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Research

Transit of Energy Resources from Iran via Georgia to Western Markets: Prospects, Risks, Challenges and Opportunities

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Contents

Summary.....	4
Research questions and working hypotheses:.....	4
Research Methodology.....	6
General Context.....	7
Chapter 1.....	10
Feasibility and profitability of transit of Iranian gas to Georgia.....	10
Gas Market in Georgia:.....	10
The need for diversifying gas supply options for Georgia.....	11
Alternative routes for gas transit.....	12
Iranian gas transit to/via Georgia: SWOT, Georgian perspective.....	15
Iranian gas transit to/via Georgia: SWOT from Iranian Perspective:.....	17
Political factors risks that may support/hinder the project implementation:.....	18
Chapter 2:.....	21
Transit of Iranian Gas via Georgia and Its Regional Implications.....	21
EU Regulations: Case of Iran and Georgia.....	22
Chapter 3:.....	24
Pros & Cons for Europe, European Stakeholders.....	24
EU – Iran energy deal?.....	25
Perspectives:.....	26
Conclusions:.....	29
Is the Game Worth Playing?.....	29
Recommendations.....	30
Bibliography and other sources.....	32
ANNEX Interstate cooperation in electrical power transmission - prospects and limitations.....	34

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Summary

The paper attempts to analyse possibilities for energy transit from Iran to Georgia and further to the Western markets that have recently opened to energy supplies from Iran as international sanctions have been lifted. Iran, estimated to be the world's fourth-largest country by proven oil reserves¹, and first or second by gas reserves², is in the process of reclaiming its share of gas and oil exports to the world, and in particular to Europe.

The issue under discussion goes beyond just the question of diversification of supply sources and energy security for Europe, or economic advantages for either Iran or Georgia. Re-opening of these promising opportunities for Iran will have strong repercussions for the overall geo-economic and geopolitical order at the regional scale and probably well beyond it. The dynamic of reviving energy cooperation involving Iran is also entangled with various political risks, in particular for neighbouring and transit countries such as Georgia.

In the present paper we have identified key actors engaged in the process of European-Iranian energy cooperation involving Georgia - at national and regional levels; motivation and incentives of the potential stakeholders; and, possible scenarios coupled with the respective challenges and risks, with special focus on Georgia's transit functionality and its energy market. The research framework includes the assessment of viable routes by applying analytical framework of SWOT, which stands for strengths, weaknesses, opportunities and threats. Political risk analysis is carried out by applying the political risk assessment method as adapted from International Country Risk Guide. Our conclusion is that such a project is hardly feasible in the short term, although conditionally realistic in longer time frame.

Research questions and working hypotheses:

At the first stage, we intend to analyse existing technical opportunities and economic benefits of importing Iranian gas to Georgia and its transit to Europe, assuming that EU is interested and willing to support such a project; what are the market-related factors vis-à-vis the changing energy market demand and supply in the region; what might be the alternative transportation routes, what are their

¹

www.worldatlas.com/articles/the-world-s-largest-oil-reserves-by-country.html, accessed May 12, 2016

²<https://www.cia.gov/library/publications/the-world-factbook/rankorder/2253rank.html>

comparative advantages and what political and security risks might accompany choosing these routes. Therefore the first research question is formulated as follows:

1. Is exporting Iranian gas to and its transit via Georgia feasible and profitable for Georgia and Iran? What are comparative advantages, risks and drawbacks of possible routes, and how would these sum up?

Hypothesis 1:

Due to existing technical difficulties and geopolitical factors, exporting Iranian gas to or via Georgia is not technically feasible in the short run, while respective prospects are difficult to predict in longer term timeframe. Financing such a project will be unrealistic at the current stage of developments, mainly due to a number of major risk factors – high construction and maintenance costs due to mountainous terrain; short-term tendency towards low oil prices, and unclear trend in the longer term; possibility of a military conflict in the region (Karabakh in the first place) that may disrupt construction or functioning of infrastructure³; Unwillingness to allow such a project on the part of the major geopolitical power in the region – Russia, and leverages it possesses; and, possible existence of more favourable alternative routes to the West, while the Georgian market is too small to count. In addition, both Georgia and Iran would have to face strong regulatory challenges as they would have to adapt to EU standards, especially if any of the two would want to enter the Energy Community, although this can be seen both as a challenge as an opportunity (cnf. the successful example of Bulgaria as a beneficial case of stronger regulations)

At the second stage we intend to assess the impact of above-discussed processes on the general economic, political and security balance in the region that includes, apart from Iran and Georgia, - the two key energy players such as Russia and Azerbaijan, as well as Turkey and Armenia. Therefore the next research question is formulated as follows:

2. To what extent and how energy cooperation of the West with Iran will influence the Georgian/regional energy market and energy security, but also the general geopolitical and geo-economic situation?

Hypothesis 2:

The Western energy cooperation with Iran involving Georgia will diversify Georgia's energy supply, which is a positive step towards more energy security, but will also increase competition between leading energy exporters and geopolitical actors. Therefore, overall regional implications will comprise more instability due to increased geopolitical rivalry in this complex region, against the background of Armenia-Azerbaijan tensions that are on the rise. Russia-Turkey relationship has not

³ Note: If the pipeline passes through either Azerbaijan or Armenia, it is under risk if there is resumption of hostilities around Karabakh. In case that the pipeline goes further via Turkey it will probably follow the route of existing pipelines that are under the risk of attack by Kurdish rebels or terrorist action.

fully recovered yet, while Russia's relations with the West are deteriorating. However, China is increasingly interested in the region mainly within the framework of its Silk Road initiatives, and may play a stabilising role due to its special relations with Russia, while Iran is emerging as one of the powerful regional actors.

At the third stage, we intend to analyse the European perspective towards the possible gas deal with Iran that may involve different energy cooperation scenarios and transportation routes; costs and benefits of the Iran-West cooperation in energy area for Europe; we seek to understand the comparative advantages for the European markets and Europe's energy security, as well as possible risks and challenges for the EU and beyond. Therefore the research question is formulated as following:

3. What are the pros and cons for Europe from the perspective of energy cooperation with Iran, possibly involving Georgia? Who are the potential Western/European supporters/pushers for such an initiative?

Hypothesis 3:

While Georgian route for transit of Iranian gas to Europe is theoretically feasible, there are currently insufficient incentives among the major Western energy companies and governments to realise such endeavour, although it cannot be totally excluded that more interest will eventually emerge, depending on the trends in the energy markets and European economy, and the situation in the region.

Research Methodology

Research methodology is based on the qualitative case study, including logical, economic and discourse analysis of primary and secondary sources and data, including two main types of primary sources: records/transcripts of in-depth face-to-face semi-structured interviews with stakeholders, experts and decision-makers; and, existing documents, agreements, statistical data, articles, speeches, internal reports, newsletters, meeting-records and other relevant materials. Economic viability of the energy cooperation will be delivered through analytical framework of SWOT. This method was created in the 1920s by business leaders Edmund P. Learned, C. Roland Christensen, Kenneth Andrews and William D. Book⁴.

As for the political risk assessment, we adapt method of International Country Risk Guide (ICRG). According to this approach, political risks consist of the critical components - in our case 7 - which are evaluated from 0 (minimal) to 10 (maximal).

⁴ R.D Irwin, ' Business Policy, Text and Cases, 1969

Political risk components of importing Iranian gas to Georgia

Components	Points	Short description what each component assesses
Government stability	0-10	Ability to carry out declared program and ability to stay in the office
Energy investment profile	0-10	Factors affecting the risk of investments
External conflict	0- 10	Risk to the incumbent government to foreign action
Corruption	0-10	Corruption in the energy sector
Ethnic tensions	0-10	Tensions attributable to potential conflict, that might affect the decision
Foreign Orientation	0-10	Divergent opinions regarding major foreign affairs partners and their role in the region
Bureaucracy quality	0-10	Minimise revisions of policy when government change

The risks are evaluated based on the author's analysis of the results of the qualitative case study, including the interviews taken from high level policy-makers and field experts in Brussels and other centres of power in Europe and the Caucasus. In Europe, interviews are taken from the Members of the European Parliament, officials from the European Commission (DG ENER), specialised agencies such as Agency for the Cooperation of Energy Regulators, think-tanks such as Carnegie Europe, East-West Institute, European Policy Centre, etc., and the similar broad selection of sources are sought in Iran, Georgia, and other countries of the South Caucasus.

General Context

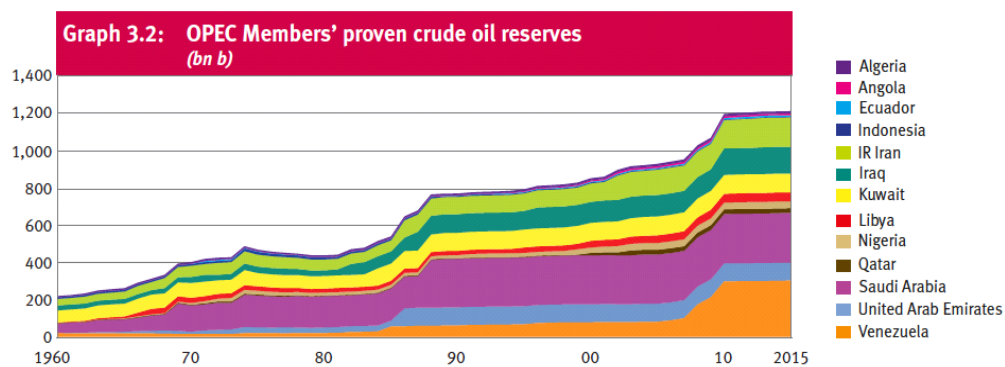
Iran holds one of the biggest gas reserves in the world, second only to Russia⁵. According to the Iran's Petroleum Ministry, the proved natural gas reserves of Iran are about 29.6 trillion cubic metres or about 15.8% of world's total reserves, of which 33% are as associated gas and 67% is in non-associated gas fields. The US Report 97-470G also upholds this statement as indicated in picture #1⁶.

⁵ <http://www.indexmundi.com/g/r.aspx?t=10&v=98>, accessed June 2, 2016

⁶ <http://pubs.usgs.gov/of/1997/ofr-97-470/OF97-470G/>, accessed June 20, 2016

Picture #1

Rank	Country	Natural gas - proved reserves (cubic meters)
1	Russia	47,799,999,660,032
2	Iran	33,610,000,236,544
3	Qatar	25,199,999,188,992
4	Turkmenistan	17,500,000,485,376
5	United States	9,458,999,623,680
6	Saudi Arabia	8,149,999,812,608
7	United Arab Emirates	6,089,000,091,648
8	Venezuela	5,524,000,079,872
9	Nigeria	5,153,000,259,584
10	Algeria	4,503,999,873,024



Obviously its natural gas reserves are not evenly distributed, the biggest gas field (shared with Qatar) – the South Pars gas field is located in the South of the country, mainly in the Persian Gulf shelf.

Back in 2008 Iran and Turkey signed a memorandum on the creation of Iran-Turkey-Europe (ITE) gas pipeline⁸, however later around 2012 this project got stalled due to sanctions. However now both Iran and Turkey are interested in cooperating on the project. While removing sanctions paved the way for strengthening Iran's position as a gas supplier in Caucasus or boosting deliveries to Turkey, Iran's sole gas exporter Turkmenistan also announce that it has been intensifying negotiations over the trans-Caspian pipeline to export its gas to Europe (currently blocked mainly by Russia due to the undecided legal status of the Caspian Sea). At the same time Iran plans currently a \$6 bn pipeline project, IGAT 9 which will connect the South Pars gas field to north-western regions. If this pipeline gets operational with Italian Saipem working on it, Iran may become among the biggest gas exporters to Europe⁹. Other plans imply building LNG facilities by the Persian Gulf for further export. None of these ambitious projects of Iran is directly involving Georgia, however, they may influence the decision-making process in Tehran.

It is natural that the Russian government would like to preserve its position of a main (in some cases monopolistic) supplier regarding gas deliveries to Europe¹⁰, but when unable to hinder alternatives, it

⁷ <https://pubs.usgs.gov/of/1997/ofr-97-470/OF97-470G/Iranmap.pdf>, accessed June 22, 2016

⁸ <http://www.ite-pipeline.com/en/default.aspx>, accessed June 1, 2016

⁹ <http://www.naturalgaseurope.com/caspian-overview-27996>, accessed June 3, 2016

¹⁰ http://ec.europa.eu/eurostat/statistics-explained/index.php/Energy_production_and_imports, accessed June 29, 2016

would try to at least get involved in any such project, as well as strengthen its domination of the gas market in its 'Near abroad'. In early 2016 the head of Russia's Gazprom Aleksei Miller and Georgia's Energy Minister Kakha Kaladze have been negotiating an energy deal between the two countries, as Georgia too would like to diversify and increase its energy consumption and compensate its over-dependence on the exports from Azerbaijan. As some experts note, Russia is also seemingly interested in involving Georgia in the Russia-Armenia-Iran gas axis, which would hinder the strengthening Azerbaijan-Georgia-Turkey partnership¹¹. No results have emerged to date and there is limited probability they will as there is strong public and political opposition to energy dependence on Russia.

At the same time, Georgia has considered importing gas from Iran. According to the head of the National Iranian Gas Export Company Alireza Kameli, Georgia's state-owned and private companies were interested in buying Iranian gas and a preliminary agreement has been reached on the transportation of 500 mcm of gas to Georgia via Armenia. However, Georgia refuted the idea that any tangible agreement has been achieved.

Russia is an unpredictable factor, although its goal is clear – to block any initiative that would not serve its interests or geopolitical ambitions. So, when Armenia and Iran signed an agreement to construct a third high-voltage power line on Armenian soil - connecting the two countries, -according to the Armenian media, Russian natural gas giant Gazprom was quick to obtain the rights to use the planned power line for energy exports. Gazprom, together with Russian company Tashir Group, dominates Armenia's distribution networks for domestic natural gas and electricity. In January 2014, Gazprom acquired an additional 20 percent of the Armenian natural gas state monopoly and in June 2015 took over ownership of the last pipeline section that takes Iranian natural gas from the Iranian border.

Although Russian influence over energy-rich Azerbaijan is weaker, there are still enough leverages to punish Baku if its actions are considered inadmissible in Moscow. The most evident leverage is the role of Russia as influential powerful broker in Nagorno- Karabakh conflict. While formally mediating, Russia incited the both parties against each other via various means (so, Russia made \$200 million loan to Armenia for weapons purchases¹², while also supplying Azerbaijan) and profits by controlling the situation. Other leverages include the possibility to destabilise Azerbaijan by manipulating North Caucasian minorities living in Northern Azerbaijan (mainly Lezghins and Avars) or Talyshs in the South. The possession of all these tools by Russia somehow limits the freedom of manoeuvre for Azerbaijan in case may intend to develop fully fledged cooperation with the West and Turkey. Also, it should be mentioned that the Russians are the second largest ethnic minority in Azerbaijan after Lezghins, closely followed by the Talysh.

¹¹ <http://neweasterneurope.eu/articles-and-commentary/2009-iranian-gas-in-georgia-a-feasible-option> accessed June 3, 2016

¹² <https://www.stratfor.com/analysis/russias-evolving-role-caucasus>, accessed on June 18, 2016

Chapter 1

Feasibility and profitability of transit of Iranian gas to Georgia

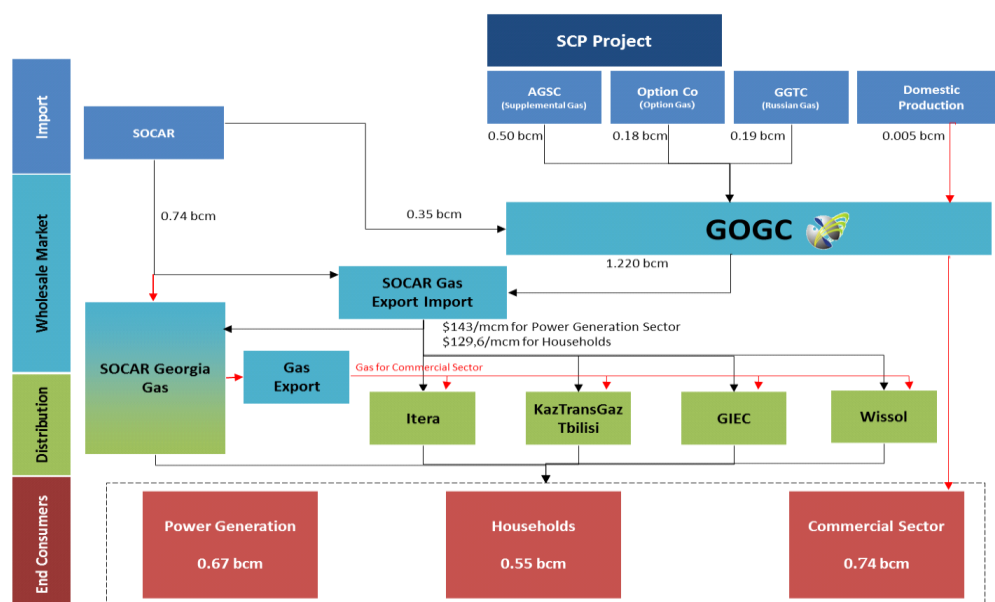
- Is exporting Iranian gas to and its transit via Georgia feasible and profitable for Georgia and Iran? What are comparative advantages, risks and drawbacks of possible routes, and how would these sum up?*

Gas Market in Georgia:

The main entity of the Georgian natural gas transmission sector is state-owned Georgian Oil and Gas Corporation (GOGC) established in 2006. In 2012 it was acknowledged as an exclusive operator, user, owner, disposer and manager of natural and liquid gas imports to Georgia.

Georgia's natural gas supply is provided by GOGC and the State Oil Company of Azerbaijan Republic (SOCAR). More than 60 distribution companies comprise the natural gas distribution sector of Georgia. The following Diagram #1 describes its structure: **Diagram 1.** Structure of gas distribution and supply market

Source: USAID



Natural gas is provided to Georgia by: the Shah Deniz Consortium (35, 6% of the market), SOCAR (54.5%) – which has long term supply contract until 2028, and in addition - Georgia is getting in-kind

transit payment for gas shipped from Russia to Armenia by the gas pipeline passing through Georgia (approximately 200-260 million cubic meters, which is around 9.6% of the total import).

According to the energy balance of Georgia, in 2014 production of the natural gas amounted to 10.3 (mil.m3), while import equalled 2 183,5 (mil.m3).

	Natural Gas (mil. m ³)
Production	10,3
Imports	2 183,5
Exports	-
Stock Changes	-
DOMESTIC SUPPLY	2 193,7

Source: GeoStat Data

The need for diversifying gas supply options for Georgia

Georgia needs around 11 mcm (Million Cubic Meter) of natural gas daily during the winter season for electricity generation as well as household consumption.

Increasing the number of gas providers and thus diversifying the sources of supply is beneficial both for the energy security and the better options due to increased competition. As already mentioned, the Georgian government is somewhat worried by its over-dependence on the energy imports from Azerbaijan, which may at some point be used as an instrument of political pressure. It's interesting to note that experts find it difficult to assess whether this limited range of suppliers threaten Georgia's energy security due to the three factors. First - as the price of oil and gas became increasingly unpredictable, economic cost-benefit analysis does not seem useful due to this volatility. Second - clarification is needed in the understanding of the concept of diversification, and the relation of balancing the risks related to low diversity and the costs of tapping alternative sources. Still, it seems that due to the growing potential of instability in the South Caucasus and the risks of Azerbaijani-Armenian confrontation over Karabakh, the current limited range of suppliers do threaten Georgia's energy security. However, similar risks are also inherent to other potential gas suppliers to the Georgian market (for instance, whether Turkmenistan or Iran) as all of the respective routes should pass through the same Azerbaijan, or in case of Iran, possibly also through equally risk-prone Armenia. Therefore, when looking for diversification of sources it is not so much the security that should be prioritised, but the economic benefits that diversity and competition will bring around.

Alternative routes for gas transit

Since Georgia does not share a common border with Iran, exporting Iranian gas to Georgia is technically possible by two routes – one via Armenia and other via Azerbaijan¹³ (as it does not make much economic sense to import gas via Turkey, theoretically possible by reversing the direction of flow in the existing pipelines). Both have certain advantages and disadvantages, as demonstrated below. However, there also exists a realistic possibility for Iran to totally sideline Georgia by building a pipeline directly connecting Iran to Turkey.



Source: Thomas Bloomberg, CC BY-SA 3.0¹⁴

It may be worth adding that from a purely economic perspective it may not be too important for Georgia whether Iranian gas comes to it through Armenia or via Azerbaijan, insofar as it eventually reaches the country or passes through it. However, as it will be mentioned below, from geopolitical perspective both routes have certain disadvantages. Azerbaijani route may further increase Georgia's energy dependence on Azerbaijan, while the Armenian route would imply further geopolitical strengthening of Russia's strategic presence and influence in the South Caucasus, that may threaten Georgia's sovereignty against the background of the past Russia's actions and current tensions over Georgia's pro-Western aspirations.

Armenian route

Lifting of sanctions imposed on Iran presents Armenia with new opportunities to overcome existing isolation and increase its participation in international projects. Georgia too could use the existing Iran-Armenia and Russia-Georgia-Armenia (North-South) pipelines to increase and diversify its gas imports.

¹³ <http://www.neweasterneurope.eu/articles-and-commentary/2009-iranian-gas-in-georgia-a-feasible-option>, accessed on May 28, 2016

¹⁴ <https://commons.wikimedia.org/w/index.php?curid=4536714>

At full capacity the North-South gas pipeline could deliver 12 bcm of gas¹⁵, while Armenia uses only 2.2 bcm of the pipeline's capacity. Alternative Iran-Armenian gas pipeline was officially inaugurated by Iranian President Mahmud Ahmadinejad and his counterpart Robert Kocharyan in 2007 in exchange for the Caucasian country's electricity supplies¹⁶, although on the Russian demand its capacity became rather modest. The total capacity of this pipeline is 1 bcm that can be expanded up to 2.3 bcm after 2019. However, currently Armenia imports only about 500 mcm/a from Iran, while as the pipeline is fully controlled by the Russian Gazprom, the latter until now would not allow any additional competition to its exports. It should be further mentioned that the capacity of existing pipeline is too small, so the connection needs to be built. Now, in the face of the risks that Iranian gas exports to Europe may represent for its interest, Moscow may reconsider its attitude and see the opportunity in allowing Iranian gas to come via Georgia and then further to Russia, which could then use its own pipeline networks to transport gas to the West. Even without building any new pipeline between Iran and Armenia, by exploiting the full capacity of the Iran-Armenia pipeline and with a reverse supply from the Russia-Armenia pipeline, Georgia could receive at least half of the gas that it needs from Iran, which is not what Russia would want.

While previously Gazprom has been putting pressure on Armenia to limit the capacity of the Iran-Armenia pipeline which has hampered the possibility to deliver any additional Iranian gas to Georgia, now the situation is changing and a parallel pipeline to increase the overall transportation capacity may become an attractive option for Moscow. However, hardly such plans will be equally attractive for Georgia, which is cautious to allow strengthening of Russia's strategic interests on its territory, as has been visible in its reluctance to restore the railroad connection between Russia and Armenia that would pass via Abkhazia.

Azerbaijani route

Similarly to the scenario between Armenia and Iran, there exists a gas pipeline between Iran and Azerbaijan, known as the Kazimahommad–Astara–Abadan pipeline. The pipeline was inaugurated in October 1970 in Astara by Mohammad Reza Shah of Iran and Nikolai Podgorny, Chairman of the Presidium of the Supreme Soviet. Although after the Iranian Revolution the pipeline stopped functioning for a long while, starting from 2006 Azerbaijan implements a swap deal with Iran, providing gas through the Baku-Astara line to Iran, while Iran supplies Nakhchivan in exchange. The overall length of the pipeline is 1,474 km long, of which 296 km is located in Azerbaijan. The pipe diameter is 1,020 mm and it had original capacity of 10 billion cubic meters of natural gas per year at 55 standard atmospheres¹⁷.

¹⁵ *Ibid.*

¹⁶ <http://www.gtreview.com/news/global/armenia-and-iran-open-gas-pipeline/>, accessed on June 1, 2016

¹⁷ <http://en.trend.az/business/energy/1578227.html>, accessed on June 2, 2016

Iranian gas can be delivered to Georgia via Azerbaijan pipeline in a reverse flow and then become connected with the BTE pipeline. However, geology and landscape here make it also relatively easy to build additional capacity if needed, especially if Iran and Russia achieve an agreement for exporting the Iranian gas also along the Caspian Sea shore to Russia, following the already existing infrastructure (Iran will be connected to Russia through Azerbaijan bypassing Georgia, as there is an already existing pipeline that goes north to Russia's Daghestan). This would make the pipeline between Iran and Azerbaijan even more profitable, with little political obstacle other than possible Russia's disinterest or objections.

In addition, recently the Iranian president Rohani announced during his meeting with the Azerbaijani president Aliyev that Iran and Azerbaijan will connect their railways and build the railway bridge between Iranian Astara and Astara in Azerbaijan. According to the Iranian president, it will become an important North-South transportation corridor, and there is no doubt, it may also facilitate implementing any other infrastructure projects that would also go in South-North direction.

Turkish route

Judging by pure logic, it would not make much sense to have a pipeline from Iran to either Armenia or Azerbaijan if eventually the gas has to pass through Turkey on its way to Europe.

Indeed, there have been negotiations for years to build the respective infrastructure, so called Persian Pipeline, also known as the Pars Pipeline and Iran–Europe pipeline. It has been proposed years ago in order to transfer Iranian gas from the Persian Gulf to Europe, connecting Iran's enormous South Pars gas field (with gas reserves estimated to be around 51 trillion cubic metres, and some 50 billion barrels - 7.9 billion cubic metres - of natural gas condensate)¹⁸ with Turkey and then with European markets. The Iranian section called Iran Gas Trunkline 9 (IGAT-9) was to start in Assaluyeh and transport gas from the South Pars gas field to the city of Bazargan at the border with Turkey; the European section would cross Turkey, passing on to Greece and presumably by Trans-Adriatic Pipeline further to Italy. The overall length of the pipeline should be 3,300 kilometres with the capacity of 37–40 billion cubic metres of natural gas per year. The cost of Iranian section was estimated to be around \$7 billion; while the Turkish section would be 660 kilometres long and cost about one billion euro. It was expected to be operational by 2014.

However, the project has not materialised due to a number of reasons, including the growing tensions between Turkey and Iran over opposing policies toward the war in Syria, along with the past western sanctions. Now that the sanctions have been lifted, the project seems again to be feasible provided it is not coupled with any political issues. However, Iran has other important gas fields and enough gas to fill still another pipeline if such opportunity emerges, and respective investment into infrastructure is

¹⁸ IEA, World Energy Outlook 2008 - Chapter 12 - Natural gas resources and production prospects, p.298

available. Therefore, while the Persian Pipeline has fair justification to exist, it is not really competing but rather supplementing alternative routes such as passing through Azerbaijan and Georgia, especially if there is also interest from Russia to import Iranian gas.

Iranian gas transit to/via Georgia: SWOT, Georgian perspective

Strengths:

Diversification of gas supplies with possible cheaper price for Georgian consumers, while the presence of a new player in the market will increase competitiveness and also decrease the price. At the same time the new infrastructure projects possess the potential to attract FDI, bring in revenues and create jobs in the country. Increasing the volumes of the gas transit will also bring additional fees. On the geopolitical level, such projects on one hand may increase the importance of Georgia as a transit country for the West,. Furthermore, attracting high amounts of FDI will compel the investors to demand high levels of transparency and efficiency coming from all involved parties, hence give Georgia an opportunity to modernize its energy sector and bureaucratic practices in this field aligned in international best-practices. Twinning projects with European administrations and expert missions could contribute to achieve that goal.

Weaknesses:

This means that Iran or Georgia would need to construct a new interconnection. Georgia's consumption of gas is only 300-400 mcm/a therefore it's not economically justified to invest in respective infrastructure in order to reach such a small market, unless there are significant volumes transported further to the west.

Both Iran-Armenia¹⁹ and Iran-Azerbaijan pipelines have relatively limited capacity, and even although the latter is several times bigger, significant investment and construction work will be needed to make the project viable.

High price of Iranian gas is an additional problem, although that may change. Still, currently the commercial price of Azeri gas is 240 dollars per 1,000 cubic metres, the Russian – \$200, while the Iranian gas is above \$400 (at least this is the price at which Iran supplies Turkey). The price of Iranian gas sent through Armenia or Azerbaijan would be additionally increased by a transit fees. This would further affect the price of gas sold to Georgia²⁰. As the Georgian deputy energy minister has recently

¹⁹ Interview with Mr. Sevak Sarukhanyan, expert in Iranian studies and head of the Public Research Centre

²⁰ <http://www.naturalgaseurope.com/iran-highest-gas-price-transit-fee-26366>

stated, buying Iranian gas at this stage is not commercially viable, as it is more expensive by about 25 per cent than alternative options²¹.

As already said, if Armenian route gets implemented, this will increase the Russian influence in the region but also over Georgia, while the Azerbaijani route will strengthen the latter countries monopoly in the energy market.

Opportunities:

While at full capacity the North – South gas pipeline (Russia-Georgia-Armenia) could deliver 12 bcm of gas, Armenia uses only 2.2 bcm of the pipeline's capacity. This means that by exploiting the full capacity of the Iran-Armenian pipeline and with a reverse supply from the Russia-Armenian pipeline, Georgia could receive at least half of its gas from Iran, which will profit through export both to Russia and to Europe. In case of possible transfer of the energy to west markets, Georgia would benefit from additional economic incentives, increasing its energy security, attracting investment and increasing its geopolitical and strategic importance.

Threats:

The main threat brought around by above described projects may be Russia's actions that are now less bound by international law especially against the background of rather lukewarm reaction from the West after the 2008 war and occupation by Russia of Georgia's provinces. One should not forget painful experience for Georgia when Russia imposed embargo on Georgian wine and mineral water; Russia continues creeping occupation of Georgia's internationally recognised territories, signing a number of treaties with the occupied breakaway regions of Georgia to further attach them to itself, while closing the cooperation between Abkhazia and Georgia on Enguri Hydro Power Plant. Other threats that the implementation may bring around are related to possible terrorist attack targeting energy infrastructure at security bottlenecks, which maybe believed to be in Georgia. Finally, if the tensions between Armenia and Azerbaijan over Karabakh lead to full-scale military action, energy infrastructure may appear among the first targets on the part of the warring parties, disrupting energy supplies for Georgia if not leading to any attacks on the Georgian territory.

Iranian gas transit to/via Georgia: SWOT from Iranian Perspective:

Strengths:

As there already exists pipeline infrastructure both in Armenia and in Azerbaijan, there will be much less costs needed for its expansion or modernisation than necessary for any totally new construction. The project, if implemented, may open for Iran a new important rout for exporting its energy

²¹ Interview with Mariam Valishvili, Deputy Energy Minister of Georgia,

resources either to Europe or to Russia, or both, and this will also potentially attract western investment and help develop the northern underdeveloped areas in Iran²².

Weaknesses:

Georgia alone is too small a market, while investing into transit infrastructure may appear too expensive against the background of low energy prices. Armenian-Iranian gas pipeline has an annual maximum throughput capacity of two bcm (planned delivery is not to exceed 500 mcm)²³, and although the Azerbaijani pipeline has much bigger capacity, it also needs modernisation and expansion, while its normal direction of operation will need to be reversed.

Opportunities:

Implementation of the South-North project will lay basis for further mutually beneficial joint gas projects with Russia. Possibility of gas trade between Russia and Iran could be opened. Another important possibility is that of connecting to the TANAP and Trans-Adriatic pipelines and transferring gas to the Western markets.

Implementation of such projects will definitely increase Iran's overall influence in the South Caucasus, and open venues for other forms of cooperation. If Azerbaijani route is chosen, it will contribute to already improving Iranian-Azerbaijani relations, and may even lead to the joint exploration of the Caspian Sea fields.

Threats:

There is high probability that Russia would try to undermine any project which it does not control or find beneficial for its interests. Other potential sources of instability in the South Caucasus (Karabakh) that may disrupt infrastructure are also to be taken into account.

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Political factors risks that may support/hinder the project implementation:

Government Stability

When speaking about political stability of Georgia, one should always remember its Soviet legacy, which has strong repercussions on the general political culture. The current government, which came into power in 2012 after defeating United National Movement led by then President Saakashvili, encountered many ups and downs in economic as well as political affairs. Coalition has been

²² According to the Georgia official Mariam Valishvili, Iran is ready to spend a few billion dollars on the Southern Gas Corridor. Azerbaijan seems to be an optimal partner, due to the lower costs, but also due to significant experience in transit agreements. However, Iran thinks to be also dominant on LNG market.

²³ As stated by Aliereza Kameli, managing director of the National Iranian Gas Exports Company (NIGEC)

dismantled and controversial narratives mainly regarding foreign affairs priorities emerged. Currently, in the light of delayed visa-liberalisation and absence of clear perspective of Georgia's NATO membership in the short-term future, pro-Russian forces are reaping the benefits and trying to shift citizens' attention towards friendship with Russia, via restoring the diplomatic ties as the first step. According to the recent polls, both Georgian dream as well as major opposition party – United National Movement have less and less credibility among the citizens, giving possibility of opening political market but also on the other endangering the country's pro-European aspirations. The political landscape may also become strongly fragmented as reflected in the composition of the future parliament following the October 2016 elections, impeding the decision-making processes. Unpredictability of the elections puts the question of the overall stability of the incoming government. Although pro-Russian takeover is not expected, presence of the pro-Russian forces on the one hand and the probability of the coalition government on the other is putting question-mark on the perspective of the major projects, in particular in energy field, which involves multiple partners or frenemies of the country. Therefore, I would evaluate this indicator with 2 points.

Energy investment profile

It should be noted that starting from 2008 Georgia has liberalised and deregulated energy market. Renewable energy projects are based on Build-Own-Operate (BOO) principle. Investors are free to choose the market strategy and negotiate prices. Furthermore, transmission grid does not require any additional fee for connection. No license is required for export. Generation as well as export activities are exempted from the VAT tax²⁴. In terms of electric energy generation costs, Georgia has competitive advantage over its neighbours (due to abundance of high mountains and fast-flowing rivers). Georgia even has generation surplus during summer months. Georgia has also well-developed transmission grid infrastructure. According to Doing Business, Georgia ranks 24th out of 189 (general ranking). While its situation worsened by 2 points in Starting Business indicator, and also worsened by 1 point Getting Credit, it has significantly advanced by 8 points in getting electricity compared to the results of the last three years, enforcing contracts (by 5 points) and resolving insolvency (by 4 points). There are also public as well as private funds available to support investors. Georgia is recognised as top performer in the region according to BDO²⁵. Nevertheless, Georgia's energy sector lacks transparency, what might hinder the investment flows. Considering these factors, I would evaluate this indicator with point 2 risk on the 0-10 scale.

External conflict

The most evident conflict which is threatening the Caucasus region is Nagorno-Karabakh conflict, which has erupted in active military confrontation in recent period. This is the huge factor of destabilisation and imminent threat to the security of the neighbouring countries as well, since Russia

²⁴ <http://www.investingorgia.org/en/keysectors/energy>, accessed on June 1, 2016

²⁵ http://www.bdo.ge/upload/BDO-IBC-Summary-2015_ENG.pdf

might become involved as well as Turkey. Since this is actual geographic location of Iran-Georgia energy cooperation, this factor is playing important negative role. Territorial conflicts of Georgia are another serious concern for the security of any significant energy project. Further escalation of the conflicts or incidents may be used by the Russian side to apply the well-known tactics and disrupt the routes. For example they are suspected to be behind the sabotage of the BTC pipeline ahead of the 2008 Georgia-Russia war.²⁶ Therefore according to the risk assessment scale it gets 7 points.

Corruption

Eradication of corruption has been also one of the priority areas of the Georgian governments during the last dozen of years. According to the recent data, Georgia ranked on 48th place out of 168 countries²⁷. Georgia is one of the first countries in the region to establish legislation that holds Georgian companies criminally liable for bribery. According to the reports of the major international organisations, Georgia ensures active and autonomous investigation and prosecution of corruption cases at all levels.²⁸ However there still exist number of serious concerns, including so called elite corruption, non-transparency of procurement and privatisation process, weak accountability about the command of reserve funds and violation of property rights. According to the experts and report analyses corruption in energy sector manifests itself during privatisation and/or construction of new energy facilities, when most favourable conditions are created for one or another company in exchange of certain benefits. In this regards the risks are minimal, but still considerable - to 1 point.

Ethnic tensions

Georgia is multi-ethnic country. Minority constitutes 16% of its population with the major minority groups of Armenians (around 5.7 %) and Azeris (6.1%) , Russian only 1.5%, the rest of the minorities are of the smaller percentage such as Greeks, Ukrainians, Abkhazians, Jews, Kurds. The majority of minorities are living in two regions of Georgia - Kvemo Kartli and Samtskhe Javakheti. If there is a flare-up of the Karabakh conflict, there will be a serious risk of its spill-over to the Georgian territory. Considering these factors, 3 points are attributed to this indicator.

Bureaucracy quality

Georgia started to modernise its bureaucracy after the Rose revolution. This process has been quite complicated, accompanied by challenges and mistakes. Apparently it is still difficult to create stable and depoliticised civil service. The defining problem is lack of institutional memory, ethics and skills due to unstable and unsystematic scheme of composing administration. They are subject of turbulent political processes often results in politically (or personally) motivated decisions, including dubious

²⁶ <http://www.eurasianet.org/node/71291>

²⁷ <https://www.transparency.org/country/#GEO> accessed June 2, 2016

²⁸ <https://www.oecd.org/corruption/acn/istanbulactionplan/countryreports.htm>, accessed June 1, 2016

and anti-meritocratic personnel choices, but also support or blocking of economic projects based on sometimes invisible and unpredictable reasons. This concerns not just the Ministry of Energy, formally responsible for the energy-related policies, but the whole frequently non-transparent decision-making process. In this regard political risk exists with 2 points attributed, according to the research scale.

Foreign Orientation

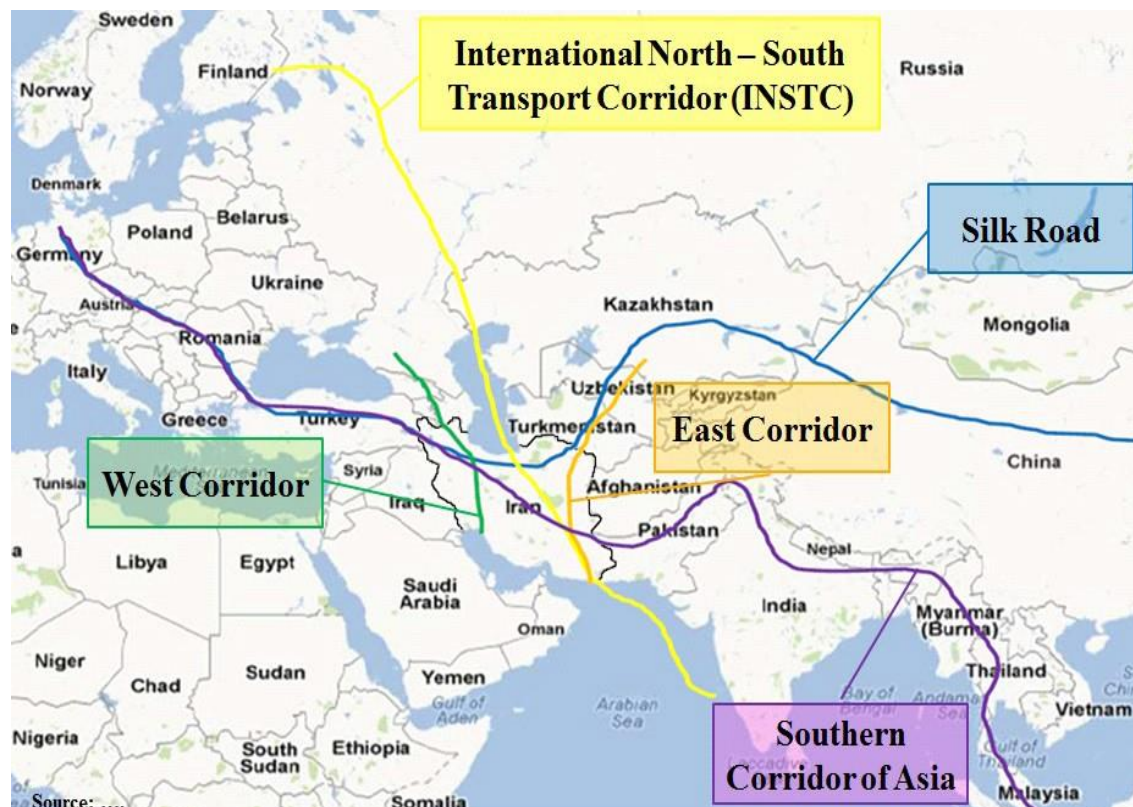
After declaring its independence in 1991, Georgia pursued a pro-European path. Western aspirations have been significantly strengthened in the aftermath of the Rose Revolution. Georgia has officially expressed willingness to become member of NATO and the EU, and has implemented a number of reforms in many areas, in order to 'return to Europe'. The majority of population is in favour of country's pro-western direction, according to the latest CRRC poll, 61% of the population support government's goal to join the EU. However recent disappointment related to the delay of visa waiver with EU is giving strong grounds to populists and pro-Russian forces to manipulate public opinion in the hope of gathering votes. Though there is no major imminent risk of changing Georgia's foreign policy priorities (which is also guaranteed by the Constitution), a threat still exists in case of radical scenarios, when Georgian parliament would be so fragmented that it would not be able to reach consensus. Therefore according to the scale, 2 points can be attributed to it.

To sum up, while the key factors influencing the realisation of projects such as those discussed above are rather of external nature – i.e. security and gas/energy prices, it seems there are quite important internal factors that may have an impact on the feasibility of building Iran-Georgia(-Europe) pipeline even without these factors. These are related in short to the quality of governance and stability within Georgia, and its foreign policy priorities.

Chapter 2:

Transit of Iranian Gas via Georgia and Its Regional Implications

- To what extent and how energy cooperation of the West with Iran will influence the Georgian/regional energy market and energy security, but also the general geopolitical and geo-economic situation?



There exist at least four factors that push Georgia towards diversification of energy: 1) Reducing its dependence on Russia; 2) exploitation of Azerbaijani Shah-Deniz gas field is delayed and this may endanger the country's energy security; 3) consumption of natural gas in Georgia with the construction of new thermal power plants is growing; and 4) the price for Azerbaijani gas might be revised toward lowering in case there is more competitive market and Georgia is able to look for a cheaper supplier.

Even in the short term it is difficult to predict the gas prices, due to the fact that the pricing structure for gas imported to Georgia from Azerbaijan is linked to how the Shah-Deniz gas field is developed and exploited, but also as the gas market is not sufficiently competitive and tends to be monopolistic.

EU Regulations: Case of Iran and Georgia

In any type of energy cooperation with the EU, Iran and Georgia need to respect the EU regulations and adapt their legal frameworks and implement EU standards, and this factor should be taken into account when discussing the feasibility of the possible projects. This chapter briefly discusses the legal basis of such cooperation.

Gas purchase by the EU is regulated by the Treaty of the Functioning of the European Union (TFEU), article 194 on energy. According to the treaty provisions, in a spirit of solidarity, Union policy on energy shall aim to ensure the functioning of the market, ensure security of energy supply in the Union, promote energy efficiency and development of new renewable forms of energy and promote the interconnection of energy network²⁹. In order to achieve these objectives, measures are established by the ordinary legislative procedure after consulting the Economic and Social Committee and the Committee of the Regions.

Any agreements should not be breach so called the 'third package on 2009' , which officially came into law in 2011 with the aim to develop a more harmonised European internal energy market. This Package aims to further open up gas and electricity markets by covering 5 main areas: Unbundling energy supplies from network operators (separation of the energy supply and generation from the operation of transmission networks to support the competition on the market), strengthening the independence of regulators, establishment of the Agency for the Cooperation of Energy Regulators (ACER), cross-border cooperation between transmission system operators and the creation of European Networks for Transmission System Operators and increased transparency in retail markets to benefit consumers.³⁰

EU imports 53% of all the energy it consumes. It imports 90% of its crude oil, 66% of its natural gas, 42% of its coal and other solid fuels and 40% of its uranium and other nuclear fuels³¹. Russia and Norway together supply over half of the EU's gas and 40% of its oil. OPEC countries, of which Iran is a member, are supplier countries of EU providing around 40% of its total crude oil. In response to Russia Ukraine crisis, EU launched energy security strategy in 2014 laying out the measures to increase energy efficiency. According to the Energy Security Strategy (COM(2015)80), ensuring energy security (and in particular gas) should be in full compliance of agreements related to the buying of energy from third countries with EU law. European Council also called for 'full compliance with the EU law of all agreements related to the buying of gas from external suppliers, notably by reinforcing transparency of such agreements and compatibility with EU energy security provisions'. It should be further mentioned, that in the cases of such intergovernmental agreements (IGAs)

²⁹ http://eur-lex.europa.eu/resource.html?uri=cellar:c382f65d-618a-4c72-91351e68087499fa.0006.02/DOC_3&format=PDF, accessed on June 15, 2016

³⁰ <https://ec.europa.eu/energy/en/topics/markets-and-consumers/market-legislation>, accessed on June 13, 2016

³¹ <https://ec.europa.eu/energy/en/topics/imports-and-secure-supplies>, accessed on June 14, 2016

Parliament and Council adopted Decision on information exchange mechanism. The main feature of this mechanism is that the Commission carries out compliance checks of IGAs after Member State and a third country have concluded such agreements. Commission is willing to strengthen its position vis a vis IGAs claiming that in case of incompatibilities renegotiation of such agreements is very difficult, therefore it requests for its involvement before conclusion of such agreements.³²

Considering these regulations, Iran will have to adapt the measures adopted by the EU. In the long-term perspective, Iran should respect the five dimension of the Energy Union framework strategy – energy security, solidarity and trust; fully integrated European energy market; energy efficiency contributing to moderation of demand; decarbonising the economy; and research, innovation and competitiveness. EU has expressed its willingness to rigorously enforce existing energy legislation as well as reinforce the legislative framework for the security of supply for electricity and gas.³³ All the agreements related to buying gas from Iran will be subject of strict oversight of transparency, needless to say that they should be in full compliance with the EU law.

Georgia

Georgia is planning to join the European Energy Community in 2016³⁴. Nevertheless transitional period might last for several years, until all regulations are applied. Georgia will need to implement reforms related to greater market liberalisation and greater competition energy markets. Country will need to improve the quality of energy services and standards as well as improve conditions for promotion of domestic renewable resources. Georgia will need to create modern, competitive and sustainable energy system, independence of the regulatory authorities will need to be increased, tariffs will be transparent and cost-benefit, process of unbundling will start and networks will become more accessible. Achieving these targets will not be cloudless, however the end result will be very much beneficial for country and its economic development. According to Mr. Janez Koapc, Director of the Energy Community Secretariat, participation in Energy Community will enable Georgia to access to dedicated support for transposition and efficient application of the EU legal framework. It will be a platform for coordination and cooperation in energy policies, integration of energy markets and will promote country's progress in front of the investor's community, traders, IFIs and broader public. There is no doubt, that gap exists between EU and Georgia's regulatory frameworks, which need to be harmonised consistently³⁵

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³² <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52016PC0053&from=EN>

³³ <http://data.consilium.europa.eu/doc/document/ST-11-2015-INIT/en/pdf>, accessed on June 15, 2016

³⁴ <http://www.naturalgaseurope.com/georgia-plans-for-energy-security-30077>, accessed on June 10, 2016

³⁵For detailed research on Georgia's regulatory gap, please see research 'Georgia and European Energy Community', http://greenalt.org/wp-content/uploads/2015/06/Georgia_and_European_Energy_Community.pdf

Chapter 3:

Pros & Cons for Europe, European Stakeholders

3. What are the pros and cons for Europe from the perspective of energy cooperation with Iran involving Georgia? Who are the potential Western/European supporters/pushers for such an initiative?

The plan of transporting Iranian gas to Europe can only be considered in a longer-term time perspective, especially considering the current trend toward low energy prices and the big scale of investments needed for its implementation. Political priorities of Iran at the moment seem to be elsewhere, especially as the hardline opposition sees the energy cooperation with the west and the opening of the economy as opening channels for looting the country's mineral riches. The government is focused on strengthening Iran's regional role and trying to quickly maximise revenues in order to compete with its main regional rival – Saudi Arabia. Iran also strives to redefine its role among the regional countries such as Iraq, Pakistan, Afghanistan and Oman. Pakistan is a difficult challenge because of its close cooperation with Saudi Arabia, nevertheless in recent years Iran advanced a pipeline project with Pakistan³⁶. Iran has also already completed constructing infrastructure connecting the major South Pars field with the Pakistani border. Iran is likely to further expand in Iraq, where it already dominates local politics. In 2015, China got involved in construction of major part of communication infrastructure from the port of Gwadar to Nawabshah, and the completion of this project post 2020 is expected to play a huge role in Iran gas exports.

As for the global markets, Iran at this stage has little interest in playing a global role as it for the time being is mainly oriented toward the regional level. Another factor is the lack of investment – so, the Nabucco project got stuck while the sanctions were in force due to the lack of potential supply that in its turn would be not plausible without due scale of investment. Development of the Iran – Europe energy cooperation will make Iran and the EU more interdependent, which is also not too welcome an idea for Tehran's hardliners. Another problem relates to choosing the right transit route. Most probably Iran will transfer its energy via Turkey, by the so called ITE (Iran-Turkey-Europe) pipeline. However, in the current situation of interethnic tensions, Turkey's Kurdish militants may readily target the hydrocarbon transportation infrastructure, therefore the Turkish ability to ensure safety of the route is questionable.

When discussing new types of infrastructure projects in Europe it should be taken into consideration that as there are enacted the COP21 standards, any new infrastructure will be subject to legal scrutiny. In this regard producing LNG guarantees much more flexibility as is not dependent on developing infrastructure such as pipelines, regulated by COP21. Along another line, the interests of big energy companies are also very important. They avoid transactional relationships and prefer more clarity

³⁶ <http://www.ft.com/intl/cms/s/0/fef594b4-8a4e-11e2-9da4-00144feabdc0.html#axzz3nE1kZL00>

regarding economic and political future of the potential counterparts, especially as Iran's geopolitical endeavours (such as support of Hezbollah in Lebanon and Syria, or Shiya rebels in Yemen) and poor human rights record may eventually re-ignite anti-Iranian stance in the West. As for the pushers of such an initiative, these are mostly Eastern European countries that are wary of overdependence on energy imports from Russia and are fervently advocating diversification of the EU's energy market. They fully realise that if the expansion of the Russia's North Stream II pipeline is going to be implemented, these countries will become even more vulnerable to being manipulated by Russia³⁷. Equally worrying is the obvious resumption of Russia-Turkey discussion on the possibility of building still another gas pipeline circumventing Ukraine – the Turkish Stream (modified version of the previously abandoned South Stream project).³⁸

Whatever the obstacles, currently both the EU and Iran seem to be eager to proceed with energy cooperation, as was expressed by the respective officials in April 2016 in the Joint Statement on Energy, agreeing to pursue the High Level Energy Dialogue on non-nuclear energy, and among other things agreeing on “Development prospects of oil and gas export infrastructure in the Islamic Republic of Iran to contribute to the EU's energy security”.³⁹

EU – Iran energy deal?

In theory Iran has sufficient reserves to satisfy EU's demand for natural gas for at least 90 years, having in its possession more than 34 trillion cubic metres of proven natural gas reserves⁴⁰. However, this potential is not yet translated into practical reality. There are three major reasons for the rather sluggish exploitation of Iran's natural gas resources: 1) International sanctions regime since 2007 and country's legal petroleum framework: so called – buyback scheme. This was a short term Risk Service Contract between National Iranian Oil Company (NIOC) and any international oil company (IOC) for conducting petroleum exploration and /or acquiring production rights. An IOC is simply a contractor to NIOC and never gains equity rights in crude oil being reimbursed in cash after completing an agreed scope of work. Some Islamic scholars have even expressed doubt whether such an agreement is licit under the Sharia law⁴¹. For this reason, a number of Iranian students along with

³⁷ Tusk: Nord Stream II doesn't help. EU Observer, 18 December 2015.
<https://euobserver.com/energy/13160>

³⁸ Jeffrey Mankoff. A Friend in Need? Russia and Turkey after the Coup. CSIS, July 29, 2016.
<https://www.csis.org/analysis/friend-need-russia-and-turkey-after-coup>

³⁹ https://eeas.europa.eu/statements-eeas/docs/iran_agreement/eu_iran_joint_statement_on_energy_cooperation.pdf

⁴⁰ <http://www.bp.com/en/global/corporate/energy-economics/statistical-review-of-world-energy.html>, accessed on May 30, 2016

⁴¹ <https://www.ogel.org/article.asp?key=2855>, accessed on May 30, 2016

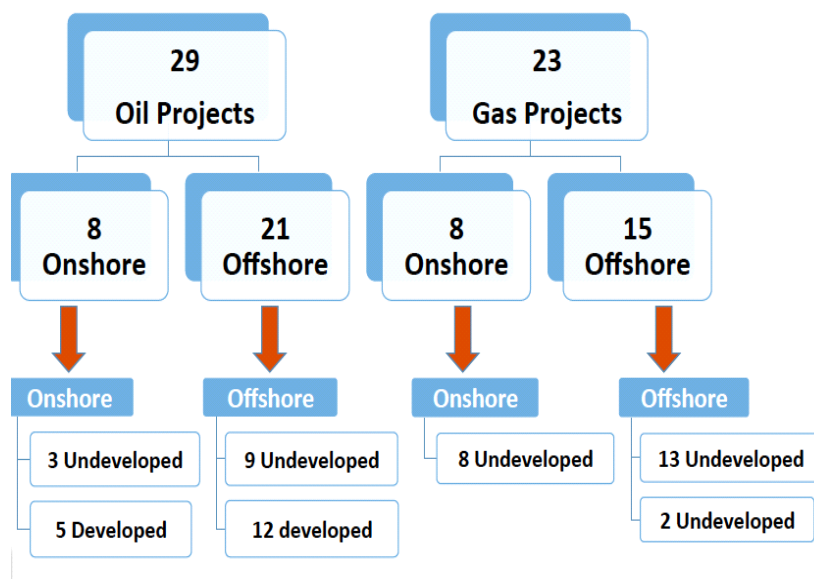
opposition politicians protested changes in the legal framework arguing that Constitution clearly prohibited foreign ownership of the natural resources.

However since 2013 Iran started working on reforming its legal petroleum framework following the model adopted in Iraq and this was successfully launched in 2015, opening an opportunity for closer cooperation with the EU and western companies.

Perspectives:

After lifting the sanctions a new chapter of Iran-EU cooperation has started. When HR/VP Federika Mogherini visited Iran in April 2016, an agreement on strategic partnership has been signed between Iran and EU. However, the real challenge now is the hesitation on part of the big banks to be engaged with Iran, as not all sanctions have as yet being lifted by the USA and extends on 1) Iranian parties on OFAC's list of Specially Designated Nationals (SDN List), 2) Iran's Islamic Revolutionary Guard Corps (IRGC) and its designed agents and affiliates, 3) Any other person on the SDN List designated under US executive orders related to Iran's proliferation of weapons of mass destruction or Iran's support for international terrorism. Apart from US sanctions, Iran has remaining EU sanctions due to 1) the arms and ballistic missiles embargoes, 2) the restrictions on the transfer of proliferation sensitive goods, 3) the restrictive measures against some of the listed persons and entities 4) Iranian support of terrorism and human rights abuses. UN also sanctions Iran due to 1) Iranian support of terrorism 2) Iran's human rights abuses 3) the arms and ballistic missiles embargoes.

Nevertheless, Iran's Supreme leader Khamenei has recently announced the country's approach at strengthening the resilience of the Iranian economy. Iran is currently going to negotiate 29 oil and 23 gas projects worldwide. See the pictures below.



Green-Fields		Brown-Fields	
Oil Projects	Gas Projects	Oil Projects	Gas Projects
South Azadegan	South Pars (phase 11)	Ab-Teymour	Ilam Refinery
South Pars Oil Layer	Farzad-A	Ahwaz -Bangestan	
Changuleh	Balal	Mansuri-Bangestan	
Darquain -3 rd Phase	Kish	Foroozan	
Golshan & Ferdowsi	North Pars	Soroosh	
Jufair , Sepehr, Susangerd, Sohrab, Banderkarkheh , Arvand	Golshan & Ferdowsi	Norooz	
	Khami Fields	Dorood	
	Sefied-Baghoun , Sefied-Zokhour and Dey	Salman	
	Karun-Bangetan & NGL-1700	Aban , Paydar , West Paydar , Danan, Cheshmeh-Khosh, Dalpari , Naft Shahr, Sumar, Dehloran	

Source: MEES (Marine Engineering Energy Solution Limited)

The political role of Iran at the declaratory level at least is linked to the determination to contribute to achieving peace and prosperity in the Middle East. Iran is also willing to deepen its cooperation with India by exporting there its energy resources⁴², as India is currently a key economic factor of growth. From East to West – China is pushing for the development of economic corridor – Silk Road Economic Belt, and Iran is a willing partner in this grandiose endeavour. Iran has also expressed desire to join the WTO, therefore it is determined to create a competitive energy industry.

⁴² Iran, India sign oil, energy agreement. pressTV, April 9, 2016
<http://www.presstv.ir/Detail/2016/04/09/459928/Iran-India-Zangeneh-Dharmendra-Pradhan-contract-FarzadB/>

Another important factor which needs to be taken into consideration is that the economy of Iran has been diversified because of the sanctions, as oil and gas contribution to the overall economy has been reduced. Iran's oil dependency is only 30%, while it's at 90% in Iraq 90%⁴³. However in order to achieve energy efficiency, at least \$50 billion are needed annually.

According to an interview with Foreign Minister of Islamic Republic of Iran, LNG is the priority of Iran. Asian markets are more lucrative and at this stage Iran is interested in the Asia markets. However in the long-term the Iran's leadership is thinking of gas export to the EU, although not necessarily via the Turkish route. This decision will depend on the pricing, and if it rises, then Iran will think of moving into the western markets.

Currently the main players in the European energy markets are Russia, UK, Qatar, and Norway, but in the longer term EU is willing to further diversify its sources. Iran possesses a very good geo-strategic location, but international companies do not want as yet to engage there as they do not have access to the trade credit insurance because of the yet un-lifted US sanctions. Companies will face difficulties to find financial services until European and Iranian banks are fully operational, they do not have access to trade credit insurance until outstanding amounts are fully paid. Companies are hesitant due to potential exposure to US sanctions. The question for Iran is as how to get out from these sanctions? Maybe a list of the projects should be created on which the US would explicitly say they are complying with the sanction policy⁴⁴. Full cooperation of banks is needed and they should become fully operational within Iran. European business community expresses willingness to work with Iran, believed to 'have solid basis for the negotiations, but reality is that companies do not make any business without banking system'.

Iran will concentrate on the development of oil fields in order to sustain growing oil production and exports, this would mean that more natural gas might be used for re-injection into oil fields. Iran has agreed to export ca. 10 billion cubic metres per year (bcm/y) for a period of 25 years starting in 2017⁴⁵. New policies on Energy and Gas sector are to increase the country's oil and gas strategic reserves in order to influence the global oil and gas markets. New policy also implies supporting private companies for investment in exploration (not ownership), exploiting and developing the country's oil and gas fields especially the joint fields. Iran plans to enhance recovery factor and achieve ultimate recovery from oil and gas reservoirs, promote foreign investments and revise contractual frameworks to allow IOCs (International Energy/Oil Companies) to participate in all phases of an upstream project, including production⁴⁶.

⁴³ Interview with Dr.Mohsen Pakparvar, Head of Energy and International Studies (IPIS), Ministry of Foreign Affairs of Islamic Republic of Iran.

⁴⁴ Interview with Benjamin Godel, Senior Manager, International Markets, Federation of German Industries

⁴⁵ <http://www.reuters.com/article/us-iran-oman-gas-idUSBREA2B24K20140312>

⁴⁶ Interview with Dr.Mohsen Pakparvar, Head of Energy and International Studies (IPIS), Ministry of Foreign Affairs of Islamic Republic of Iran.

For Iran, shifting to the LNG production is very important as it ensures flexibility in reaching global markets without relying on pipelines. Due to demand and pricing in the markets, LNG Iran strategy would also target mainly Asian markets.

Iran – Turkey route to EU?

Iran – Turkey route would require significant improvement of communication between Iran and Turkey, so that Iran would be able to rely on Turkey for its access to Western markets⁴⁷. This is not improbable, but in the rapidly changing geopolitical environment it is difficult to expect investors to support any big-scale project without predictable long-term stability, unless unrealistically high revenues would counterbalance potential risks.

Conclusions:

Is the Game Worth Playing?

Based on what has been said above, it seems there is limited plausibility in the short term to organise export of Iranian gas to Georgia or via Georgia to Europe. This is by no means a priority for Iran, and Tehran is further demotivated by rising tensions with Turkey. Furthermore, Europe does not demonstrate great enthusiasm toward such project, due to a number of reasons – its preoccupation with internal problems; shifting attention to spot market for LNG and to the renewable energy; instability in the Middle East that seems to be of prolonged nature; unwillingness of big banks to financially support such a project in the light of still pertaining American sanctions on Iran.

At this stage of work the answer to the main question – in the short term perspective feasibility of transporting Iranian gas via Georgia to Europe – seems to be rather negative. However, in the longer time frame such a project makes sense and most probably will come to life in one or another form (and along one of the optimal routes) depending on the prospects for the stabilisation of the region, and on the dynamics of demand on gas and its price.

Recommendations

At the discussed topic involves numerous stakeholders, developing recommendations for all of them will require too much space and competence, hardly a realistic requirement for this work. Therefore

⁴⁷ According to Marco Giuli, policy analyst of European policy Centre, if Iran decides to export its gas to Europe, it will chose the route via Turkey. The major risk here is believed to be the possible eruption of the Nagorno-Karabakh conflict as well as Georgia's potential instability due to its occupied territories. At the same time there are factors that would question the viability of Turkish route such as rising tensions between Suni and Shia communities and countries, and the different positions of Turkey and Iran regarding the war in Syria.

we will mostly focus on recommendations for the Government of Georgia, and to less extent, the EU, as those stakeholders toward whom this paper is mainly focused.

The Government of Georgia

- The most important aim for the Government of Georgia would be to: on one hand strengthen the analytical capacity in the area of geopolitics and geo-economics of energy that would enable it to both calculate risks and benefits, but also assess indirect impacts and implications of energy-related projects and policies; on the other hand, it is necessary to involve in decision-making on big-scale energy projects (such as Iran-Georgia-Europe endeavours) not just profile ministries but much broader range of decision makers and independent experts, due to extremely complex and multi-dimensional nature of the possible implications.
- As the public at large and in particular the civil society are not adequately informed about the developments of the energy sector and their potential implications, while in general the application of the EU regulations should directly benefit to the rights of consumers, it is highly recommended that respective issues become essential part of public debates, and CSOs should get engaged in public discussion and have opportunities for participation in respective policy-making process.
- Due to the fact that diversifying energy sources in the existing geopolitical reality will hardly enhance energy security for Georgia, the aim should be seen as creating more competitive and open regional energy market that would bring in not just security but mainly economic benefits.
- While looking for alternative sources of energy such as Iranian gas, it should be understood that there are no less important way to increase both energy security and economic efficiency such as investing in more efficient energy usage and energy saving, developing renewable energy technologies, but also development of storage facilities such as underground natural gas storage facilities that would protect the country against volatility in prices and supplies. Such storage facility would enable Georgia to store its natural gas during the summer month or during low prices periods, further eliminating or decreasing the need of additional purchase from other countries when the prices go up (respective feasibility study has been already financed by the United State Trade and Development Agency (USTDA)). In particular, acceleration of the utilisation of the vast hydro resources would reduce Georgia's dependency on additional gas and electricity imports.
- The Georgian government should work closely with the government of the Islamic Republic of Iran to reinforce their mutual capacity in developing and sharing experiences in expanding/improving legal and regulatory environments that would be conducive to deeper and

more effective cooperation in energy sector. At the same time, the Georgian government should carefully observe and analyse the development of EU-Iran energy cooperation, and the proposed High-level Energy Dialogue of the EU and Islamic Republic of Iran that may enable Georgia to get engaged in multilevel cooperative platforms;

- Georgia, as a possible transit route as well as Iran's energy partner should take part in the newly created Energy Business Forum, in order to be part of the facilitation processes of further investments in Energy sector. At the same time, on its way of accession to the EU Energy Community, Georgia has to show its determination to implement the 'Third Energy Package'. In this regard, Georgia should benefit from the experiences of the recently joined as well as contracting partners of the Energy Community (such as Ukraine and Moldova);

The European Union

- It should be clearly understood that energy cooperation with Iran should be seen not just through purely economic prism but as an important geopolitical issue, involving also other countries and regional stability and security. Any decision regarding such cooperation should be consulted with respective countries and seen from their viewpoint as well.
- In the situation of rising tensions and risks emanating from Russia there is a need for renewed efforts to secure diversification of energy sources from Europe, engaging in particular Iran in this process as a country with enormous potential, but also in the way that may contribute to stability and prosperity in Eastern neighbourhood and Greater Middle East.
- While collaborating with Iran in diversifying Europe's energy supplies, this should be accompanied by the transfer of technologies and know-how that would enhance environmental and social safety, but also contribute to more efficient and sustainable exploitation of resources in Iran, so as to prolong and improve its functionality as the major source of energy for Europe, but also as increasingly benevolent and stabilising regional power, also through designing policies that would strengthen and support the more liberal and pro-western forces among political and economic elites.
- While thinking of diversifying energy supplies by collaborating with Iran, EU leadership should also realise that this is one more argument for applying more effort and resources to stability, security and prosperity in the South Caucasus, due its additional role as important transportation hub for energy resources.

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ANNEX

Interstate cooperation in electrical power transmission - prospects and limitations

Among other areas of energy cooperation areas between Iran and Georgia electrical power occupies a relatively modest place. Indeed, electricity transmission between Iran and Georgia is technically feasible and potentially beneficial; however it should be emphasized that an essential aim of such cooperation for Iran will be facilitating electricity trade with Russia, while for Georgia it implies mainly benefiting from electrical power transit rather than significantly increasing Georgia's own export capacity. Such prospects fit well with the decision of the Russian Federation to build two nuclear power plants in Iran. One 1000 megawatt power plant has already been built in the Southern Iranian city – Bushehr, while the construction of another one nearby is to start soon⁴⁸. In 2014 Moscow and Tehran additionally agreed to work together on building 8 more nuclear power plants in Iran.

Georgia's energy market is currently dominated by three major companies - 'Energo Pro-Georgia' with 63% of total electrical power, TELASI with 32.5% and Kakheti Energo-Distribution – 4.5%⁴⁹. Notwithstanding Georgia's abundant hydro resources, which gives the country a great potential to produce and further export peak electricity, Georgia is unable to suffice itself during the fall and winter periods, and has to import electricity. The proportion of imported electrical power is also on the rise due to increased consumption by 5% every year⁵⁰. Because of such seasonality due to over-dependence on hydropower, Georgia imports (basic) electricity when short electricity from hydropower plants (from Russia, Azerbaijan, Armenia and Turkey) but exports peak electrical power during the summer and spring to the electric grids of the same four countries. According to the Georgian National Energy Regulation Commission, total capacity of Georgia's cross-border power transmission stood at 2,230 megawatts as of end - 2014.

Recently, in December 2015, Armenia, Iran, Georgia and Russia have agreed to 400 kV develop a power transmission system to foster electricity trading between the four countries⁵¹. While the electricity systems in Iran and Armenia as well as in Russia and Georgia are capable of synchronous operation, no such capabilities are currently in place when it comes to all four countries together. The possibility for Georgia to export or import electricity to/from Iran can theoretically take place either

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<http://www.foxnews.com/world/2016/09/11/iran-begins-construction-on-2nd-nuclear-power-plant.html> accessed on August 10, 2016

⁴⁹ http://gnerc.org/files/wliuri%20angariSi/2014%20წელს_opt.pdf, accessed on August 10, 2016

⁵⁰ *Ibid.*

⁵¹ <http://civil.ge/eng/article.php?id=28879>, accessed on August 10, 2016

via Armenia or via Azerbaijan. According to the latest developments, Azerbaijani route has been chosen to deliver electrical power to and from Iran. This will give capacity to transmit 1000-1200 megawatt electricity between South and North in both directions. The strengthening of the transmission system is planned as following: Georgia will build the 500 kV transmission line to Marneuli, then Georgia intends to build another 500 kV line from Ksani substation to Stepantsminda and the Russian border, while Russia will start building a power line from there to Mozdok to connect its electrical grid. This will supplement the existing infrastructure in Georgia, with its important element being also the 'Black Sea Energy Transmission Line', running between the east and west of Georgia and connecting to the north-east of Turkey, implemented with investments from the EBRD and the German development bank KfW⁵².

The fundamental reason for such 'regional' agreement on cross-country cooperation is on one hand Russia's desire to employ its export potential to Iran, on the other - Georgia's intention to benefit both from transit and from the additional market for its surplus electrical energy. However, it should be stressed that this partnership has only regional dimension and will hardly be of much interest for Europe, unless Georgia attracts investments to fully exploit its huge hydropower resources, possessing a game-changing energy export potential at the regional level but possibly also beyond the immediate region. Still, such prospects are strongly limited by environmental consideration and the possible mass protests both from the ecological and the local communities in Georgia.

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⁵² <http://www.ebrd.com/news/2015/black-sea-transmission-line-redraws-europes-energy-map.html>
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