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Special Editor: Andreas Heinrich

- “After Us, the Deluge”: Oil Windfalls, State Elites and the Elusive Quest for Economic Diversification in Azerbaijan 2
By Farid Guliyev, Bremen
 - The Southern Gas Corridor: Initiated by the EU, Completed by Others? TANAP, TAP, and the Redirection of the South Stream Pipeline 6
By Julia Kusznir, Bremen
 - Perspectives for Electricity Generation from Renewable Energy Sources in the South Caucasus Region 11
By Maximilian Kühne, Philipp Ahlhaus and Thomas Hamacher, Munich
-
- CHRONICLE 16
13 December 2014 – 26 January 2015
-
- JOB ANNOUNCEMENT 18
2 PhD Positions in the Field of Caspian Studies (Social Sciences)

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“After Us, the Deluge”: Oil Windfalls, State Elites and the Elusive Quest for Economic Diversification in Azerbaijan

By Farid Guliyev, Bremen

Abstract

Despite the officially stated goal of economic diversification and the billions of petrodollars in government expenditure, Azerbaijan has made slow progress achieving non-oil growth and remains heavily dependent on oil revenues. Why have Azerbaijan's efforts to reduce dependence on energy export revenue not borne fruit? Two factors seem crucial. First, various public investment projects, mostly on infrastructure, implemented under the banner of diversification were actually exploited by the elites to convert growing public funds into elite assets under their private control. Second, the peak in oil production (in 2010) and the expected depletion of oil reserves over the next two decades seem to have shortened elite time horizons, causing the authorities to spend about 65 percent of the overall savings from the state oil fund. In sum, elite financial interests and short time horizons deflected economic diversification and put Azerbaijan's long-term development at risk.

Introduction

Ten years into the oil boom, Azerbaijan's economy remains as reliant on petroleum exports as in 2003, when the incumbent President Ilham Aliyev took the reins of the presidency: oil and gas constitute 95 percent of the country's overall exports, contributes 74 percent of government earnings and accounts for 70 percent of state budget revenues. High levels of fiscal dependence on oil indicates that the Azerbaijani state effectively is a rentier state deriving most of its revenue from oil rents, rather than taxes. Having realized the risks of oil dependency, in 2012 the administration of President Aliyev announced its strategic development outlook for the future. The development concept “Vision 2020” recognized the need to overcome petroleum dependence and its corollary of becoming a “raw material appendage for the world economy.” The document also highlighted diversification away from oil as the key path toward this goal. The economic development minister said that by 2020, the Azerbaijani economy is expected “to rid itself of its dependence on the oil sector.”

In more tangible ways, however, diversification was understood by the authorities to imply massive public expenditure on infrastructure projects using oil wealth. In a pattern familiar to scholars of the resource curse, billions of dollars were directed from the state budget toward construction of new bridges, highways, parks, residential towers, convention centers, sport complexes, and the world's tallest flagpole. However, has the government's diversification plan been a success? Has it laid down solid foundations for sustainable growth for the future when oil runs out?

The International Monetary Fund's (IMF) staff mission in Azerbaijan said that progress towards economic diversification has so far been “elusive.” The government has been slow to implement reforms with respect to

improving the climate for private business. Corruption was cited by the IMF mission as a key obstacle. Similarly, the European Bank for Reconstruction and Development (EBRD) stated that in 2014, non-oil growth was largely stimulated by government investments, while the prospects for long-term and sustainable non-oil private business growth without constant government stimulus seem “unclear.” Conditions for doing business outside the oil sector remain “difficult,” discouraging foreign investments in the non-hydrocarbon sector. Notably, the pursuit of diversification based on infrastructure projects has so far failed “to translate into pronounced non-energy exports growth,” the EBRD noted.

Why has Azerbaijan's progress towards economic diversification been so unremarkable? In this article, I argue that two sets of factors contributed to slow improvement. First, state control of oil allowed the state elites to use, or sidetrack, various government projects undertaken under the banner of diversification to capture rents on a larger scale. Second, the awareness of oil peak production (2010) and expected depletion dates of oil deposits might have shortened the ruling elites' time horizons (namely, how much they value the future relative to the present) creating incentives for higher public spending for their own benefit today over saving for future generations.

Oil Wealth into Elite Private Profit

High public spending in the political economy context of Azerbaijan operates as the mechanism to reward the close-knit network of cronies loyal to the president. Although oil revenue collection has been transparent, corruption proliferated in public expenditure as the government largely concealed data on how it spent the oil revenues. Rents are captured by the elites on the spending side through the opaque public procurement pro-

cess, awarding of contracts to regime cronies and elite-connected companies, and other machinations to divert public funds. In the absence of clean procurement rules and efficient oversight of public finances, public money is likely to be wasted or plundered. As a result, the state elites and the oligarchs around President Aliyev have become extremely rich and now seek to secure their new wealth and property.

According to Leiden University political economy professor Anar Ahmadov, increases in public expenditure have worked to channel national oil wealth into the portfolios of elites, turning public funds into private assets. In apparent neglect of the social welfare of their citizens, the ruling elites have focused on acquiring large chunks of oil wealth for personal consumption rather than investing these funds into long-term sustainable development.

Large business in Azerbaijan is owned by ministers and senior officials in the presidential administration. As the government increased oil-fueled public expenditure, these state officials-turned-oligarchs have become very rich. The same system is replicated at the local level where medium-sized businesses are either owned or controlled by regional governors, who are in turn connected to the power holders in the center. Kemalladin Heydarov, who was the head of the state customs committee before being appointed the minister of emergencies, is one of the most powerful Azerbaijani oligarchs. His corporate empire includes a business conglomerate Gilan Holding which comprises about 300 firms and subsidiaries and employs more than 12,000 people. Heydarov's family also "supervises" the Gabala district although the head of the local executive authority of the district is a different person, who is officially appointed by the president. The 2014 Bertelsmann Transformation Index (BTI) describes these informal networks as follows:

"key cabinet members have their own private economic interests that often involves a near monopoly on a certain sector of the economy. As a result, an informal understanding exists as to what sector is control[led] by what oligarch."

According to the Asian Development Bank (ADB), most of the state-owned enterprises in Azerbaijan "operate as monopolies in their respective markets, such as electricity and gas, agriculture, and sea and air transport," and "most operate inefficiently."

Infrastructure Spending

Why have most of the public expenditures been directed to large infrastructure projects? Such projects make it easy for the government and closely allied contractors to siphon off billions of dollars. Government infrastructure expenditure also works as a convenient way

for what Russians call *raspil* (carve up), meaning the distribution of budgetary funds among state elite and bureaucratic groups. Investigative journalist Khadija Ismayilova concurs, noting that infrastructure projects represent "the best way to transfer money from the state budget to personal pockets." Independent expert Vugar Gojayev believes that in the Azerbaijani system of institutionalized corruption, large infrastructure outlays have become

"a resource waste and a means of personal enrichment for the ruling elite. The tenders in such giant projects were awarded to politically connected monopolies. The government spending on hosting mega-events and expenditures on 'white elephant' projects and other public contracts have served as a means to funnel money to well-connected companies that in many cases were owned by senior officials or persons close to them."

Since the start of the oil boom in 2004, oil exports have generated more than a hundred billion US dollars in revenue for the state coffers. The administration of Ilham Aliyev decided to spend most of the oil money, rather than save it. In Azerbaijan, the bulk of the state's share of oil revenue is accumulated in the state oil fund SOFAZ. Of about US\$108 billion windfall revenue over the last 10 years, the government spent US\$70 billion from the oil fund or nearly 65 percent of its overall assets. The oil fund's reserves today stand at US\$37 billion. SOFAZ expects to receive an additional US\$200 billion in the coming years. But the amount of actual income will likely depend on the price of oil. With the price at US\$80 per barrel, the total revenue is estimated at US\$100 billion and the Shah Deniz-II gas deposit will be unlikely to provide huge profits considering its high extraction costs.

Middle East Technical University political science professor Suha Bolukbasi believes that by spending lavishly on construction projects while being cognizant of approaching oil depletion the government acted "irresponsibly."

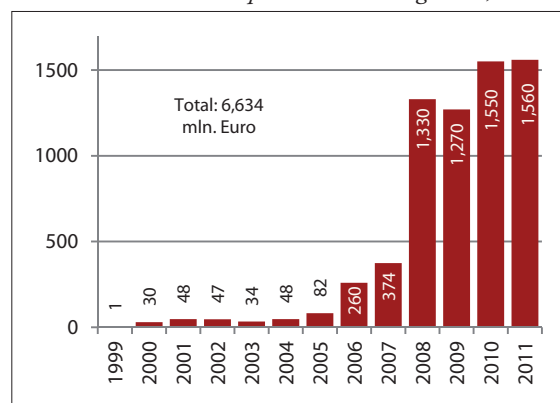
According to calculations by Azerbaijani political opposition leader Ali Karimli posted on his Facebook page, if the government is to pay its share according to various contracts—including acquisitions and investments in the Turkish energy sector (where total investments are estimated at US\$20 billion), the state's share in construction and expansion of pipeline capacities for the TANAP and TAP gas pipelines to carry Shah Deniz-II gas to Europe, construction of a new Oil and Gas Processing and Petrochemical Complex (OGPC) in the Garadagh rayon of Baku (at an estimated cost of US\$17 billion)—the total amount needed to cover

these expenses equals more than US\$32 billion. SOFAZ already invested US\$2.2 billion in the Southern Gas Corridor Closed Joint Stock Company to manage the development of Shah Deniz-II gas and the expansion of gas pipeline infrastructure. The rest of the sum is expected to be taken from the oil fund, whose savings will be around US\$32 billion by the end of 2015, just enough to cover the government contract commitments and investment plans. Based on these calculations, Karimli concludes that the amount currently held as reserves in the oil fund can “only formally be called savings.” In fact, these funds have already been earmarked for specific projects.

Since 2009, direct transfers from the oil fund accounted for more than a half of the country’s year-on-year budget increase. In 2013, SOFAZ received US\$17.3 billion (at the current exchange rate) in revenue. The Fund’s expenditures were at US\$15.7 billion or 91 percent of the earnings. In violation of the requirement to hold a minimum of 25 percent of revenues in reserve, the president decreed to withdraw about US\$14.5 billion (or 84 percent of that year’s revenues) from the oil fund as budget transfers. In 2014, the amount of transfers was US\$12 billion. The 2015 state budget envisages a transfer of US\$13.1 billion, which is 11.3 percent up from the previous year and makes up 53.4 percent of the total budget revenue of US\$24.8 billion. A lack of checks on executive discretion over the Fund and the refusal to adopt fiscal rules has enabled the government to indulge in uncontrolled public spending.

Government priorities are set clearly: close to 35 percent of the state annual budget is invested in infrastructure and construction projects, which according to investigative reporter Ismayilova do not bring any sustainable development for the non-oil sector. Investment in infrastructure increased enormously in recent years (see Figure 1). In the period 2005–2009, infrastructure investment was US\$9 billion, of which US\$4.5 billion was in road construction and renovation. Investment in the modernization and construction of new roads and other physical infrastructure for the 2010–2015 period was expected to be around US\$13 billion. At this rate, infrastructure development consumed about US\$22 billion of public expenditure. This amount represents 31 percent of the overall oil revenue spent via the state budget. The costs of roads are artificially inflated in investment projects. Consequently, it turns out that Azerbaijan builds some of the most expensive roads in the world. For example, the government allocated 620 million AZN (US\$790 million) for the reconstruction of the Baku–Guba highway, but the road still needs repair, according to journalist Ismayilova.

Figure 1: Investment in Road Infrastructure (in million Euros, current price and exchange rates)



Source: OECD/International Transport Forum (2013) *Spending on Transport Infrastructure 1995–2011: Trends, Policies, Data*. Paris: OECD, pp. 26–27, available at: <http://www.internationaltransportforum.org/pub/pdf/13SpendingTrends.pdf>.

A policy paper written by Azerbaijani economic expert Gubad Ibadoglu and his colleagues argues that an increase in oil revenue leads to public investments on large projects “with little developmental value” in a pattern of resource allocation that can generally be seen as “wasteful spending.” SOFAZ Executive Director Shahmar Movsumov disagrees; he said in an interview that the oil money is indeed “invested in future generations.” With reference to the Gulf states, he justified the Azerbaijani government’s expenditure on infrastructure: “The Gulf is a very interesting place, and similar to us. It is flush with money and it understands infrastructure.” Rather than creating state-sponsored factories and plants, it is better to invest in infrastructure and “let the private sector create jobs instead,” he said. However, uncertainties remain as to whether excessive infrastructure investment has been a boon for reducing oil dependence.

Agriculture remains underdeveloped and constitutes only 5.3% of GDP (in 2013) even though this sector employs almost 40% of the labor force. By comparison, the oil sector, which accounts for half of the country’s GDP, employs only 1 percent of total workers. While it has become easier to start a business and register property in Azerbaijan, there are still serious obstacles for firms in getting construction permits, access to credit, and cross-border trade, according to the latest World Bank Doing Business Report. Elite-connected monopolies create market distortions. The endemic practice of bribe-soliciting tax inspections hampers the development of small and medium-sized private enterprises that operate independently from elite monopoly interests. According to the U.S. State Department investment climate assessment (June 2014):

“[a]lthough Azerbaijan has continued to welcome and attract significant foreign investment to further develop its energy sector, inefficient government bureaucracy, weak legal institutions, requests for illicit payments for cross-border transactions, and predatory behavior by politically-connected monopolistic interests hinder investment outside of the oil and gas sector.”

Time Horizons

Politicians' time horizons, or expected stay in office, seem to be a relevant predictor of elite behavior in relation to the management of oil profits. In petroleum-reliant states, the probability of a leader continuing to serve in office is influenced by forecasts of oil peak dates and resource depletion prospects. Leaders with shorter time horizons generally have greater incentives to engage in short-term predation, rent-seeking and consumption of state resources, rather than prudential management, investment in productive sectors or saving.

Azerbaijan has 7 billion barrels of proved oil reserves. The U.S. Energy Information Administration (EIA) estimates that Azerbaijani crude oil exports already peaked in 2010, and have gradually diminished since the peak year as production continued to decline. If oil production is to continue at the current rate and no new discoveries are made, Azerbaijan will run out of oil in 22 years from now. Based on BP data, natural gas reserves are 0.9 trillion cubic meters, and the reserves-to-production (R/P) ratio for Azeri gas is 54.3 years. Natural gas constitutes 7 percent of total exports and revenue from gas exports will not generate as much revenue as oil has. The IMF economists estimated that natural gas exports, expected to increase over the next decade or so, will over time become a larger share of total exports, but generated wealth is estimated at only one-third of the profits from oil exports given lower gas prices relative to oil.

There are currently no apparent expectations of leadership change in Azerbaijan as the incumbent president is relatively young and the removal of term limits in 2009 allows him to stay in office indefinitely. However, the timing of the peak oil production (which hit the mark around 2010) and the expectation of oil reserve depletion, rather than insecurity in office, appears to have influenced President Aliyev's choice between spending and saving oil income and might have altered his time horizons. According to journalist Ismayilova, the Arab Uprisings and the Maidan events in Ukraine sent a warning signal to post-Soviet authoritarian regimes

and raised the costs of buying people's loyalty. As a result, the Azerbaijani leadership possesses “very little faith in the sustainability of their regime. So, they try to spend as much as possible as quick[ly] as possible.”

With shorter time horizons, Aliyev's elites had more incentives to spend a larger portion of oil revenue as a means to accumulate greater private and personal wealth, rather than preserving it for future generations. As a source of fiscal revenue, oil differs from taxes. So long as oil reserves are available, there are weak incentives in rentier states to foster productive business sectors to harness them for taxation. An approaching end of the oil wealth thus might trigger the incentives to funnel oil profits into elite private assets quicker through increases in government outlays and directing the oil money towards large infrastructure projects.

Conclusion

Diversification is believed to threaten the status quo benefiting wealthy elites who would try to avoid or resist it. Moving away from a reliance on hydrocarbons requires considerable effort and commitment on the part of the political leadership, especially in the absence of well-developed alternative sectors prior to oil, as is the case with Azerbaijan. Moreover, promoting private business threatens the ruling elites interested in holding onto power.

Here I have argued that diversification can also be conveniently exploited by elites in ways that increase their financial gains. In Azerbaijan, huge public investments into infrastructure, justified through the discourse of economic diversification, were channeled through informal networks to benefit the economic interests and privileges of regime cronies connected to state elites. Moreover, having observed their economy passing the peak oil stage and being aware that the country will run out of oil over the next two decades, the elites might have developed shorter time horizons putting a premium on short-term expenditure over the privileges of holding public office in the longer term with less certain payoffs. As a result, the nexus of state-business elite—formed around shared kin, patronage, or regional lineage—deflected economic diversification in Azerbaijan and subdued it with the narrower interests of converting public funds into economic assets under elite private control. In sum, the private financial interests of the Azerbaijani elites and their short-term interests have led to stagnation in the non-oil sector and set in motion a pattern of unsustainable economic development.

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Farid Guliyev successfully defended his PhD in Political Science at Jacobs University Bremen in December 2014.

The Southern Gas Corridor: Initiated by the EU, Completed by Others? TANAP, TAP, and the Redirection of the South Stream Pipeline

By Julia Kuszniir, Bremen

Abstract

This article reviews the latest developments in the Southern Gas Corridor, which seeks to reduce European dependence on Russian gas by increasing supplies from the Caspian. Turkey and Azerbaijan are the main beneficiaries of recent events, while Russia is losing its influence over European energy markets, as evidenced by its decision to redirect the South Stream Pipeline to Turkey. The situation remains volatile and depends heavily on Russia's evolving relationship with the West and the ability of Turkey and Azerbaijan to position themselves between the EU and Russia.

Introduction

On 20 September, 2014, the Azerbaijani government inaugurated construction of the second branch of the South Caucasus Pipeline (also known as the Baku–Tbilisi–Erzurum pipeline or Shah Deniz pipeline). The pipeline is a part of the EU-supported Southern Gas Corridor (SGC) project. EU officials initiated this effort in 2007 in order to reduce reliance on Russia for gas supplies by developing the pipeline infrastructure necessary for transporting gas from Caspian producers, including Azerbaijan, Turkmenistan and Iraq, to Europe. The representatives of the countries involved in the SGC project named it a model of global cooperation that significantly strengthens European energy security. In the words of the then President of the European Commission José Manuel Barroso, the Corridor “will be a strategic energy avenue for the 21st century, a true geostrategic project”. In light of these considerations, this article analyses the project's recent developments and what the current situation means for the countries involved and for the stability of gas supply from the Caspian Basin to Europe.

Since its establishment, the SGC has been the subject of numerous “pipeline struggles”: the status of the planned pipelines have undergone significant changes and/or faced uncertain futures for a long period. Originally, the SGC consisted of three pipelines: (1) the Interconnector Turkey–Greece–Italy (ITGI) with a capacity of 10 billion cubic meters (bcm) per year, (2) the Trans-Adriatic-Pipeline (TAP) with an annual capacity of 10 bcm, and (3) the Nabucco pipeline with a capacity of 31 bcm per year. The ITGI project lost the competition because of technical and financial problems. Then, in 2012 the long-planned Nabucco pipeline project underwent radical changes—the project was scaled back into a Nabucco West project with a shorter route and smaller capacity (16 bcm per year) resulting from high financial costs and the lack of necessary gas suppliers. At the same time, Russia began to build its South Stream gas pipeline (initiated in 2007)—a rival project to the EU-

backed pipelines Nabucco and TAP that was supposed to transport 63 bcm of gas per year to European markets via the Black Sea.

The Southern Corridor received a new boost in June 2013 when the Shah Deniz consortium, exploiting the Shah Deniz gas deposit in Azerbaijan, announced the TAP project to be its preferred transportation route to Europe. According to the consortium, Nabucco West lost out to TAP for commercial reasons, such as capital and operating costs, and because of the price that the developers were able to procure for Azerbaijan's gas on the European market. This marked the beginning of the modified Southern Gas Corridor, which consists of three projects: (1) the expansion of the existing South Caucasus Pipeline (SCP) running through Azerbaijan and Georgia to Eastern Turkey; (2) the construction of the Trans-Anatolian Gas Pipeline (TANAP), and (3) the building of the TAP. The new SGC will be some 3,500 km long. The total investment in the pipeline will be US\$45 billion (see Table 1).

At the moment, the gas from the Shah Deniz field will be the main source for the Southern Gas Corridor. Thanks to proven gas reserves estimated at 1.2 trillion cubic meters, Shah Deniz is one of the world's largest gas fields. The project aims to reach gas output at a level of 16 bcm per year in 2019 and 31 bcm in 2026. The production at the field is scheduled to begin in late 2018 with deliveries to Georgia and Turkey. Commercial sales to European consumers will follow in 2019. The hope is to cover 20 percent of European gas needs in the long term. Regarding the export route, Shah Deniz gas will run through the SCP to Eastern Turkey and then will be transferred into TANAP with an initial capacity of 16 bcm per year. Of this, 6 bcm is earmarked for the Turkish domestic market, and the remaining 10 bcm will be transported into the TAP at the Turkish–Greek border. The TAP will then ship this gas through Greece and Albania under the Adriatic Sea to southern Italy. It will eventually connect with a number of existing

and proposed pipe interconnectors within Europe and enable delivery to European markets, including Southern Europe and the Western Balkans. TAP's current capacity is planned to increase up to 20 bcm.

Remarkably, new driving forces for the modified Southern Gas Corridor have emerged: TANAP was initiated by Azerbaijan's state energy company SOCAR and Turkey's state pipeline operator BOTAS in 2011 as reaction to the long and ineffective negotiations on the Nabucco project. Initially, SOCAR owned 80 percent of TANAP stakes while Turkish partners BOTAS and TRAO held the remaining 20 percent. In 2013, British BP—the operator of the Shah Deniz consortium—decided to join TANAP by buying a 12 percent share in the project. In June 2014, SOCAR sold 10 percent of its share to BOTAS, reducing SOCAR's share in TANAP to 58 percent. While the TAP project was initially developed by Norwegian Statoil, Swiss EGL Group (now named Axpo) and German E.ON, in June 2013 SOCAR—together with British BP, French Total and Belgian Fluxys—joined the project. After the withdrawal of E.ON and Total in 2014, SOCAR's stake rose—along with BP's and Statoil's—to 20 percent making it one of the three biggest shareholders in TAP. To sum up, SOCAR has succeeded in getting shares in both pipeline projects that allow the company to have an influential position in the projects' decision-making processes. Furthermore, SOCAR has acquired a controlling stake in the Greek transmission company DESFA, strengthening its position on the European gas markets, too.

Under the aegis of the EU, the SGC was plagued by essential obstacles: (1) a lack of additional gas sources and (2) the increasing Russian political and economic activities in the South Caucasus and the Caspian region that could cause serious problems for the stability of gas supplies in the long-term (e.g., the South Stream gas pipeline). The new players face the same obstacles.

Search for Additional Gas Sources

Consequently, Azerbaijan and Turkey have increased their engagement with other regional gas producers, including Turkmenistan, Iraq and Iran offering to ship natural gas from these producers to Europe via the TANAP-TAP pipelines. In November 2014, SOCAR officials said that the company is willing to help Turkmenistan with its existing gas and oil pipeline infrastructure in order to develop Turkmen oil and gas offshore projects. More recently, Turkey and Turkmenistan have signed a framework supply agreement that aims to deliver Turkmen natural gas to Europe via TANAP through Turkish territory. Two options are under discussion: (1) The Turkmen gas could be shipped via the Trans-Caspian Pipeline (TCP). Since 2011, EU officials

have been working together with Azerbaijani and Turkmenistani officials on an agreement to construct the TCP. However, an unresolved legal dispute over the status of the Caspian Sea between the littoral states has hindered the realisation of the project. The TCP project also faces high costs and technical difficulties. (2) Another option would be to transport Turkmen gas through Iranian pipelines to Turkey and then transfer it to TANAP. However, the implementation of this option is unlikely in the short-term because of the international sanctions imposed on Iran's regime.

The agreement between Turkey and Turkmenistan was reached at a time when one of the main gas importers from Turkmenistan, Russia's state-owned gas company Gazprom, had announced that it is no longer interested in natural gas imports from Turkmenistan. The company is working to cancel the existing supply contracts, justifying this move with the argument that it expects domestic gas production to grow in the coming years and that there will be no need for additional imports. Western sanctions have pressured Gazprom into shrinking planned investment projects and reducing its demand for Turkmen gas.

Azeri authorities have also held talks with the Iraqi authorities and representatives from the Kurdish Regional Government on developing bilateral energy cooperation. They have discussed, among others options, using the Southern Corridor infrastructure to ship Iraqi gas to European markets. Consequently, Iraqi representatives have stressed that the TANAP pipeline is an ideal option for transporting Iraqi gas to Europe that they are willing to use. These negotiations are very important because they simultaneously involved the highest level Iraqi policy-makers and the Kurdish Regional Government. This means that a compromise between the two sides regarding the gas exports can be achieved and the Iraqi gas could eventually reach European markets. Interestingly, the European companies and the EU representatives were less successful in their negotiations on gas supplies for the Nabucco pipeline with the Iraqi government.

Russia as a New Threat?

Whereas Russian authorities have recently reoriented Russian gas export routes toward Asian markets, they have also been looking for alternative routes and locations for exports in the Caspian region. In May 2014, for example, the Russian oil company Lukoil—a stakeholder in the Shah Deniz consortium and the South Caucasus Pipeline company—decided to ship part of its oil production from the Russian shore of the Caspian Sea to the pipeline terminal of the Baku–Tbilisi–Ceyhan pipeline (BTC) for further transportation to the European markets. A month later, the Russian state oil

company Rosneft and SOCAR held talks on expanding energy cooperation. Both sides agreed, among other things, to employ together the existing pipeline infrastructure. This includes the use of the BTC pipeline to transport Rosneft's crude exports. Rosneft is also planning to buy a share in the Azeri Absheron gas project on the Caspian shelf. Its gas reserves are estimated at 350 bcm of gas and 45 million tonnes of gas condensate. SOCAR hopes to use Absheron gas for exports via TANAP-TAP pipelines in the future. Remarkably, the deals with Rosneft and Lukoil were reached at a time when the EU and the US had imposed sanctions against Russian companies. It seems that the deals will ensure profits for both sides. For Russia, the BTC pipeline is an alternative route for its crude exports to Europe that is not affected by the EU sanctions. For Azerbaijan, the deals with Russian companies guarantee the crude needed to fill the half-empty BTC pipeline. They will also secure transit fees from Russian oil and additional investment for the exploration of the new gas fields.

The Russian South Stream gas pipeline project, connecting Russia with Bulgaria beneath the Black Sea, was also facing significant obstacles in the aftermath of the Russian annexation of Crimea: the EU and US sanctions blocked the necessary financing and construction work on EU territory. More importantly, EU officials say that the project violates European competition regulations, including the provisions of the Third Energy Package and that all intergovernmental agreements between South Stream partners and Russia should be renegotiated according to European law. After long unsuccessful consultations, Russian officials decided to freeze the South Stream project and redirect the pipeline toward Turkey. On 1 December 2014, the Russian state gas company Gazprom and Turkey's Botas signed a memorandum to build an underwater pipeline with a capacity of 63 bcm and create an additional gas hub on the Turkish border with Greece for gas deliveries to South European markets. Given the growing gas demand in Turkey and Turkey's ambitions to become an energy hub by 2023, the deals are very valuable because they guarantee more gas (Russia would supply Turkey with additional 14 bcm) for a lower price—Turkey would get a 6 percent discount for Russian gas from 2015 and would profit from selling Russian gas. Moreover, Russian officials announced that in the long-term Russian gas may be supplied to the European markets from Turkey via TANAP-TAP pipelines resolving the problems with gas capacities for the Southern Corridor. For the time being, it is not clear how the route will run and how much it will cost. However, if built, it will significantly change the original design and main goal of the SGC project, namely supplying non-Russian gas to Europe.

These events give the impression that the Azeri and Turkish officials, particularly now, are trying to take advantage of the Russian–EU conflict for the economic and geopolitical benefit. However, the Kremlin could put political and economic pressure on Azerbaijan and Turkey. SOCAR's representatives have stressed in the media that Azeri gas exports to Europe will not pose any threat to Russian gas exports to the European market. It has claimed that its main interests are to become a reliable supplier for Europe, while also developing additional export routes to Azerbaijan's neighbours Georgia, Turkey and Russia. As Azerbaijan's relatively neutral position in the Ukraine crisis shows, it will try to avoid any direct political conflict with Russia. Therefore, the expansion of energy cooperation between both countries could be seen as a means of seeking protection against Russia.

Moreover, alongside annexing Crimea and supporting the separatist uprising in Eastern Ukraine, Russia has been taking radical political steps toward the South Caucasus corridor as well: it has sent the message that it will not abandon its aim to establish a "Eurasian" empire, of which the South Caucasus Corridor is an integral part as it connects the Black Sea with the Caspian Sea and secure access to Central Asia. This strategy finds an echo in the recently signed agreement between Russia and the Republic of Abkhazia that substantially extends Russian political and economic influence in the region. Abkhazia is a disputed region within Georgia that is one of the post-Soviet "frozen conflict" zones. The Russian–Georgian war in 2008 and the current conflict between Russia and Ukraine have clearly demonstrated that Russia is ready to use its hard and soft power mechanisms at any time. This could be a significant threat to the Southern Corridor's gas supplies in the future.

No less important is the fact that Azeri gas will be delivered to the West Balkan countries, including Bosnia and Herzegovina and Montenegro, where Russia has been constantly expanding its political and economic influence. In particular, Gazprom has been a major gas supplier to the region for decades. In addition, it owns a large-scale network of petrol stations and holds shares in the local retail fuel markets there. There should be no doubts that Russia, if the political situation does develop in its favour, will try to exert its influence through its grip on the energy sector there as well.

Conclusion

From the above analysis, we can conclude that Azerbaijan and Turkey have taken advantage of the EU's weak position on the pipeline projects in the Caspian region. Azerbaijan helped to reformulate the initial idea of a Southern Corridor in its favour so that it became

not only the key gas supplier in the project but also the key stakeholder and decision-maker. In addition, it has secured direct access to the European energy markets and strengthened its energy independence from Russia.

The realisation of the TANAP-TAP pipeline projects is of significant importance for Turkey: the projects strengthen its role as an energy hub regionally and globally; they also guarantee extra gas deliveries to cover its domestic growing gas demand and a high volume of direct investment in the country's energy infrastructure. They secure transit fees and therefore will contribute significantly to Turkey's economy. Moreover, through its active negotiations with the Caspian producers such as Turkmenistan and Iran, Turkey has taken on the EU's role in the SGC project and strengthened significantly its geopolitical role in the region. Consequently, in the EU-initiated SGC project, gas suppliers and transit countries have successfully pursued their national interests. Azerbaijan and Turkey have become frontrunners in the development of the EU-supported Southern Corridor.

However, it would be wrong to argue that Azerbaijan—as a main supplier and key stakeholder in the TANAP-TAP projects—can fully control and influence the decisions related to the routes and supplying conditions on its own. The Southern Corridor is an international project, and the interests of other important stakeholders, such as BP and the Turkish energy compa-

nies, must be taken into account. Additionally, due to the fact that the Shah Deniz 2 is a technically difficult project, the Azeri reliance on foreign investment and technology is one of main prerequisites for successfully implementing the project.

Western sanctions have not only significantly damaged the Russian economy, but also undermined Russian ambitions to increase its role on the European energy markets. As a result, Russia needs to diversify its energy sales. Azerbaijan and Turkey offer a solution to this. As current events have shown, these two countries will use this opportunity and intensify their cooperation with Russia.

Russia does not want the South Caucasus region and the Balkans to become integral parts of the West; this would mean Russia's loss of influence in these territories. Russia will therefore try to maintain its influence in the future through bilateral economic and, in particular, energy cooperation. By tightening its influence, the Kremlin can eventually undermine the political and economic stability and security of these regions. This will destabilise further energy deals with European markets. Therefore, the stability of gas supplies from the Caspian to Europe will also depend on the new geopolitical situation in the Caspian and the ability of Azerbaijan and Turkey to cooperate with Russia on the European energy markets.

About the Author:

Dr. Julia Kuszniir is a postdoctoral fellow at Jacobs University. Her research interests include geopolitics, global energy security, energy politics and energy relations in the European Union and Eastern Europe. She also focuses on the development of energy markets in Central Asia and the Caucasus and their impact on national politics.

Further Readings

- Dickel, R. et al. (2014), Reducing European Dependence on Russian Gas: distinguishing natural gas security from geopolitics, OIES Paper NG 92, The Oxford Institute for Energy Studies, University of Oxford.
- Göksel, Diba Nigar (2014), Turkey's Russia conundrum: To court or to curb?, FRIDE Policy Brief, No. 185, September.
- Jaroshewicz, Aleksandra (2014), Azerbaijan—a growing problem for the West, OSW Commentary, No. 146, 15.09.2014.
- Kuszniir, Julia (2013), TAP, Nabucco West and South Stream: The Pipeline Dilemma in the Caspian Sea Basin and its Consequences for the Development of the Southern Gas Corridor, Caucasus Analytical Digest No. 47, pp. 2–7 <<http://www.laender-analysen.de/cad/pdf/CAD-47.pdf>>.

Table 1: TANAP, TAP, TCP, East–West gas and Gazprom–Botas Undersea Pipelines: an Overview

Gas pipeline project	Route	Project partners/ Stakeholders	Planned Capacity [bcm/per year]	Estimated costs of construction	Start of construction
Trans-Anatolian Pipeline (TANAP)	From Georgian–Turkish border to Turkish European border with two branch to Greece and to Bulgaria (2.000 km long)	SOCAR BOTAS BP	From 16 bcm to 31 bcm (by 2026)	10–11 billion US dollars	April 2015 Expected to be completed by 2018
Trans Adriatic Pipeline (TAP)	As the third-part pipeline for Azeri gas to Europe it will connect with TANAP at the Turkish–Greece border and run via Greece, Albania and the Adriatic Sea to Italy (870 km long)	SOCAR BP Statoil Enagas Fluxys Axpo	from 10 bcm to 20 bcm	1,5 billion Euros	Planned to start in 2016 Expected to be completed by 2019
Trans-Caspian Pipeline (TCP)	From Turkmenistan through the Caspian Sea to Azerbaijan, (the length is still not clear)	still not clear	30 bcm	5 billion US dollars	still not clear
East–West Pipeline	Designed to connect the eastern and western (shore of the Caspian Sea) parts	Turkmengaz	30 bcm	2 billion US dollars	Announced in 2012 Expected to be completed by June 2015
Gazprom–Botas undersea pipeline	From Russia through the Black Sea to Turkey (the length is still not clear)	Gazprom and Botas	63 bcm	Still not clear	Still not clear

Source: compiled by the author after bringing together information on gas pipeline projects based on the data of companies' websites and of <www.newsbase.com>.

Perspectives for Electricity Generation from Renewable Energy Sources in the South Caucasus Region

By Maximilian Kühne, Philipp Ahlhaus and Thomas Hamacher, Munich

Abstract

Renewable energy sources are sustainable, domestic and allow for diversification of resources. Given their availability and economic feasibility, they could contribute toward a reliable electricity supply for the South Caucasus region. Based on annual generation time series derived from weather data for the period 2000–2012, we analyse the availability and economic feasibility of wind power and solar photovoltaics in Armenia, Azerbaijan and Georgia. Our analysis demonstrates that electricity generation from wind and solar power is currently not economically feasible in any of the three countries. However, we demonstrate that the attractiveness of renewable energy sources improves significantly in the future if investment costs and the cost of capital can be reduced. We conclude by discussing possible benefits of an early introduction of renewable energy sources in the electricity supply of the South Caucasus region.

Introduction

The South Caucasus region is an integral part of the European energy strategy (Altmann 2007, Meister 2014), due to its substantial reserves of natural gas and oil and its geographical location along the energy transit corridor between Central Asia and Europe. Exporting gas and oil to Europe will potentially drive the economic development of the region in the near future. However, a long-term strategy for supplying the region's domestic energy demand is required to achieve sustainable economic development. Such considerations are particularly important regarding electricity: The correlation coefficient between electricity consumption and the gross domestic product (GDP) of modern national economies is usually much higher than between total primary energy consumption and GDP.

Natural gas has a dominant position in the electricity generation mix of the South Caucasus. According to the International Energy Agency (2014), it contributed approximately 58 percent of the 38 TWh of total electricity produced in the region in 2011. Just over one third of the region's electricity production is supplied by hydropower plants. With less than 1 percent of the total, electricity production from oil played only a marginal role. On a national level, the share of hydropower ranged from 13 percent in Azerbaijan to a remarkable 77 percent in Georgia in 2011. While approximately one third of Armenia's total electricity production is generated by the region's only nuclear power plant in Metsamor, nuclear power amounted to less than 7 percent of the total demand in the South Caucasus region in 2011.

From a strategic perspective, this status quo poses several problems. First and foremost, with basically only three sources of energy and a dependence on natural gas of almost 60 percent, the overall level of diversification of the electricity supply is low. Although the large

part of the region's gas consumption is currently covered by Azerbaijan's domestic resources, natural gas is also imported to the region (Shaffer 2012). With neither access to Azerbaijani gas nor any relevant resources of its own, Armenia is heavily reliant on imported natural gas (and nuclear fuel) from Russia (Danish Energy Management 2011). While so far import dependence is only a national problem, in the long run the whole region might be affected by the depletion of resources. According to Aliyev (2013), the economic exploitation of Azerbaijan's gas reserves might be limited to the next 20–30 years. Depending on Europe's appetite for gas, a shortage of resources and related price rises could occur even earlier.

Except for hydropower and a few small-scale projects, renewable energy sources (RES) are not yet contributing to electricity supply in the South Caucasus region. Renewable electricity generation however satisfies several requirements of sustainability and security of supply. Whereas carbon abatement is a global challenge, nitrogen oxide, sulfur dioxide and particulate matter emissions have an immediate impact on the environment and the health of the local population. Their reduction is an important issue in the South Caucasus, where pollution from fossil and nuclear fuels has reached disconcerting dimensions (Kochladze 2009). Replacing fossil fuels would immediately reduce the environmental impact of power generation in the region. In addition, the deployment of RES would diversify the mix of energy sources and generation technologies as well as reduce import dependence, thus improving security of supply.

This article investigates the perspectives of renewable electricity generation in the South Caucasus region. Therefore, first the availability of RES is evaluated. Secondly, the economic feasibility is explored, using the levelised cost of electricity as a metric. The conclusion describes the additional benefits of RES.

Availability of Renewable Energy Sources

The overall potential of renewable electricity generation is usually classified in terms of theoretical, technical and economic potentials (Hoogwijk 2004):

$$\text{theoretical potential} > \text{technical potential} > \text{economic potential}$$

While the theoretical potential is an estimate of the total annual amount of a primary energy resource that is available in nature, the technical potential is defined as the usable portion if constraints like available and suitable terrain are considered and conversion losses are taken into account. The economic potential is the annual amount of electricity that can be obtained at cost levels that are competitive with alternative sources of electricity, considering current or projected technology costs and market conditions.

Especially for technologies other than hydropower, reliable data on the technical and economic potential of renewable electricity generation in the countries of the South Caucasus are still rare. Due to the limited availability of reliable data, we focus on solar photovoltaics (PV), as well as onshore and offshore wind power. A few estimations exist for the economic potential of onshore wind power in the region. According to USAID (2010), the potential in Armenia amounts to 1.6 TWh (terawatt hours) annually (about 22 percent of total electricity production in 2011), while Walden *et al.* (2013) estimate a potential of 2.4 TWh annually for Azerbaijan (about 12 percent of total electricity production in 2011). For Georgia, a technical potential of 5.0 TWh annually from onshore wind (about 49 percent of total electricity production in 2011) is given by USAID (2008). With regard to solar PV, reliable data could only be retrieved for Armenia, where a technical potential of up to 3.9 TWh (about 53 percent of total electricity production in 2011) is estimated (R2E2 Fund 2013). Data from this small number of studies can only be taken as a preliminary indicator of available RES potential in the South Caucasus region.

Based on weather data for the period 2000–2012, Janker (2014) compiled a global database of time series of potential electricity generation from wind and solar PV. From these time series annual full load hours (FLH) are derived, which indicate the amount of electricity that is generated per unit of installed capacity. Janker (2014) uses two different approaches to determine aggregate FLH for regions or countries: It is assumed that either installed capacity is uniformly distributed across the whole country or installed capacity is uniformly distributed only across the 33 percent of sites with the best conditions. While the assumption of a uniform distribution across the whole country might become more realistic with increasing

shares of wind and solar power, it certainly does not hold for countries which are only starting to develop renewable electricity generation. Thus, FLH which are only based on the best 33 percent of sites are probably more suitable for the South Caucasus region. We examined average FLH of the period 2000–2012 in order to obtain a more representative estimate for each country (Table 1).

For onshore wind power, Azerbaijan offers the highest FLH value among the three countries of the South Caucasus. With an average of 1,041 FLH considering the best 33 percent of sites, conditions are, however, not as favourable as in Germany or the United Kingdom. The number of FLH that could be achieved for onshore wind in Armenia and Georgia is significantly lower. Offshore wind resources could possibly also be harnessed along the coasts of the Black Sea and the Caspian Sea. Whereas only a very low number of FLH can be expected along Georgia's Black Sea coast, the Caspian Sea offers significantly better conditions for electricity generation from offshore wind parks. With an average of 2,149 FLH for the best 33 percent of offshore wind sites, conditions on the Caspian Sea are still less attractive than in the North Sea region, where 3,693 FLH and 4,241 FLH are reached on average in the offshore zones of Germany and the United Kingdom respectively (Janker 2014). However, it should be noted that Kerimov *et al.* (2013) found capacity factors of 0.41–0.49 (i.e. 3,590–4,290 FLH) for offshore sites near Azerbaijan's Apsheron Peninsula.

The conditions for electricity generation from solar PV are favourable throughout the South Caucasus region, with achievable FLH in Azerbaijan and Armenia being slightly higher than in Georgia. Solar radiation however falls short of Mediterranean countries like Italy and Spain, where, according to Janker (2014), more than 1,350 FLH are reached on average (considering the best 33 percent of sites). Although this comparison of FLH indicates the limited performance of wind and solar power in the South Caucasus region, meaningful conclusions can only be drawn from an economic analysis.

Economic Feasibility of Wind Power and Solar Photovoltaics

The economic feasibility of renewable electricity generation in the South Caucasus is analysed by determining the levelised cost of electricity (LCOE) per technology and country. According to Kost *et al.* (2013), the LCOE of any power plant are the average costs per generated kilowatt hour of electricity, i. e. the present value of all costs associated with construction and operation divided by the amount of electricity generated over the whole life time of the plant. If costs and energy are scaled to installed capacity, the LCOE can be calculated by using FLH as a representation of annual electricity generation.

In order to calculate the LCOE of onshore wind, offshore wind and solar PV in the countries of the South Caucasus, it is assumed that the average FLH considering the best 33 percent of sites can be achieved. Due to the limited availability of data, investment costs as well as operation and maintenance costs (O&M) are based on values for Russia (Birol *et al.* 2014). The life time of wind turbines is assumed to be 20 years, while the lifetime of PV panels is assumed to be 25 years (Kost *et al.* 2013). Ondraczek *et al.* (2013) report current values of weighted-average cost of capital (WACC) for Armenia (15.2 percent), Azerbaijan (15.3 percent) and Georgia (17.8 percent), which are used as estimates of the interest rate in these countries. It should be noted that, compared to European countries, like France or the United Kingdom, for which 6.3 percent and 4.1 percent are reported, the cost of capital is relatively high in the South Caucasus countries.

The LCOE are determined for 2012 and 2020 (Figure 1). The 2012 level of investment and O&M costs as well as the current high level of WACC are used to assess the economic feasibility under current conditions. Moreover, the LCOE are also calculated based on the projected level of investment and O&M costs in 2020 and assuming a potential decrease of WACC from the current high level to 9 percent.

Generally, the LCOE of wind and solar power in the South Caucasus region are relatively high if current levels of costs and WACC are considered. In all three countries, onshore wind offers lower LCOE than offshore wind or solar PV under current conditions. Onshore wind in Azerbaijan represents by far the cheapest option to generate electricity in the region today. However, given the expected reduction of investment and O&M costs in the future, solar PV could become more attractive than onshore wind in Armenia and Georgia. The assumed reduction of cost of capital could further increase the competitiveness of solar PV in the region, compared to onshore wind in Azerbaijan.

In order to assess the economic feasibility of renewable electricity generation, the LCOE are compared with consumer electricity prices in this article. Thus, additional taxes or subsidies are not accounted for. With consumer electricity prices of 0.12–0.14 GEL per kilowatt hour (kWh) in Georgia (GNERC 2008), 26 AMD/kWh in Armenia (Kochnakyan *et al.* 2013) and 0.06 AZN/kWh in Azerbaijan (Kostopoulos *et al.* 2009), the current price level in the region amounts to approximately 0.05–0.06 €/kWh. In view of a minimum LCOE of 0.22 €/kWh, electricity generation from wind and solar power is thus not competitive under current conditions. While, on the one hand, investment costs are still too high, it also has to be noted that currently electricity

prices in the region are not fully cost recovering (Vetlesen *et al.* 2012, Kochnakyan *et al.* 2013, Kostopoulos *et al.* 2009). Given the projected development of investment costs and cost of capital, the attractiveness of wind and solar power could improve significantly, reaching a minimum LCOE of 0.15 €/kWh. However, in order to become competitive, either electricity prices have to increase or support mechanisms have to be implemented. Although intended to promote the development of wind power, currently implemented feed-in tariffs of 33 AMD/kWh in Armenia (Danish Energy Management 2011) and 0.05 AZN/kWh in Azerbaijan (Moffatt *et al.* 2010) are not sufficient to stimulate investment.

Further Benefits of Renewable Electricity Generation

Despite the questionable economic feasibility, an early introduction of non-hydro RES in the electricity supply might still hold benefits for the South Caucasus countries. Whereas for Armenia renewable electricity generation opens up the possibility of reducing its dependency on energy imports, Azerbaijan should begin to gradually diversify its electricity generation to ensure security of supply and a sustainable economic development in the future. Another incentive to expand the utilisation of RES is the possibility to export electricity to neighbouring countries. With its growing electricity demand and a higher price level, Turkey could become a key market for renewable electricity from the South Caucasus (Ghvinadze & Linderman 2013). Furthermore, the seasonal characteristics of electricity generation from wind power could provide added value to the power system. As Kelbakiani & Pignatti (2013) point out, the seasonality of renewable electricity generation already has become a problem in Georgia, where hydro generation usually exceeds electricity consumption in spring and summer months, while, due to water shortages, hydropower is unable to meet demand in winter. Instead of further increasing hydropower capacity in Georgia, Kelbakiani & Pignatti (2013) suggest the complementary expansion of wind power, which exhibits seasonal characteristics similar to electricity consumption, i. e. a peak production in winter.

Conclusions

Based on the analysis of FLH, there should be notable potential for the development of onshore wind power, especially in Azerbaijan, for offshore wind power in Azerbaijan and for solar PV throughout the South Caucasus region. Although the literature generally supports these findings, there is still a strong need for further analysis of the technical and economic potential of wind and solar power.

The analysis of LCOE has demonstrated that, under current conditions, electricity generation from wind

and solar power is not economically feasible in any of the countries investigated. As shown, expected investment cost reductions and the lower cost of capital could improve the overall attractiveness of RES significantly until 2020. If wind and solar power are, however, supposed to contribute to the region's electricity supply in the future, support schemes like feed-in tariffs or investment incentives have to be implemented.

In the long run, the expansion of RES might still hold benefits for the South Caucasus countries. Once the deployment of renewables has reached a certain level, both technical and financial incentives will call for the regional balancing of electricity generation. Therefore, wind, solar PV and hydropower could one day boost multilateral cooperation in the South Caucasus region.

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Maximilian Kühne and Philipp Ahlhaus are doctoral candidates at the Chair of Energy Economics and Application Technology at Technische Universität München. They focus their research on large-scale energy systems modelling and optimisation. Thomas Hamacher was professor and acting director at the Chair of Energy Economics and Application Technology from 2010 to 2013. He was appointed to a full professorship at the Institute for Renewable and Sustainable Energy Systems at Technische Universität München in 2013.

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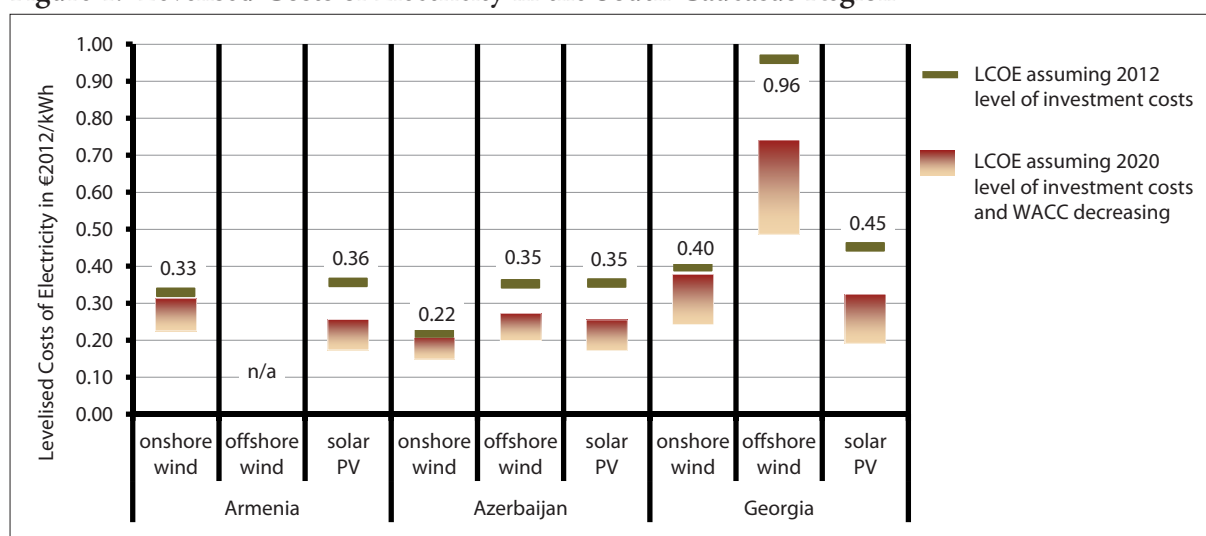
Table 1: Annual Full Load Hours of Electricity Generation from Wind and Solar Power (average for the period 2000–2012)

		Armenia in h/a	Azerbaijan in h/a	Georgia in h/a
onshore wind	all wind sites	510	581	307
	best 33 %	691	1,041	643
offshore wind	all wind sites	n/a	1,675*	635
	best 33 %	n/a	2,149*	880
solar PV	all PV sites	1,100	1,167	1,003
	best 33 %	1,165	1,178	1,053

* Full load hours of offshore wind are based on the whole area of the Caspian Sea.

Source: Janker (2014).

Figure 1: Levelised Costs of Electricity in the South Caucasus Region



Source: Maximilian Kühne, Philipp Ahlhaus and Thomas Hamacher; NB: full load hours are based on best 33% of sites (Janker 2014); investment costs are based on investment costs for Russia in Birol *et al.* (2014); and current values of WACC for Armenia (15.2%), Azerbaijan (15.3%) and Georgia (17.8%) are based on Ondraczek *et al.* (2013).

CHRONICLE

13 December 2014 – 26 January 2015

13 December 2014	Former Georgian deputy interior minister Eka Zguladze is granted Ukrainian citizenship and is expected to take the same position in the Ukrainian government with the hope that she will eradicate corruption in the Ukrainian traffic police.
14 December 2014	Azerbaijani opposition activists demand the release of political prisoners during a rally in Baku
14 December 2014	Georgian President Giorgi Margvelashvili visits Ashgabat and meets with Turkmenistan's President Gurbanguly Berdimuhamedov to discuss economic cooperation between the two countries, including trade and tourism
16 December 2014	The mandate of the EU Monitoring Mission (EUMM) in Georgia is extended for two more years
18 December 2014	The European Parliament ratifies the Association Agreement between the EU and Georgia, including the deep and comprehensive free trade agreement, during its session in Strasbourg
20 December 2014	Georgian Prime Minister Irakli Garibashvili says he is ready for results-oriented talks with Russian President Vladimir Putin following the latter's remarks during an annual news conference that there is a possibility of a meeting between the Georgian and Russian leaderships
20 December 2014	The Georgian Ministry of Defense expresses condolences in a statement over the death of a Georgian volunteer in eastern Ukraine in battle and says that "representatives of former authorities" are to blame for his death as they encourage Georgian citizens to fight in Ukraine
22 December 2014	The Georgian Ministry of Defense apologizes for a statement published after the death of a Georgian volunteer in eastern Ukraine following widespread condemnation
26 December 2014	Georgian Prime Minister Irakli Garibashvili distances the government from former Georgian army officers fighting in Ukraine and emphasizes that only humanitarian aid is provided to Ukraine by Georgia
26 December 2014	A parliamentary session in the Georgian town of Kutaisi is disrupted when scuffles break out between parliamentarians of the opposition UNM party and the ruling Georgian Dream coalition
28 December 2014	The Radio Free Europe/Radio Liberty Baku bureau is raided by Azerbaijani prosecutors who say they have a court ruling that the office should be closed down
29 December 2014	US State Department spokesman Jeff Rathke expresses concern over the human rights situation in Azerbaijan following the crackdown on RFE/RL's Baku office
3 January 2015	The Georgian Ministry of Defense says that Defense Minister Mindia Janelidze spent New Year's Eve with Georgian soldiers at Bagram Air Field in Afghanistan
6 January 2015	The Russian military says Azerbaijan, Russia and Turkmenistan will hold joint naval exercises in the Caspian Sea for the first time in June and July 2015
7 January 2015	Azerbaijani authorities arrest ten men accused of taking part in militant activity with connections to Syria
7 January 2015	Georgia reports 5.49 million visits by foreign citizens in 2014, a slight increase in comparison with the previous year
8 January 2015	A man sets himself on fire in Azerbaijan's capital of Baku for reasons unknown in a street where the authorities have demolished old buildings in the last few months
12 January 2015	Estonian Prime Minister Taavi Rõivas says that Estonia is a "strong supporter" of the EU visa liberalization process with Georgia during a visit to Tbilisi
13 January 2015	Protesters demand Moscow apologize after a Russian soldier is suspected of killing six members of an Armenian family near a Russian military base in the Armenian town of Gyumri
15 January 2015	Protesters demanding the handover of a Russian soldier accused of murdering six members of an Armenian family clash with the police in the Armenian town of Gyumri
16 January 2015	The Georgian Ministry of Energy "strongly" denies remarks by the breakaway region of Abkhazia that talks on the Enguri hydro power plant have taken place with Tbilisi
17 January 2015	The Georgian Orthodox Church calls in a statement for "limits to freedom of expression" in order to protect believers' rights against insult to religious feelings

20 January 2015	The EU commissioner for European neighborhood policy and enlargement Johannes Hahn opens up the possibility for Armenia to sign an association agreement with the EU without its free-trade component after a meeting with Armenian foreign minister Eduard Nalbandian
21 January 2015	Azerbaijani President Ilham Aliyev meets with German Chancellor Angela Merkel in Berlin to discuss bilateral ties and energy issues
22 January 2015	Georgian Prime Minister Irakli Garibashvili meets with his Turkish counterpart Ahmet Davutoğlu and Azerbaijani President Ilham Aliyev on the sidelines of the World Economic Forum in Davos
23 January 2015	The Russian State Duma ratifies a military agreement signed in November in Sochi between President Vladimir Putin and Abkhazia's de facto leader Raul Khajimba that Georgia says is illegal
23 January 2015	Georgian Interior Minister Alexander Tchikaidze resigns amid allegations of providing "protection" to two police officers involved in an operation in which two men were killed almost nine years ago
24 January 2015	A package of legislative amendments submitted to the Georgian Parliament criminalizes a wide range of activities related to illegal armed groups abroad, including "travelling abroad for the purpose of terrorism"
25 January 2015	Lithuanian Prime Minister Algirdas Butkevičius starts an official visit to Georgia to discuss Georgia's EU and NATO integration during talks with Georgian high officials
26 January 2015	Vakhtang Gomelauri, former deputy Interior Minister, is appointed new Interior Minister in Georgia

Compiled by Lili Di Pippo

For the full chronicle since 2009 see <www.laender-analysen.de/cad>

Call for applications:**2 PhD Positions in the Field of Caspian Studies (Social Sciences)****Research Centre for East European Studies / University of Bremen**

within the Innovative Training Network (ITN)

Around the Caspian: a Doctoral Training for Future Experts in Development and Cooperation
with Focus on the Caspian Region (CASPIAN)

*funded by an MSCA grant of the European Union in the context of Horizon 2020
(Grant agreement no: 642709)*

2 PhD positions are available at the Research Centre for East European Studies (Forschungsstelle Osteuropa) at the University of Bremen**Deadline for applications: 12 April 2015****Starting date for selected PhD students: 01 September 2015**

Successful candidates will have to complete a PhD thesis related to one of the following two topics within the contract period of 3 years:

Bremen-PhD1: Authoritarian strategies to create stability and legitimacy. The role of state income from natural resources (with a regional focus on Central Asia and the South Caucasus)

The literature on the rentier state and the resource curse argues convincingly that state income from exports of natural resources can be used to strengthen authoritarian states by either buying loyalty or building up state capacities for the suppression of dissent. However, little is known about the conditions under which this authoritarian strengthening becomes feasible and the explaining factors for specific strategies of the authoritarian leaders. The Caspian states offer interesting case studies in this respect as they all share a common Soviet legacy. Comparing resource-rich and resource-poor countries offers a chance to identify the impact of resource rents and will also provide a better understanding of general authoritarian strategies to create stability and legitimacy.

Bremen-PhD2: The (limited) development of welfare and social policies in Central Asia and the Southern Caucasus: causes and dynamics

The development of social welfare systems after the dissolution of the Soviet Union has been characterised by a twofold transformation: on a territorial level, the newly formed states of the post-Soviet region had to develop welfare institutions and policies independently for the first time. They were confronted with Soviet legacies in the form of existing institutions and popular expectations on the one hand and a global push for neo-liberal reforms, summarized at that time as Washington consensus, on the other hand. On a functional level, the new states, therefore, had to decide which policy fields should be covered by their welfare systems in which ways. This offers an ideal opportunity to identify debates, patterns and causes for specific welfare policy mixes.

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The two selected candidates will get an employment contract for a period of three years at the Research Centre for East European Studies and will register as doctoral students with the University of Bremen. They will be integrated into the Bremen International Graduate School of Social Sciences (www.bigsss.uni-bremen.de), one of Germany's most respected social sciences graduate schools, funded by the Excellence Initiative of the German government.

Most importantly, the Innovative Training Network CASPIAN will provide substantial training and networking opportunities for a group of 15 PhD researchers. Further full partners in CASPIAN are: Dublin City University, Oxford Brookes University, Tallinn University of Technology, University of St Andrews, University of Coimbra and University of Gent.

Information about the Marie Skłodowska Curie actions (MSCA) is available at <http://ec.europa.eu/research/mariecurieactions/>

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Applicants are advised to check their eligibility under MSCA rules. Major criteria are:

- Mobility clause: Candidates must not have been resident or carried out activities in Germany for more than 12 months in the past three years (up to April 2015).
- Maximum seniority allowed: Candidates must have less than 4 years (full-time equivalent) of research experience after their Master's degree.

Applicants also need to meet the criteria for admission to doctoral studies at the University of Bremen, including a Master's degree in a social science discipline.

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The application package should include:

- cover letter
- short CV
- draft of a research design for one of the above mentioned two PhD projects (max 3 pages)
- name and contact details of three referees who can comment on the applicant's professional competences and/or academic capacity

Please submit your complete application package by email as one pdf file.

Applications received by 12 April 2015 will be given full consideration.

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Informal enquiries and full applications should be addressed to

Prof Dr Heiko Pleines, pleines@uni-bremen.de

<http://www.forschungsstelle.uni-bremen.de/en/>

ABOUT THE CAUCASUS ANALYTICAL DIGEST

Editors: Denis Dafflon, Lili Di Puppo, Iris Kempe, Natia Mestvirishvili, Matthias Neumann, Robert Orttung, Jeronim Perović, Heiko Pleines

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