POLICY PERSPECTIVES ON THE SILK ROAD REGION

Vol. 4 | No. 3 | Spring 2021

The Second Karabakh War: Further Reflections

Seeing Beyond Victory Laurence Broers

From Struggle to Permanent Failure Azer Babayev

Energy and the Silk Road Region: Geostrategic Considerations

Hydrocarbon Energy Complexes Robert M. Cutler **SGC's Strategic Benefits** Vitaly Baylarbayov

Oil Pipelines in the Silk Road Region Rodrigo Labardini Morena Skalamera

SGC and the Geopolitics of Climate Change Morena Skalamera

Beijing's Long Road to the Gulf Region Fuad Shahbazov

The Ties That Bind: The South Caucasus and its Immediate Neighborhood

Trilateral Cooperation Between Azerbaijan, Turkey, and Georgia Richard Weitz

Ukraine's Strategic Relations with the South Caucasus Taras Kuzio

Investment Attractiveness Along the Silk Road

Development or Regression? Stanislas Pritchin



Oil Pipelines in the Silk Road Region

Coordination and Collaboration Amidst Competition and Confrontation

Rodrigo Labardini

For centuries, numerous projects have wanted to connect the Caspian Sea to its main markets in the East (China) and the West (Europe). All vie to link energy sources (oil and gas) and goods (commodities and manufactured products) with consumers. Contemporary pipelines and transport corridors are presented as cost-efficient, faster, and profitable, and thus sound economical alternatives to traditional hauling via tankers. "choke-points," each with three alternative routes. *First*, the "Eastern Gap" at the Caspian Sea: Russia, Iran, and the Caspian Sea. The Caspian Sea region also includes Azerbaijan, of course, since it is the only state (together with Russia and Iran) located on its western bank, with routing options via the Caucasus to reach the Black Sea and Anatolia on to Europe. *Second*, the "Western Gap" at the Black Sea: Russia (again), the Black Sea, and Anatolia.

Reviewing the political map, continental pathways between East and West must traverse two regional

The South Caucasus' unique geographical location between East and West as well as between Russia and Iran place it at a strategic crossroads of key

86

geopolitical interest. Furthermore, the Caucasus-Caspian Sea-Central Asia region (CCCA) today-this corresponds more or less to what the editors of Baku Dialogues have called the "Silk Road region"-is merging ever closer with Eurasian and Middle East politics. The politicization of energy and transport-with pipeline politics often dealing with opposing economic and partisan interests-as well as sanctions against Russia and Iran, also raises the importance of sanctions-free routes. Compounding these issues is the fact that several countries in the region are landlocked, dependent on transit states, and vulnerable

Energy geopolitics

to the latter's maneuvers.

Energy is essential to life: it's a Energy is essential to life: it's a communities, and for every country. Whomever controls any of the processes to produce energy and reach markets has im-

portant social and international leverage. Energy resources possess a unique natural double characteristic used as a foreign policy tool: they are both commercial and strategic goods, which explains their political nature. Great influence and power are available to whomever has partial or total control over any of the processes involved in delivering energy to the consumer: source possession, exploitation, production, transport, storage, distribution, and price-setting capabilities. These subjects constitute energy security: the capability to guarantee resources at predictable affordable prices.

The more actors—whether public or private—that participate in any project, the more complicated it is to attain results. Numerous technical questions, economic considerations, legal misunderstandings, and political waves have to be tackled with unswerving commitment in spite of governmental changes.

In classical geopolitics, geography and surroundings impact upon foreign policy. In other words, geography matters. Yet, in a critical perspective, image construction

and language shape geopolitical interaction. Political actors may use any narrative strategically to shape domestic and international policy discourse and, in turn, to promote their own interests. They are also influenced by domestic,

Energy resources possess

a unique natural double

characteristic used as a

foreign policy tool: they

are both commercial and

strategic goods, which

explains their political

nature.

Rodrigo Labardini is Mexico's ambassador to Azerbaijan. Previous postings include ambassador to Nicaragua, Director General for International Labor Policy of the Ministry of Labor, Director General for Human Rights and Democracy of the Foreign Ministry, and Deputy Legal Adviser of the Foreign Ministry. All comments are solely those of the author. ORCID: 0000-0002-2547-0549; rodrigo.labardini@live.com.mx.

international, and regional dynamics involving political and economic developments.

The desire to reach markets can foster international relations in energy flows. Countries and transnationals jointly build regional infrastructure and garner specialized knowhow and assistance from international finance institutions. Oil and gas originating from the CCCA region are becoming a growing re-

ality in European households. Examples to transport Caspian oil to Europe include the Caspian Pipeline Consortium (CPC), the Baku-Novorossiysk (BNP), the Baku-Tbilisi-Erzurum

(BTE), and the Baku-Tbilisi-Ceyhan (BTC) pipelines. Intricacies become evident when we consider that the Southern Gas Corridor (SGC) was initially developed by six countries (Azerbaijan, Georgia, Turkey, Greece, Albania, and Italy), yet it may further develop to the Eastwith Turkmenistan via a Trans-Pipeline (TCP)—and Caspian further into Europe-with the Balkans and Southeast Europe via the Ionian-Adriatic Pipeline (IAP) and the Interconnector Greece-Bulgaria (IGB) pipelines. SGC became fully operational on December 31st, 2020,

and as it keeps developing, more countries will join-probably even Russia.

N Tonetheless, tensions may **IN** occur due to copious issues-mainly political and economic-in all processes involved in delivering energy to markets, fueling conflict. Recent Eurasian examples include the Russia-Ukraine gas crises of 2006, 2009, and 2014; the 2009 Turkmen-Russia gas dis-

pute; the Belar-

2007

transport

us-Russia and 2020 energy It all comes down to a disputes over gas safe route to access enerand oil; and the gy resources and diversi-2017 and 2020 fy supplier countries and Belarus-Lithuroutes. ania

disagreements. Eurasia is surrounded by turbulence, with energy projects competing with one another. Challenges abound. It all comes down to a safe route to access energy resources and diversify supplier countries and routes. Countries, producers, transporters, price-setters, and consumers are involved in a cooperative delivery game whilst competing with each other to reach the markets.

An energy strategy arises from geopolitics, foreign policy priorities, and market characteristics. Caspian and Central Asia countries followed varied paths in search of increased revenue, energy security, and economic independence. These involved cooperation and coordination amidst competition and confrontation, with crisscrossing projects avoiding collision. Azerbaijan, Kazakhstan, Turkmenistan, and Uzbekistanall former Soviet republics endowed with rich hydrocarbon resources-inherited a share of that former country's pipeline network. They each tried to increase oil and gas production, establish transport routes to world markets, and build petrochemical industrial complexes. These constituted the basis for opportunities in both the Eastern and Western Gaps to reach the Black and Mediterranean Seas via the Caucasus and Anatolia, while side-stepping sensitivities to the north and the south.

Pipelines and Reserves

Today, the world is much more **L** aware of the Caspian Sea's energetic relevance. It has even been called the New Persian Gulf, for it may contain 16 percent of the world's oil and its natural gas and oil reserves. And we should keep in mind that its reserves, together with those of Central Asia, "dwarf those of Kuwait, the Gulf of Mexico, or the North Sea," as Zbigniew

Brzezinski wrote in The Grand Chessboard (1997). This makes the Silk Road region a center of a global energy focus. Yet, it is worthwhile remembering that in 1991, during the demise of the USSR, the Caspian Sea countries-excluding Russia-represented 0.68 percent and 2.11 percent of the world's oil and gas proven reserves, respectively. In 2019-again excluding Russia—they represented 2.22 percent and 13.20 percent of the world's proven oil and gas reserves, respectively.

The Caspian region faced challenges to extract and transport energy resources, as well as financing challenges. Caspian hydrocarbon fields are located far from export markets and initially had to rely on old, Soviet-era pipelines. But the Caspian countries used their geography as a bargaining chip for export routes. For example, in 1994, Azerbaijan signed the Contract of the Century with eleven multinationals from eight countries to deliver oil to Europe; in 1997, Kazakhstan agreed to build the China financed Kazakhstan-China Oil Pipeline (KCOP): the first pipeline to directly send Caspian oil to China. Nonetheless, the legal status of the Caspian Sea was still pending; this was addressed with the 2018 Convention on the Legal Status of the Caspian Sea, with maritime border guidelines and some cooperation parameters set

up for the countries in question to use and share aquatic and subsea (hydrocarbon) resources. Yet it seems that this document requires trans-Caspian pipelines to be approved by all Caspian Sea states and, as it hap-

pens, both Russia and Iran apparently still oppose these on environmental grounds.

Tydrocarbon reserves are un-Revenly distributed in the Caspian Sea, with all five littoral states' economies largely dependent on oil and gas. Kazakhstan has the most substantial proven oil reserves, Azerbaijan was a pioneer in offshore oil production, Turkmenistan is a leader in proven natural gas reserves, while the Russian and Iranian share is insignificant. Whereas for Azerbaijan, Kazakhstan, and Turkmenistan, the Caspian Sea is the main source of energy reserves, Russia and Iran have other, more plentiful energy resources at their disposal.

In addition to drilling and logistics issues, for the longest time another problem for Caspian Sea resources to reach the world markets was the fact of landlockedness. Furthermore, the Caspian

Today, the world is much more aware of the Caspian Sea's energetic relevance. It has even been called the New Persian Gulf, for it may contain 16 percent of the world's oil and its natural gas and oil reserves.

90

Sea and its resource-rich states (Azerbaijan, Kazakhstan, and Turkmenistan) were surrounded by neighbors that were commercial rivals and possessed major regional access notwithroutes. standing what

American analyst Robert Manning termed a "a plethora of alternative oil and gas pipelines." This author lists several options whose point of origin is the Caspian basin: to Russia; to Europe via Russia and the Black Sea; to the Black Sea via Georgia; to Europe via Turkey; to the Persian Gulfvia Iran; to Pakistan and India via Turkmenistan and Afghanistan; and to the Yellow Seavia Uzbekistan, Kazakhstan, and China.

Before the demise of the Soviet Union there was no major geopolitical game in the Silk Road region. Afterwards, each country took a different path to diversify and development whilst seeking to reduce their respective dependence on Russia. After seven monopolistic decades, the countries of the Silk Road region started receiving serious interests for exploring, developing, and producing their oil and gas resources through investment

and partnership with foreign energy companies, mainly originating in the United States, the European Union (and the UK), and China. Azerbaijan pursued a balanced foreign policy whilst vying to achieve economic indepen-

dence by opening up to foreign direct investment in oil endeavors to fund development and promote regional stability and growth. Kazakhstan implemented major economic reforms to attract foreign investors. Turkmenistan kept a strong control over its

economy, particularly in the energy sector. Uzbekistan aimed at stabilization in the quest to avoid economic and institutional shocks.

Caspian Basin Countries

zerbaijan's regional hydro-**A**carbon relevance was described by Zbigniew Brzezinski thusly: "Azerbaijan, with its vast energy resources, is also geopolitically critical. It is the cork in the bottle containing the riches of the Caspian Sea basin and Central Asia," he continued. "The

independence of the Central Asian states can be rendered nearly meaningless if Azerbaijan becomes fully subordinated to Moscow's control."

After regaining its indepen-

dence in 1991, Azerbaijan experienced a severe economic recession characterized by negative growth for five years, including a 50 percent decline in oil production from 20 million tons to 10 million tons over a 25-year period (1970-1995) due to outdated technology, poor

planning, lack of investment in new drilling and rehabilitation of existing wells, and the conflict with Armenia over Nagorno-Karabakh.

As a newly independent country with a long oil tradition, Azerbaijan used all available routes to transport its Caspian hydrocarbons. Crossing the Caspian Sea either to send or receive hydrocarbons was complicated, since it required a legal definition of this body of water, its maritime borders, and an agreement on the exploitation of its subsea resources. Azerbaijan was

Before the demise of the

Soviet Union there was

no major geopolitical

game in the Silk Road

region. Afterwards, each

country took a different

path to diversify and

seeking to reduce their

respective dependence on

Russia.

whilst

development

pragmatic: to reach European markets, it developed routes through Russia, Georgia, and Turkey. With the latter two, Baku stressed that a security alliance was most beneficial.

A successful oil and gas strategy led to extraordinary international investment and economic growth with the signing of the aforementioned Contract of the Century and the Shah Deniz field agreement, agreed two years later (in 1996). Azerbaijan received \$60 billion in foreign investment in its oil and gas sector between 1994-2010, or \$77.8 billion between 2000 and 2017. The country's oil and gas revenues were expected to reach \$200 billion by 2024.

In the 1990s, Iran was facing problems in the world's oil export markets, and prospective Caspian oil and gas producers were a threat. After an international consortium backed by Western capital looked to Azerbaijan's hydrocarbons, Iran tried to obtain a share by advocating Azerbaijan's position on dividing the Caspian into national sectors.

However, unable to do so by demand of the United States, Iran then strenuously argued in favor of a condominium concept (in this, Tehran was supported by Moscow), which then gave rise to the idea that geopolitical rivalry was restricting Russian and Iranian exploration, development, and export routes. Additionally, American sanctions were applied on Iran, amidst frosty Azerbaijan-Iran relations on account of Iran's support for Armenia during the First Karabakh War.

Kazakhstan implemented a multi-vector foreign policy, walking a thin line between, on the one hand, its two major neighbors, Russia and China, and, on the other hand, the Western countries, whilst pivoting towards China with the construction of the KCOP as well as the Central Asia-China gas pipeline. Energy is the country's main source of income (85 percent of its total 2007 annual revenue and 67.1 percent of total exports).

Three main pipelines carry Kazakhstani crude and oil products: the Uzen-Atyrau-Samara (UAS) and Caspian Pipeline Consortium (CPC) pipelines to Russia, as well as the KCOP pipeline to China, in addition to rail (to Russia and China) and tanker shipments (across the Caspian Sea to Russia, Azerbaijan (linking to BTC), and Iran). An underwater trans-Caspian pipeline seems to be the best option for increasing production and diversifying export routes. Geographical proximity may

Kazakhstan, Turkmenibring stan, and Iran together to jointly build oil pipelines to overcome Russia's regional influence. A Kazakhstan-Iran protocol envisaged Iran financing the reconstruction of Kazakhstan's Aktau port, linking it to the Tengiz oil field further north to see Kazakhstani oil flow via Iran's Caspian port in Bandar-e Anzali to oil refineries located in other parts of that country. It also developed the Turkmenistan-Afghanistan-Pakistan-India Pipeline (TAPI)-still under construction as of March 2021.

Russian production in the Caspian Sea basin traditionally came from onshore fields in the North Caucasus, particularly Krasnodar, Stavropol, and Chechnya. This region supplied Russia with 65,000 bbl/d (in 2013 numbers). Aside from oil revenues, developing the northern Caspian gives Russia an opportunity to advance new technologies to employ in the Arctic.

After the downfall of the Soviet Union, Russia lost its previously vast Soviet Caspian Sea resources. It tried to preserve its geo-strategic, political, economic, and environmental interests, while facing technical difficulties in oil extraction from the Caspian Sea. Hence, Russia became involved in a struggle for the transportation of Caspian hydrocarbons (visà-vis Azerbaijan, Kazakhstan, and Turkmenistan), offering projects to transport oil and gas from various Caspian fields.

One of the first projects to give Russia an opportunity to compete in Caspian oil transport was the Tengiz-Novorossiysk pipeline (CPC) connecting Kazakhstani fields with Russia's Black Sea, contributing to the development of Novorossiysk. Ultimately, this strengthened the importance of the Black Sea while boosting Russia's economy and Turkey's control of oil-flow through the Bosporus and the Dardanelles.

Most of Turkmenistan's gas reserves are located in the Amy Darya basin in the southeast, the Murgab basin in the south, and the South Caspian basin in the western part of the country. The economy is highly dependent on natural gas (86.8 percent of exports), trailed by petroleum oils and crude oil. The fuel industry accounts over 81 percent of domestic industrial output. Thus, its economy is highly vulnerable to gas and oil prices' fluctuations with restricted exports markets.

Turkmenistan has given great importance to diversifying its export routes in order to reduce

vulnerability, prevent political instability, and overcome the perils of landlockedness. It opened up the Cheleken oil and gas drilling project to foreign investment, with most of its exports in 2011 going through Azerbaijan to the world markets. Most of its gas exports go to China; most of its oil exports are exported over the Caspian Sea to world markets.

Caspian Oil Pipelines

The Caucasus/Caspian Sea **L** region has significant transit infrastructure, hosting major trans-Caucasian oil pipelines: the Caspian Pipeline Consortium (CPC), the Baku-Novorossiysk Pipeline (BNP), the Baku-Supsa Pipeline (BSP), the Baku-Tbilisi-Ceyhan pipeline (BTC) and, inasmuch as it reaches the same destination point and thus becomes a competitor, the Kirkuk-Ceyhan Pipeline (KCP). To the United States and the EU, the region matters as a transit route for energy goods from the Caspian Sea as well as for energy source diversification.

Caspian oil moves through pipelines, ports, ships, and railways. Two pipelines—CPC and BTC dominate the network, with over 50 percent of available capacity. Smaller pipelines, together with Russian pipelines available to Caspian production, provide another 25 percent. This is supplemented by smaller but significant routes involving railways, swaps with Iran, and other transport options.

Of noteworthy interest is the temporal framework of regional pipelines. KCP was built in 1970some three to four decades earlier than the other Caspian/Caucasus pipelines, namely BNP (1998), BSP (1999), CPC (2003), and BTC (2006). This reflects the evolving state of the world. The oil embargoes of 1956 (Saudi Arabia vs. France and the UK) and 1967 ("Arab oil" vs. America, the UK, and Germany) may not have been successful as foreign policy tools, but they evidenced the importance of diversification (both for producers and consumers), while striving to satisfy domestic industrial needs and acquiring foreign currency.

KCP is a clear example: it offers diversification to Iraq, direct oil imports and currency for Turkey, and reduces Russian influence for both. The other pipelines (BNP, BSP, CPC, and BTC) arose when pipelines to (Northern) Europe had been developed and had crafted European dependency from Russian fuel, impelling diversification. KCP reshaped Iraq-Turkey relations, as the former needed markets and export routes to the Mediterranean and the latter needed reliable sources of supply and currency. With KCP, Iraq became Turkey's largest oil supplier while providing Iraq an imperative alternate export route.

KCP was developed during the Iraqi-Turkish economic rapprochement of the 1960s. Iraq's support for Turkey in the 1974 Cyprus Crisis, Turkey's diplomatic support for the Arabs in the 1967 Six-Day War and the 1973 Yom Kippur War, and both countries' common interest in dealing with their respective Kurdish populations allowed Baghdad and Ankara to overcome historical mistrust and build the KCP. It was built independently of major oil companies and, at one point, was the largest pipeline system in the Middle East.

KCP enhanced Iraq's export routes whilst providing Turkey direct imports from Iraq as well as foreign currency for transit fees for oil transshipped from Ceyhan.

Next up is the Baku-Novorossiysk Pipeline (BNP). Post-independence Azerbaijan had to overcome several serious challenges, including possible civil war, a dire economic situation, and

a distraught oil industry. It had two large markets in view: Europe and China: the former was more attainable in the immediate near future as the latter required longer distances to traverse and would require more complex political arrangements. The crux was to reduce dependence on Russia while avoiding situations where international sanctions could apply. An initial compromise allowed pumping oil to Georgia (BSP) and to Russia (BNP). Turkey claimed to be a part of the energy corridor and found strong support in Washington from policymakers wanting to limit Russia's control over exports of Caspian oil. Out of seven general routes, only one destination remained (i.e., Europe) with three possible routes: Russia/ Black Sea, Georgia/Black Sea, and Georgia/Turkey.

The advantage of BNP was its lesser cost (\$1 billion), which was achieved by reversing a Soviet-era pipeline that had previously delivered Russian crude from Grozny to Baku refineries and extending it to the offshore oil terminal at Sangachal. Its disadvantages included preserving Russia's monopoly over Azerbaijani oil and recurring wintertime problems with fog and wind that made tanker loading difficult. Later, a Chechnya bypass was constructed. BNP passes close to Russia's Makhachkala port, allowing access for oil from the eastern Caspian.

Azerbaijan undertook a politically sound decision for its oil to reach European markets notwithstanding the negative effect on its revenue stream. To wit: by exporting through BNP, Azerbaijan agreed to blend its higher quality semi-light sweet crude with Russian crude and market it as the medium sour crude Urals blend, which is sold at 10 percent less than the usual price. BNP has had geopolitical/flow issues due to quota disagreements, technical matters, earthquakes, and military issues.

The Baku-Supsa Pipeline (BSP) was built in 1998 by refurbishing a partially constructed pipeline in Azerbaijan connected to a disused pipeline from northwest Tbilisi to Batumi. This was further refurbished as far as Supsa, located on Georgia's Black Sea coast, where an offshore loading facility was constructed.

BSP was closed in mid-2006 because of corrosion and a landslide. After a major explosion and fire closed BTC in August 2008, BSP was used to re-route Azerbaijani oil deliveries, which were also temporarily closed for safety reasons due to the Russo-Georgian War. In July 2015, Russian troops gained control over a section of BSP in occupied South Ossetia. Nonetheless, SOCAR stated that Azerbaijan can deliver to Supsa via alternative routes.

We now come to the Baku-Tbilisi-Ceyhan pipeline (BTC). After the renewal of its independence, Azerbaijan wanted to export its oil to Western markets. The immediate routes were BNP and BSP. Both had the inconvenience of traversing the Bosporus and Dardanelles bottlenecks. The onset of the Second Chechen War in 1999 helped to justify the final choice of BTC, at which point, Russia's Lukoil withdrew from the consortium. Moscow maintained that Azerbaijani oil reserves were too limited to justify as costly a project as BTC.

Iran also opposed BTC. Tehran was wary about it. It claimed BTC was unreasonably expensive (\$3.6 billion). Together with Russia, Iran alleged that a trans-Caspian oil and gas pipeline (connecting Tengiz oil and Turkmen gas with Baku) might have undesirable ecological consequences due to the region's seismic situation. Tehran argued the Caspian had considerably less oil reserves than was the case, especially in the Azerbaijani sector. As tensions over BTC heated up, Iran proposed alternatives, suggesting oil swaps as most profitable.

Nevertheless, BTC opened in mid-2006. It runs parallel to BSP as far as Georgia before turning south through Turkey to Ceyhan on the Mediterranean coast. BTC is capable of transporting around 50 million tpa of crude oil. Capacity can be increased to 60-65 million tpa by employing drag reducing chemicals and to 80 million tpa by adding pumping capacity. It has also carried Kazakhstani and Turkmenistani oil.

While BNP and BSP were for important Azerbaijani oil revenues, BTC was the defining project for Azerbaijan and the region. BTC helped unlock the Caspian's economic potential, investbringing ment and revenues as well as parallel economic devel-

opment. The pipeline also strengthened competition by expanding the transport capacity of Caspian hydrocarbons. This pipeline practically put an end to Russia's monopoly on the transport of Caspian energy resources. Together with CPC, BTC provided more than half of available transport options for Caspian oil.

Since 2010 BTC has run with spare capacity, wherefore SOCAR proposed reversing part of BNP to export Russian oil through BTC. This would also allow Russian oil to bypass the Turkish straits.

Driven by American and EU energy interests, Azerbaijan managed to establish transit routes for energy resources; first through Russia's Black Sea (Novorossiysk), later bypassing

> Russia to Georgia's Black Sea (Supsa), and finally bypassing the Black Sea and the Bosporus by engineering a pipeline project whose terminal is located in the Mediterranean (Ceyhan).

> Thus, Azerbaijan became less dependent on Russia

and Iran after BTC. This pipeline is both a power resource and the interaction medium for regional and international actors, including governments and NGOs, due to the wide array of connections made possible.

Vol. 4 | No. 3 | Spring 2021

97

While BNP and BSP were

important for Azerbaijani

oil revenues. BTC was the

defining project for Azer-

baijan and the region. BTC

helped unlock the Caspi-

an's economic potential,

bringing investment and

revenues as well as parallel

economic development.

96

 $\mathbf{T}\mathbf{\Lambda}\mathbf{7}^{e}$ turn now to the **VV** Caspian Pipeline Consortium (CPC). After gaining its independence, Kazakhstan arranged a swap arrangement with Iran. Iran would deliver to the Persian Gulf an amount equivalent to Kazakhstani oil delivered to northern Iran. An agreement with Turkey was signed in March 1993 to build a pipeline from Baku connecting to KCP, tracing a route south of the Iranian border. It would have carried Azerbaijani and Kazakhstani oil.

As part of its active policy in pipeline development strategy, Russia has shown a desire to distance itself from any clashing or what three Russian energy experts called in a 2016 article in the International Journal of Energy and Economics

Policy a "dominating attitude of the transit countries" in its export routes. With meager compensation, Russia established with Kazakhstan the Caspian Pipeline Consortium to

transport Caspian oil from the Tengiz field located near the Caspian Sea to Novorossiysk and to international markets via the Bosporus. Although Russia and

Kazakhstan have shares. Moscow had to allow the participation of Western companies such as Chevron, Shell, ExxonMobil, Eni, and British Gas. As the largest privately-operated pipeline route, CPC is the only oil pipeline within Russia not controlled by state-owned Transneft, Russia's oil pipeline monopoly.

The Trans-Caspian Oil ▲ Transport System (TCOTS) is a proposed oil transport infrastructure project designed to carry oil through the Caspian Sea from Kazakhstan to Azerbaijan and on to the Mediterranean or Black Seas. The cost is estimated at \$4 billion. The plan is to build a 739 km pipeline from Eskene to Kuryk in Kazakhstan (the Kazakhstan-

Caspian

Trans-

undersea

al-

using

shut-

to Sangachal with a

portation System) As the largest privateand a 700-kiloly-operated pipeline route, meter Trans-Caspian Oil CPC is the only oil pipe-Pipeline (TCOP) line within Russia not from Kuryk to controlled by state-owned Sangachal, Transneft, Russia's oil pipeternatively *line monopoly.* tanker tles from Kuryk

> 500 kbd capacity in the initial stage, rising to 1,200 kbd.

So far, the project seems to be stuck in neutral gear, in part due to Iranian and Russian opposition. Here it can be noted that the original TCOP provided for 150 kbd of Kazakh oil across the Caspian in the first stage. In 2016 this was almost fully accounted for with 120 kbd sent to Azerbaijan by tanker.

Laying Eurasian Pipelines

To build oil pipelines from L Caspian Sea sources to European markets-or, for that matter, between any source and its markets-over time states evidenced economic and political motivations, preferring easier and more economical routes, subject to political considerations. This is confirmed by analyzing the timeline of when and where major international pipelines were built in Eurasia, as well as accounting for the intended purpose for their construction.

An examination of any map depicting the major international pipelines originating in the Caspian basin that link to European markets provide at least the following standout observations. Pipelines serve dissimilar regions with varying consuming patterns, derived from different refineries, consumption patterns of large consumers, and even seasonal consumption patterns (as

well as storage capacities). They are principally directed to major demand centers in Germany, France, and markets along the way. Pipelines both complement each other and are at competition with each other, as well as with other modes of transportation, in filling these needs. There are long-haul versus short-haul pipelines. From their layout, several distinctive purposes may be contemplated for building oil pipelines.

Tirst, to directly reach European **F** markets from the sources. Directed to markets in Germany and France, and traversing Italy and Central Europe directly from sources in Asia/Eastern Europe. Druzhba and Norpipe are prime examples. Druzhba is the world's longest pipeline, originating in Almetvevsk in central Russia, where it collects oil from western Siberia, the Urals, and the Caspian Sea, before moving on into Ukraine, Hungary, Poland, Slovakia, and Germany. Norpipe is a Norwegian pipeline running from the offshore Ekofisk Complex, which collects both oil and gas from neighboring fields as well as its own, and transports this to Teesside in the UK and Emden in Germany.

Druzhba and Norpipe directly reach their intended markets from sources in central Russia and

Siberia, and the North Sea. In these systems, the regions surrounding the main markets serve as transit routes and benefit in a twofold manner: by receiving oil from sources and from transit fees revenue. In time, these pipelines evidenced a mutual dependence between sources and markets. In 2018, almost one third of the European Union's oil imports came from Russia. In 2016, the export of crude oil and petroleum products amounted to nearly 70 percent of total Russian petroleum liquids production, mostly to European countries, with revenues from oil and natural gas-including exports-making up 36 percent of Russia's federal budget revenues.

 \mathbf{C} econd, to reach the world's **J**oil markets via oceans. Obviously, the oil market is not only European but global in nature. Oil that does not directly reach its intended market via pipelines is destined to reach these via maritime transport. This evidences the liquid nature of oil and the relative ease for its handling.

A number of pipelines exemplify this. Here we can list eight. First, the Baltic Pipeline System (BPS) collects oil from Russia's Timan-Pechora region, west Siberia, and the Urals-Volga regions to Primorsk at the eastern part of

Vol. 4 | No. 3 | Spring 2021

the Gulf of Finland. Second, BPS-2, which was designed to bypass Belarus after the 2007 oil transport dispute with Russia. Third, the Odessa-Brody pipeline (OBP), which travels from Ukraine's port city of Odessa to Brody, a town near the border with Poland-a planned extension could see it expand to Plock on the Vistula and Gdansk on the Baltic Sea. Fourth to eighth, the aforementioned CPC, BSP, BNP, BTC, and KCP pipelines. Caspian Sea hydrocarbon countries (Azerbaijan and Kazakhstan) reused old pipelines (BNP) or built new pipelines to reach the Black Sea (CPC, BSP) or the Mediterranean (BTC). The maritime points each of these pipelines reach are veritable oil logistics hubs.

Third, to reach consumption **L** centers from the oceans. Mirroring pipelines from the sources to the oceans, these pipelines connect to the consumption regions from a coast-receiving oil from the world's sources. Evidently, oil coming into European consumption centers is not necessarily originating from Eurasian production centers.

The Trans-Alpine Pipeline (TAL), which originates in Italy's northern Adriatic port of Trieste and transports oil to refineries in Central Europe (Germany, Austria, and the

Czech Republic), is one such example. Another is the South Europe Pipeline (SPSE), which originates west of Marseilles and supplies oil to refineries in France, Switzerland, and Germany. A third is what is now known as the Adria oil pipeline and originally called the Yugoslav or JANAF pipeline, which runs from a terminal on the Dalmatian coast into the Croatian hinterland, Serbia, Hungary, Slovakia, and the Czech Republic, with branch lines to Slovenia and Bosnia and Herzegovina.

Furthermore, while it is good to have access to the seas, there are differences associated with each sea.

particular Thus, while an option may be to reach the Black Sea, it is better to reach the Mediterranean because from there it can reach world mar-

kets faster while avoiding dense traffic in the Bosporus and Dardanelles bottlenecks.

Fourth and relatedly, interconnector pipelines. With ocean-to-consumption pipelines in place, smaller but necessary efforts must be taken to haul oil to additional consumption centers. The Ingolstadt-Kralupy-Litvinov

pipeline (IKL), which runs from Germany to the Czech Republic, and the Adria-Wien Pipeline, which runs from Italy to Vienna, exemplify this point. Both carry oil from main lines to consumption centers not as large as the main line destination point.

Tifth, a geopolitical vision. Oil Γ pipelines—as any other large regional infrastructure projectare rife with geopolitical battles. To conclude any project requires vast amounts of financial resources (from countries, international financial institutions, and companies), cooperation between builders to overcome complex tech-

> nical issues, and a constant and unswerving political commitment to accomplish the final result. Such cooperation and understanding must continue after the

project becomes operational, or it may become unused. Nonetheless, geopolitics had a more significant role in the construction and maintenance of some pipelines than others.

Three examples can be given. The aforementioned Druzhba pipeline (the term means "friendship" in Russian), used to be known in some

Geopolitics had a more

significant role in the

construction and main-

tenance of some pipelines

than others.

circles as the COMECON pipeline due to the fact that it originated in Soviet plans to provide eastern Russian oil to energy-hungry western regions of the Soviet Union (western Russia, Ukraine, Belarus) as well as to its "fraternal socialist allies" in the former Soviet bloc like Czechoslovakia, Poland, Hungary, and East Germany. It is the largest principal artery for the transport of Russian (and Kazakh) oil across Europe and remains one of Russia's greatest geopolitical instruments for Russia.

Another is the aforementioned Baku-Novorossivsk Pipeline (BNP). The transport of Azerbaijani oil became a controversial issue in the late 1990s, as Moscow had been insisting on delivering it to Novorossiysk, while a consortium of largely Western companies, led by BP, was reluctant to opt for this cheaper option but wary of antagonizing Russia. As noted above, with BNP, Azerbaijan had to accept to mix its high-quality oil with Russian lower grade and sell it as an Urals blend for less money

A third is the Odessa-Brody pipeline (OBP), also discussed earlier in the essay. It was initially intended to haul oil from Kazakhstan to Odessa and to link up with the South Druzhba pipeline. However, as sufficient capacities of oil supplies

Vol. 4 | No. 3 | Spring 2021

were not agreed, in July 2004 the Ukrainian government accepted Russia's proposal to reverse the pipeline flow. This made OBP transfer Russian oil from South Druzhba southwards to the Black Sea and on to Mediterranean destinations. Hence, Russia preempted Caspian Sea oil flowing into Europe and prevented competition for its oil in the EU market.

Lastly, the Baltic Pipeline System Two pipeline (BPS-2). While BPS was built between 1997 and 2001 on the basis of solid commercial principles, BPS-2 had clear geopolitical views in its planning, development, and construction. The project surged after the January 2007 oil transit dispute between Belarus and Russia. Even with a negative profitability report, Russia developed BPS-2 to bypass the Belarus transit route with the aim of protecting Russia and its partners from what the aforementioned Russian energy experts called "dominant attitudes of the energy transit countries," including decisions to raise tariffs or siphon off hydrocarbons.

Sixth, once in operation, pipelines become more business-oriented and may disregard ideologies. Intents for regional pipelines may vary substantially during any of its pre-operational phases—including design, financing, and construction—in

102

which case the projects may stall and never come to fruition. On the other hand, once operational, a pipeline may survive its original political impetus, as in Druzhba, which after the Soviet Union's demise continued to function as an important source of revenue (somewhat) independent of ideology—in spite of important technical problems, including oil contamination. On the other hand, due to political or economic reasons or instability, a pipeline may become unsound or discover new interests. BNP is a case in point.

Geography Matters

Two different regions emerged between Asia and the Atlantic coast: Northern and Mediterranean Europe. The vast majority of the oil pipelines discussed in this essay link production centers in Eastern Europe or Eurasia to consumption centers in Northern Europe, both in direct source-to-consumption pipelines and in ocean-to-consumptioncenter pipelines. Major oil sources for Northern Europe are Russia and the North Sea. By building-in the Soviet era—one pipeline (namely Druzhba) with two branches to former Soviet republics and allies in the Soviet bloc, Russia became dominant in the north. Decades later came the development of pipelines in the Mediterranean region.

One set of pipelines were developed to reach the oceans and another set to reach the consumer markets from the coasts. By doing so, these pipelines provide the shortest possible route to reach maritime regions and through them world markets. The major source for these pipelines is Russia, but they also include Caspian Sea states (Kazakhstan and Azerbaijan) as well as Iraq.

Another distinct feature is the timeline for the Mediterranean and Caucasus pipelines. Northern pipelines linking their points of origin with Northern Europe were built first: Nord-West Oelleitung (NWO)—the first long-range crude oil pipeline in Europe—in the late 1950s and Druzhba a few years later. These were followed later by ocean-to-consumption centers pipelines (AWP and ADRIA), as new European consumption centers developed. The southern pipelines—BNP (1998), BSP (1999), CPC (2003), and BTC (2006)were built in less than one decade, vet some three to five decades after the northern pipelines-save for KCP, which was built in 1970.

This points to geopolitical developments as well. After the demise of the Soviet Union, the newly independent countries in Central Asia and the South Caucasus had to develop large regional infrastructure projects in order to overcome their respective landlockedness. This required very important and prolonged negotiations between governments and companies—not only to address

Union, the newly independent countries in Central Asia and the South Caucasus had to develop large regional infrastructure projects in order to overcome their respective landlockedness. name indicates, does not supply crude oil). One can surmise that this is due to the large distance involved and the high associated costs, possibly impelling commercial interests to build a pipeline thereto.

complex technical issues but particularly to cement agreement amidst coordination and cooperation between competing and confronting interests of governments, with regional crisscrossing interests in possible collision. The South Caucasus pipelines could only be developed after the demise of the Soviet Union: once the resource-rich newly independent states could act by themselves to channel international revenues to their respective countries directly. In the Silk Road region, only Russia, Iran, and Georgia are sea-abutters, wherefore these further gained geopolitical relevance to reach the world markets-with only the latter not subjected to Western (Russia) or international (Iran) sanctions.

Interestingly, there is no major international oil pipeline from Asia to Southeastern Europe (the Southern Gas Corridor, as its As the region grows economically, this would represent an option for development.

Final Thoughts

Energy is a life necessity and Cone-third of the world's primary energy comes from fossil fuels. Controlling any part of the processes requires one to identify the source, exploit and produce it, transport it, distribute it, store it, and set its price. This obviously provides great influence and power, which explains why a plethora of countries seek to participate in as many of these as they possibly can.

Much has been said about the European continent's dependence on Russian energy. Russia certainly has influence in Europe on account of its oil—and in fact has used it as political pressure, as with Belarus and Ukraine. But it needs to be said that, especially in the EU space, negotiations over Russian oil are generally more about supply and pricing. Political factors, if they exist, are not primary. However, it is important to note that the resulting dependency is mutual. Just as Europe depends on Russian energy, Russia depends on European oil revenue.

In large cross-border infrastructure projects, including pipelines, economic and commercial issues are of para-

mount importance, having to satisfy technical matters in long-maturing political processes. To become a reality, and to continue to operate, they cede to po-

litical concerns as foreign policy tools. Some pipelines, like BPS-2, have been specifically built for political reasons, despite not satisfying commercial issues. On the other hand, ideological and geopolitical motivations may be overcome once a pipeline becomes operational including surviving a new era, such as Druzhba—but they seldom operate seamlessly. Nonetheless, once operational, pipelines develop a life of their own, wielding new sources of cooperation and cooperation dealing with competition and confrontation, amidst crisscrossing projects that avoid collision.

Of the examined major international oil pipelines, none directly deliver oil directly from their point of origin to Europe, except for Druzhba. Pipelines go first to the oceans, then transport by ship to Europe before being taken by delivery pipelines to their ultimate markets. Pipelines between Europe and Asia were developed during the 1958-1990 period, while the

In the EU space, negotiations over Russian oil are generally more about supply and pricing. Political factors, if they exist, are not primary. Caspian Sea and South Caucasus pipelines were built in less than a decade at the turn of the millennium (1997-2006) again, except for KCP, which became operational

in the 1970s. They were and could only be developed after the demise of the Soviet Union.

In the Caspian Sea-South Caucasus region, during the Soviet era all pipelines were controlled by Moscow and went to Russia. Somewhat opening up the market, in 1997 BNP still preserved Russia's monopoly whilst providing Azerbaijan with much needed international revenue. As expert and former U.S. Department of Energy official Leonard Coburn put it, the first fissure occurred in 1998 with BSP and the opening up of rail routes from Baku to Batumi and Supsa. The second took place when CPC opened in 2001, carrying Kazakhstani oil to the Black Sea via Russia. The third came about in 2006, with BTC finally breaking Russia's monopoly and bypassing the Bosporus-Dardanelles bottleneck. Furthermore, Kazakhstan and Azerbaijan are developing trans-Caspian oil shipping from Aktau to BTC, that in 2016 was 80 percent fulfilled-and committed to building a trans-Caspian pipeline. These routes provide the Silk Road region with competitive and diverse routes that undermine Russia's position. Thus, Azerbaijan-together with Kazakhstan-managed to inhibit Russia's oil monopoly in the Caspian Sea in a span of less than a decade.

By breaking the oil source monopoly for Europe, the Caspian Sea-South Caucasus region has opened alternatives for European energy sourcing. When (or if) sanctions against Iran are lifted, this may become even more so. Whereas Europe was importing 35 percent of its oil from Russia in 2011, by the first half of 2020 the figure had dropped to 26.4 percent. Thus, it has oiled the hinge to open the door in Eurasia as one economic and political continent through the construction of regional oil pipeline infrastructure. It seems unlikely that the genie will be put back inside the bottle. BD

CASPIAN CENTER FOR ENERGY AND ENVIRONMENT

The Caspian Center for Energy and Environment (CCEE), a core institution of ADA University, provides policy relevant and academic research, teaching, and training, as well as a variety of outreach activities in the sphere of energy and environment in the wider Caspian region.

Held annually in July, in partnership with the State Oil Company of the Azerbaijan Republic (SOCAR) and BP in Azerbaijan, the Baku Summer Energy School (BSES) is our flagship two-week certificate program. It brings together world-renowned scholars, academics, and policymakers to examine and gain a better understanding of the energy and environmental issues with a particular focus on the Caspian region.

bakudialogues.ada.edu.az

ccee.ada.edu.az