the contract. It is arguable that Russia rewards certain behaviour and that Hungary’s foreign policy direction is linked to the energy prices Russia provides. An example of this is when Gazprom cut the price for Panrusgáz in 2013 with 7–10%, just shortly prior to the Hungarian government announcing that Russia signed an agreement with Hungary on the construction of Paks II, and after Vladimir Putin expressing gratitude for Hungary's support of the South Stream project.69 However, it is difficult to link price cuts to particular Hungarian foreign policy moves. There is nevertheless a link between the foreign policy direction and more favourable gas deals. Hungary cut off the reverse flow supply to Ukraine in September 2014 until February 2015, during the beginning of the Russia’s military intervention in Ukraine, just three days after a meeting in Budapest between the head of Gazprom, Alexei Miller, and Viktor Orbán.70 Orbán declared afterwards that “In the next period we will need large quantities of gas ... We will receive this, I agreed this with Alexei Miller”.71 An important factor in this matter is also that Hungary had, prior to the meeting, requested Gazprom to fill the gas storage capacity since the state–company MVM lacked the necessary funds.72

This episode culminated in the extension of the long-term gas contract until 2021, in which the negotiations took place on the highest political level after MVM Group had bought E.ON’s share of the initial contract. The concession of Gazprom in the long-term gas supply contract, with regards to price, were in line with the

70 BBC, 2014.
72 Ámon and Deák, 2015.
continental trend, but in the Hungarian case it goes beyond the average concession of the CEE. The new price will be below the 338 USD/mcm Hungary paid in 2014 and can be compared to the Czech Republic’s price of 378 USD/mcm and Slovenia’s 395 USD/mcm.\(^{73}\) It had great political impact since it helped Orbán with his gas price reduction, his major promise in the 2014 election. The interests of the ruling party and Orbán seem to match the geopolitical interests of Russia, making the relationship between the countries mutually beneficial.

In terms of contracts, there is also a visible difference between the Czech Republic and Hungary. In the Czech Republic, the Russian gas import contract was signed between the state-owned company Transgas and Gazexport (part of Gazprom) in 1998 and was later extended in 2006 to 2035.\(^{74}\) During the privatisation period however, RWE bought the government shares in 2001 and Transgas became RWE Transgas.\(^{75}\) In contrast to Hungary, it is therefore an international company being responsible for the negotiation and import of Russian gas. Moreover, it was also Transgas that concluded the contract with Norway in 1997, making RWE Transgas an important player in the Czech gas sector. However, these long-term contracts limit the implementation of EU liberalisation matters since they were signed before the liberalisation period. Since the greatest part of natural gas is provided through long-term contracts, the growth of new traders would face the fact that the same gas is being traded only with more mediators in between. At the same time, long-term contracts provide stability and guarantees to both exporters and importers. While RWE is a strong and stable European company, having the entire transit network, most of the natural gas storages, as well as most of the contractual gas in one company is not without risks to Czech Republic’s gas security. That RWE might abuse its dominant position, despite them being seen as reliable and trustworthy, should not be discounted too easily. Although, with RWE being the major player, the risk of bankruptcy or sale of the pipeline network for financial reasons can be considered as low.

### Conclusion

This paper has shown that two similar countries, the Czech Republic and Hungary, have adopted different ways of dealing with their gas import dependency. While the Czech Republic has managed to diversify their gas supply and transit route to a larger extent, Hungary remains predominantly dependent on Russian gas. Hungary has in last couple of years tried to diversify their supply and transit routes through interconnectors with its neighbouring countries, but they have yet to yield results and doubts remain of their future success, especially with the

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\(^{73}\) Stern and Yamifava, 2017.

\(^{74}\) Binhack and Tichý, 2012.

\(^{75}\) Vlček and Černoč, 2013.
proposed LNG trade with Croatia. The Czech Republic and Hungary have increased their gas storage capacities in recent years, with both being better prepared to meet a potential future gas crisis than ten years ago.

The Czech Republic and Hungary have different approaches to their respective gas sectors. The Czech Republic has adopted a market based approach where the state is limited in its involvement. The contract negotiations between gas exporter and importer are handled by the companies themselves, and the country is abiding by EU rules and regulations. In contrast, Hungary has developed an approach where the state has created an environment where regulated prices in combination with special taxes and market intervention by the state have led to network operators and energy suppliers suffering financial losses, which has led to foreign utilities selling their businesses to the state, creating a largely state-owned energy sector. A significant difference from the Czech government is that the Hungarian government is highly involved in the negotiations of contracts with gas exporting companies, as shown by the contract extension with Gazprom in 2015. Hungary’s approach is a deviation from the common EU energy strategy. Instead, Hungary has looked increasingly more to Russia. The gas imported from Russia is cheap, and it has allowed the Hungarian government to make gas prices an electoral issue. Prime Minister Viktor Orbán and the Fidesz party have successfully run an election campaign on low gas prices for households, emphasising the importance of the continuation of cheap Russian gas for the government. In Hungary’s case, domestic policy is shaping the country’s foreign policy to a larger extent than is the case with the Czech Republic.

The Czech Republic and Hungary’s gas security is affected differently based on their approaches. The Czech Republic benefits from increased security through their diversification efforts and is not as vulnerable to gas disruption from one pipeline or exporter. Hungary remains heavily dependent on Russia and would be affected if the gas transit through the Brotherhood pipeline was disrupted. As previously mentioned, both countries’ gas storages can greatly limit the damage of gas disruption, but they would still be vulnerable if there was a longer crisis. The most important company operating in the Czech Republic, RWE, is not based in the country and that RWE might abuse its dominant position should not be discounted too easily. Hungary does not share this problem since the gas companies are becoming increasingly more state-owned. The Czech Republic's access to other markets and their decreasing dependence on a single supplier makes their gas security stronger than Hungary. If Hungary gains access to LNG through Croatia, or increases its access to the western markets, its gas security will improve drastically.

Finally, while the relations with Russia affect the price for importing gas, other factors, mostly external, contribute to the ever-decreasing gas prices. The rise of US LNG production and export to European countries have lessen the dependence on imported gas through pipelines from Russia, giving countries other alternatives, which lowers the import price for Russian gas. Long-term fix-price contracts are becoming less present in the negotiations between exporter and importer,
highlighted by Hungary’s recent contract expansion with Gazprom where Hungary negotiated a lower price for their imports. Similarly, Czech traders are operating more on the German spot market, making long-term contracts more obsolete. The future of natural gas in the Czech Republic and Hungary depends on many factors, and the two countries will continue to have plenty of options to increase their gas security, if they are willing to pay the price.

REFERENCES


Hungary and the Czech Republic’s Approach to Gas Security


