



A New Spring for Caspian Transit and Trade

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Major recent shifts, starting with the Taliban victory in Afghanistan and Russia's war in Ukraine have led to a resurgence of the Trans-Caspian transportation corridor. This corridor, envisioned in the 1990s, has been slow to come to fruition, but has now suddenly found much-needed support. The obstacles to a rapid expansion of the corridor's capacity are nevertheless considerable, given the underinvestment in its capacity over many years.

For the first time in three decades, the establishment of formidable Trans-Caspian infrastructure has become viable. Shortly following the collapse of the USSR, the United States, the EU and most states of Central Asia and the Caucasus sought to establish Trans-Caspian trade and transport routes, initially focusing particularly on energy, and envisioned these routes as an essential strategic component of linking the region to the West and strengthening the political and economic independence of the countries of the region. Despite close to thirty years of policy efforts, these forces did not succeed in establishing infrastructure that would link both sides of the Caspian Sea in a manner that makes this a corridor for considerable transport of goods or energy. This, however, may be changing. Events in 2022 and 2023 have accelerated efforts of the states in the region to establish viable infrastructure links across the Caspian Sea.

Trans-Caspian interconnection is being pushed by both positive and negative drivers. First, the states of the region, especially Kazakhstan, realize the clear geopolitical and energy security need for the diversification of its export routes. Russia has demonstrated that it is willing to disrupt Kazakhstani oil exports to promote its geopolitical goals, and general Black Sea insecurity renders the export of energy from the region through Black Sea ports much less reliable and more expensive. Similarly, the Taliban takeover in Afghanistan and closure of trade routes across Russia, Belarus and Ukraine has greatly increased the importance of the Trans-Caspian option for goods transport. On the positive side of the ledger, strategic cooperation between the states of Central Asia and the Caucasus has grown significantly, enabling the consolidation of foreign policies that focus on strengthening their independence and direct links to the outside world. The rise of Turkish strategic cooperation with the states of the region has further strengthened the impetus for the Trans-Caspian.

The Development of the Trans-Caspian Vision

Immediately upon the dissolution of the Soviet Union, many in the region and beyond grasped the prospect of new trading routes being opened across the Eurasian continent. This led to two separate but intertwined visions emerging. One was the vision of export routes for the hydrocarbon resources of Central Asia and the Caucasus to world markets. The other was the vision of a new trading route between Europe and Asia, in which Central Asia and the Caucasus served mainly as a transit corridor – but one that could nevertheless be lucrative for regional states, as it would lower the implicit “tax” visited on them by their landlocked geography and enable them to access markets both to the east and west.

In fact, Azerbaijan's main oil and natural gas export projects were built with extra capacity, on the expectation that one day the infrastructure would transit Central Asian energy. When the BTC pipeline was in planning, Azerbaijani President Heydar Aliyev pushed for the pipeline to have extra capacity to transit Central Asian oil. Aliyev believed that the Central Asian producers would eventually decide to export significant oil volumes across the Caspian to the West and that capacity should be ready. The Southern Gas Corridor was built with extra capacity, based on similar thinking.

Already in 1992, the European Commission launched the idea of a land transport Corridor Europe-Caucasus-Asia. Though the EU implemented numerous technical assistance projects, these were not of a scale that would make the corridor a viable choice compared to air or sea transport routes. External financial assistance was not sufficient, the capacity of regional states to implement projects remained lacking, and private sector interest was not yet present. Across the region, governments for natural reasons prioritized the consolidation of their new sovereignties, meaning that the appetite for deregulation that would facilitate cross-border trade was not strong.

The emergence of energy transportation routes also took time to develop. Corporations sought to minimize cost, and thus initially were interested in upgrading Soviet infrastructure going through Russia, or in opening a route through Iran. Only when the latter proved impossible for political reasons did oil majors seriously begin to consider transportation routes linking the Caspian Sea to Turkey and the Mediterranean. They still tended to prefer cheaper Russian routes, but the constraints on expanding oil and gas shipment through the Turkish straits restricted volumes that could be exported through Russia. Meanwhile, both local states and their Western partners noticed the resurgence of Russian efforts to assert control over former Soviet states from mid-1993 onward. As a result, they understood the risks associated with continued dependence on Russia for the transit of the region's most valuable commodity.

The Caspian Energy Corridor, CPC versus BTC: Neo-liberalism vs Realism

The collapse of the USSR led to the establishment of fifteen independent countries, eight of which were landlocked. Landlocked countries globally face obstacles in transportation and trade due to the need to transit neighboring states to reach open seas and world markets. The landlocked factor is especially acute for several countries in Central Asia and the Caucasus—Azerbaijan, Kazakhstan, and Turkmenistan—that are major energy exporters. Thus, the major driver of their economies is dependent on the existence of reliable transit routes.

Since their independence, the landlocked states of the former USSR have employed different strategies to overcome the landlocked obstacles. These strategies have had varying degrees of success. The two major infrastructure routes that were established from the Caspian to the West illustrate the diversity of approaches to the problem. One was the East-West energy and transport corridor centered on the Baku-Tbilisi-Ceyhan (BTC) oil export pipeline, while another was the Caspian Pipeline Consortium (CPC) designed to export oil from Kazakhstan to Russia's ports in the Black Sea, and on to world markets. Both projects were established in the same period, and Washington championed both projects. Yet they represented two fundamentally different strategic approaches.

The BTC project was based on the premise that Azerbaijan and the greater region could not allow itself to be dependent on the good graces of either major power—Russia and Iran—as an export outlet, especially since both were oil and gas exporters themselves. As Azerbaijan's late President Heydar Aliyev remarked, oil exporters Russia and Iran will always put their own oil on a tanker before the oil it transits from foreign countries. In contrast to the geopolitical approach represented by the BTC project, the CPC pipeline represented a neo-liberal approach. It was based on the notion that if Russia – and especially various Russian oil and pipeline companies – financially benefitted from the export of Kazakhstani oil along with the involvement of major international oil companies, Moscow would have a strong motivation not to upset Kazakhstani oil exports from its ports. Following the same approach, industry voices – who were naturally interested in accessing the Russian and Iranian markets – advocated for pipelines through Russia and Iran for bringing Azerbaijani oil deposits to market. Azerbaijan's former President Heydar Aliyev foresaw the geopolitical problems that would turn what in the short run seemed like cheaper options into more expensive ones if supplies were eventually disrupted – and he stood his ground. Gradually this perspective won support with Western governments, and to some extent with the companies, and the Baku-Tbilisi-Ceyhan pipeline and east-west corridor was launched.

While the Caspian energy exporters chose main export routes based on different political approaches and assessment of the risk entailed in each option, both Azerbaijan and Kazakhstan sought multiple pipelines to reduce their risk. Importantly, however, this policy was not anti-Russian but anti-monopolistic as well as to mitigate impact of various disruptions—technical, weather etc. Indeed, as mentioned, the U.S. government supported the Caspian Pipeline Consortium project, which opened in 2001 and has since served to export the resources of Kazakhstan's Tengiz oil field to the Russian Black Sea port of Novorossiysk for over two decades. In parallel, a small-capacity Soviet-era pipeline connecting Baku to Novorossiysk was upgraded and opened to the export of Azerbaijan's "early oil" as early as 1997. The U.S., in cooperation with Turkey, joined forces with the leadership of Azerbaijan, Georgia and Kazakhstan to push for a major export pipeline that would link Baku with the port of Ceyhan on Turkey's Mediterranean coast. While this was primarily intended for Azerbaijani crude, significantly, Kazakhstan's leadership was part of the project from the start, thus viewing the Baku-Tbilisi-Ceyhan pipeline as a route for the export of Kazakhstan's vast oil reserves. President Nursultan Nazarbayev participated at all major signing agreements related to the BTC pipeline, thus confirming at the highest level Kazakhstan's interest in the project and in establishing energy infrastructure across the Caspian Sea. In addition, a Trans-Caspian gas pipeline was envisaged as an outlet for the vast natural gas reserves of Turkmenistan. Kazakhstan and Turkmenistan, in parallel, began to explore the prospect of exporting energy eastward to China.

While private sector representatives were skeptical to these large, expensive projects, they eventually came around to embrace the building of an energy transport corridor linking the Caspian with Turkey across Georgia. Several factors played in. The prospect of exporting energy through Russian Black Sea ports was limited by several factors. Unrest in Russia's North Caucasus made reliance on a corridor through that region unpalatable. The capacity, and environmental risks, of the Turkish straits similarly ruled out reliance on Black Sea shipping for additional millions of barrels per day. Meanwhile, U.S. sanctions on Iran ruled out the building of a pipeline through Iran to the Arabian Sea. Then, the discovery of large natural gas reserves in the Shah-Deniz field in Azerbaijan's sector of the Caspian provided the potential economies of scale for building a joint export corridor for both oil and gas. And finally, the merger of BP and Amoco – two of the largest shareholders in the Azerbaijan International Operating Company – led to the emergence of an obvious leading force among the private sector interests that had the capacity and experience to implement what was one of the world's largest infrastructure projects at the time. The discovery of Azerbaijani gas, however, had the unintended effect of complicating matters for the realization of a Trans-Caspian gas pipeline, as the discovery of Azerbaijani natural gas led Baku to seek to export its own gas by the same projected pipeline that would transfer Turkmen gas to Western markets.

Central Asian producers instead looked to China as a way to diversify export routes. China's CNPC had begun to establish itself in Kazakhstan's energy sector in 1997, gaining access to several smaller projects. By 2005, China increased its stakes in Kazakhstan by acquiring Petrokaz, a large oil producer, and soon after began planning for the development of pipeline infrastructure to import Kazakh oil and Turkmen gas into the Chinese market. From 1997 onward, China and Kazakhstan began planning for a pipeline system to transport Kazakh oil to China, by constructing a pipeline from Atasu in Kazakhstan to Alashankou in China. The 600-mile pipeline was completed in 2005.

The rapid rapprochement between Beijing and Ashgabat, in particular, challenged Russia's efforts to maintain control over the energy infrastructure of Central Asia. Their agreement to rapidly build a pipeline to deliver Turkmen gas to China, as well as Turkmen overtures of interest to the EU for westward gas export, reduced Moscow's influence on Turkmenistan considerably.

The Slow Emergence of a Continental Trade Corridor

In terms of commodity trade, the logic of the transport corridor across Central Asia and the Caucasus was straightforward. Europe and East Asia were, and remain, two of the world's biggest trading blocks, with hundreds of billions in trade between them. But this trade is dominated by sea routes, which are cheap but lengthy – taking up to two months to reach their destination – and air transport, which is fast but expensive. This provides a rationale for a land transportation route that is faster than sea routes, but cheaper than air travel. And while this land route may not be competitive for transportation from coastal cities in China or Japan to coastal cities in Europe, it could be very appealing for trade between inland areas like, say, Xi'an and Bratislava.

The benefits of developing this trade route, aptly named the "New Silk Roads," were obvious, but the impediments to its realization were plentiful. One problem was the presence of obvious bottlenecks. For example, there was no functioning rail connection linking the Western Caspian coast to Turkey – Armenia's occupation of Azerbaijani territories having led to the closure of the Turkish-Armenian border, and the century-old rail connection between Kars and Gyumri. Neither was there a connection between the European and Asian sides of Istanbul. Furthermore, the standard railway gauge used in Europe and China is different from the broad gauge used in Russia, requiring either variable gauge railway cars or the reloading of goods. In the Caspian, port and ferry infrastructure was also poor.

Over time, some of these problems were overcome through the building of the Baku-Tbilisi-Kars railway and the Marmaray tunnel under the Bosphorus. But in spite of major investments in the creation of port infrastructure, obstacles remain – such as the scarcity of ferries able to connect Azerbaijani ports with their counterparts in Kazakhstan and Turkmenistan.

The political impediments to greater trade have been equally significant. For the Trans-Caspian trade corridor to be competitive, border crossings need to be smooth and fast – if cargoes are kept for days at consecutive borders, the route loses its competitiveness in comparison with sea routes, which on average take 15-20 days more than the optimal land route. And in this regard, the political economy of former Soviet states constituted a considerable challenge. Opaque decision-making structures, widespread corruption, and informal networks exercising monopolistic control over various sectors of the economy all served to inhibit trade. Only by the mid-2010s, following the crash of oil prices in 2014, did regional governments seriously begin to target this problem, particularly through the efforts of reformist leaderships in Kazakhstan and Uzbekistan in Central Asia, and in Azerbaijan in the Caucasus.

Changing Geopolitical Realities

For most of the last decade, the states of the region, the U.S., and the EU placed Trans-Caspian connectivity on the back burner. However, events in 2022 and 2023 seriously renewed interest of both regional players and the U.S. and Europe in establishing infrastructure connecting the two sides of the Caspian Sea. Among the recent events that have contributed to increased regional cooperation in the Caspian region and given impetus to Trans-Caspian connectivity are the Taliban takeover of Afghanistan; Russia's invasion of Ukraine; deterioration of maritime security in the Black Sea, especially impeding trade involving Kazakhstan and Georgia; Russia's periodic choking off of Kazakhstan's oil exports; and the increased cooperation between China and Russia, Russia and Iran, and trilateral Russia-China- Iran cooperation.

The Taliban takeover in Afghanistan struck a major blow to Central Asia, as it undermined already frail prospects of a breakthrough in connecting the region with South Asia by land. In the short term, there has actually been a modest increase in the transport of goods across Afghanistan, most likely because of a general reduction in violence in Afghanistan after the Taliban – who were responsible for most of that violence – transitioned into a position of power. Still, with the Taliban showing little inclination to live up to promises made either in the Doha agreement or otherwise, Afghanistan looks set to remain mainly a barrier and not a bridge for Central Asia in the foreseeable future.

An even more powerful shock to the region has been Russia's invasion of Ukraine. The invasion contributed to a dramatic shift in perceptions of threat from Russia. This perception varied greatly from country to country, being most acute in countries bordering Russia and/or with Russian minorities – making the impact on Kazakhstan exceptionally acute even in a regional perspective. Concretely, the invasion also led to interruptions and partial closures of the main trade route – known as the "northern corridor" – linking China with Europe across Kazakhstan, Russia and Belarus. This further contributed to a sense of isolation across Central Asia, adding impetus to the Trans-Caspian route as a corridor to the outside world.

Along with Russia's invasion of Ukraine and the ensuing war of attrition came a deterioration of the maritime security environment in the Black Sea. As the situation concerning grain exports from Ukraine has illustrated, shipping in the Black Sea now comes at heightened risk, increasing insurance costs and reducing the appetite for shipping in the region – thus affecting trade involving Kazakhstan, Azerbaijan and Georgia. In addition, the western sanctions on Russia have complicated matters for Kazakhstan's oil exports. Kazakhstan obtained a waiver for sanctions allowing its oil to be sent to world markets even though it is exported via Russian ports, but fear of falling foul of U.S. sanctions has made shippers and buyers wary of loading any oil from Russian ports.

As if this was not enough, Moscow has been purposefully choking off Kazakhstan's oil exports. A few occasions during 2022, Moscow artificially halted the CPC pipeline, citing reasons ranging from unexploded World War II-era explosives in the Novorossiysk port to storm damage and deficient documentation. This was more likely the result of Russian dismay at Kazakhstan's refusal to endorse Russia's war, and more pointedly President Kassym-Jomart Tokayev's public refusal, in Vladimir Putin's presence, to extend diplomatic recognition to the "quasi-states", as he termed them, of Luhansk and Donetsk – Russian-created artificial units in eastern Ukraine. Moscow also launched a media campaign targeting Kazakhstan in Russian state-controlled outlets, which included claims that challenged Kazakhstan's sovereignty and voiced claims on its northern and eastern territories.

On a broader level, states in Central Asia and the Caucasus could not but help observe the closer cooperation among Russia, China and Iran, which reduced Central Asia's geopolitical options. This includes Russian use of Iranian armaments in its war in Ukraine, growing Sino-Russian alignment against the West at the global level, and even signs of a trilateral alignment between Moscow, Beijing and Tehran – such as the holding of a trilateral naval drill between the powers in March 2023.

The cooperation that has emerged across the Caspian between Azerbaijan and the Central Asian States is fortified significantly by the emergence of a new Turkic axis of cooperation. While Turkey was preoccupied with Middle Eastern affairs in the early 2010s, from around 2015 onward it began to increase its attention to Central Asia and the Caucasus. This took place both bilaterally and through the upgrading of Turkic cooperation, with the erstwhile Turkic Council being upgraded to the Organization of Turkic States in 2021. Azerbaijan, Uzbekistan and Kazakhstan have all signed security agreements with Turkey, Azerbaijan's being a full mutual defense treaty. The states of Central Asia thus now have a serious security partner to factor into their decision-making. As part of this cooperation, the Organization of Turkic States has transformed from a cultural organization to a bona fide security organization. The EU has also given significant policy attention to this organization and sends representatives to leader summits and ministerial meetings. Turkish companies, such as the state owned TPAO and the Turkish pipeline company Bota?, are likely to play a role in new energy infrastructure established across the Caspian. In addition, Turkish involvement in new Caspian energy infrastructure could deter Russia from attempts to disrupt the energy trade. Turkish companies have recently signed an agreement with Kazakhstan for building additional oil tankers in the Caspian.

The Gulf states have also emerged as an important factor in the region. The first GCC-Central Asia summit was held in Jeddah in July 2023, an indication of a broader interest by Gulf states in investing in Central Asia. The UAE's Abu Dhabi National Oil Company (ADNOC) is likely to play an important role in linking investments across the Caspian.[1] ADNOC has made investments in the energy sector in Central Asia and most recently made a major investment in Azerbaijan's gas production, with the acquisition of a third of the shares in Azerbaijan's Absheron gas field.

The reaction of Western powers has, however, been relatively timid. While the U.S. and EU have focused greatly on countering Russia in Ukraine, the broader strategic support for countries in Central Asia and the Caucasus has not been as visible. It is true that the EU has raised the level of its relationships with the region to the highest level, with EU Council President Charles Michel visiting Central Asia twice in two years. Commission chair Ursula von der Leyen visited Azerbaijan in July 2022, and the EU signed a strategic partnership in energy matters with Azerbaijan. The U.S. has been slower to increase its engagement with the region, but in September 2023, President Biden met with Central Asian Presidents for the first time within the framework of the C5+1 mechanism, and adopted a declaration that focused strongly on security and connectivity.

However, in contrast to the early 1990s after the Soviet demise, when the U.S. was the strategic champion of the establishment strategic energy infrastructure that would link Azerbaijan and Central Asia to the West, the Biden administration has imposed serious limitations on Washington playing a major role in this sphere. The administration issued an order in October 2021 prohibiting all U.S. government agencies from supporting foreign governments in efforts to establish new fossil fuel projects. The administration (together with the G-7) continue to prohibit public funding for these projects as well. There are some limited exemptions for natural gas projects, such as expansion of existing projects, but the Biden administration has granted a very limited amount of exemptions to date. The EU also continues to place brakes on long-term natural gas contracts and public funding, which limits the EU role in bringing new gas supplies to the continent.

Actions

Russia's invasion of Ukraine and subsequent periodic closure of the spigot of Kazakhstani oil exports have changed Astana's and other states in the region's calculations about the risk from Russia. Increased cooperation between the states of Central Asia (especially Kazakhstan and Uzbekistan) together with Azerbaijan and Turkey has created a new axis of cooperation that the states of the region hope will serve as a counterweight to Russia. Kazakhstan seeks to diversify its oil export, and thus reduce reliance on export from Russia's Black Sea ports. Moreover, the concrete establishment of the Southern Gas Corridor has turned the idea of natural gas export from Central Asia to Europe to a realizable endeavor. Regional states have acted to boost Trans-Caspian transportation concerning oil, gas, uranium, goods and information.

Oil

In terms of the transportation of oil, the major action has been between Kazakhstan and Azerbaijan. On July 5, 2022, a regional court in Russia ruled the closure of the CPC pipeline for 30 days because of alleged "environmental violations." This followed on previous restrictions in the port of Novorossiysk, allegedly due to storm damage. It is clear that this led alarm bells to go off in Astana, and confirmed suspicions that the CPC route, which had served Kazakhstan well for 20 years, was no longer as reliable as previously thought – and that Moscow was fully prepared to obstruct this route for political gain, or just out of spite. Two days later, President Tokayev publicly instructed the state-owned oil and gas company Kazmunaygaz to work out the best options for diversifying Kazakhstan's oil exports, explicitly mentioning the Trans-Caspian corridor as the most promising alternative. In parallel, he ordered the expansion of capacity in pipelines transporting Kazakhstani oil to China. In other words, Russia's policy of periodic disruption of Kazakhstan's oil exports at the Black Sea has backfired. While for decades Astana and the investing companies were comfortable to export the bulk of Kazakhstan's oil export via Russia, today Kazakhstan seeks to diversity its oil export routes.

President Tokayev's order intensified the already significant contacts that had been taken by Kazakhstani and Azerbaijani officials since the beginning of the Russian invasion of Ukraine. President Tokayev visited Baku in August 2022, and Aliyev visited Astana in April 2023, at which point they agreed to create a Supreme Interstate Council. The two sides have since cooperated on the herculean effort of expanding oil transit across the Caspian.

Kazakhstan produces about 1.7 million barrels of oil per day (bpd), over 90 percent of which has been exported via Russia.[2]CPC itself exported over a million bpd, with an expansion of 240,000 barrels per day envisaged for 2024 and further production increases expected in coming years. Further, the Atyrau-Samara pipeline carried over 200,000 bpd million tons, also exported through the port of Novorossiysk. Meanwhile, about 100,000 bpd went through the Aktau port. Even of those, close to 50,000 bpd are shipped to the port of Makhachkala in Russia's Dagestan republic, and then to Novorossiysk. The capacity from Aktau to Baku stood at about 60,000 bpd.[3]

This indicates that replacing the capacity of CPC is essentially impossible, at least in the short term. That would require the construction of a major subsea oil pipeline. Oil majors conducted a large study on oil export through a Transcaspien pipeline to the BTC pipeline back in 1999. They have reportedly again been looking at that study. At the time, the lack of an agreement on the delimitation of the Caspian was considered a problem. However, the 2018 Caspian Convention is seen to create new opportunities for Transcaspien oil export. Of course, there is no guarantee that Russia or Iran would not target the construction of such a major project. Even without that, there are hurdles: Kazakhstan's oil is expected to peak in 20 years. On one hand, this means that the type of pipeline required may be cheaper than those designed to last many more decades. On the other hand, it reduces the amount of time the pipeline would bring revenue.

Still, the fear is that a subsea pipeline would cost several billion dollars and take years to build. Investors are understandably wary of engaging in such a prospect as long as there is hope that the situation concerning transport through Russia will normalize. Moreover, attracting finance will be challenging as most of the oil majors refrain from investment in pipelines and prefer to invest in oil production. In addition, as mentioned, G-7 countries no longer grant public finance for oil projects as part of their attempt to phase out fossil fuels. Also, investing companies in Kazakhstan may focus on an extension of their Production Sharing Agreements before investing in an oil export pipeline. And, of course, the 500-pound gorilla in the Caspian—Russia—will likely work to undermine the establishment of Trans-Caspian oil and gas export infrastructure. Iran is likely to join Russia in those efforts to undercut establishment of the new infrastructure, since Tehran aims for its territory to serve as an export route from the Caspian.

Thus, Kazakhstan will in a best-case scenario remain dependent on the CPC route for at least 5-7 years. Accordingly, the government of Kazakhstan and the major oil companies producing oil there are adamant to keeping CPC export operational.

However, much can be done even in the absence of a subsea pipeline. Kazakhstani oil has long been shipped by small tankers across the Caspian, where it is loaded onto railway cars for transport to the oil export terminal in Georgia's port of Batumi, which Kazakhstan owns. Kazakhstan also owns Rompetrol in Romania so could export from Batumi to Romania. Negotiations between Azerbaijan and Kazakhstan have centered on reaching a volume of around 300,000 bpd. The most feasible prospect is to expand oil transportation across the Caspian by tankers, feeding into both the Baku-Supsa pipeline and the BTC pipeline. Azerbaijan appears to favor Kazakh oil filling the Baku-Supsa pipeline first, in part in order not to mix light Azerbaijani oil and less valuable sour Tengiz oil in the pipeline. Kazakh officials, however, stress their preference for the BTC route, which brings Kazakh oil directly to the Mediterranean and avoids the Black Sea security impediment.[4]

Either way, there is a need for the expansion of infrastructure in railways, ships, ports and pipelines. Railway transit through Georgia is restricted by a lack of locomotives; shipment by tanker is restricted by lacking port infrastructure implying wait times, scarcity of tankers, and the volume of oil that can be transported to the Kazakh seaports on the Caspian Sea from the oil fields. The sea port in Aktau can be dredged and expanded to a capacity of 20 million tons, but \$4 billion in investment would be needed. Similarly, a pipeline connecting the Tengiz field to the port of Aktau would be required to carry greater volumes of oil, but would cost \$2 billion. As for tankers, none of the 15 tankers presently in the Caspian have been vetted by multinational oil companies and many are unlikely to meet their requirements, at least not without improvements. Getting new tankers into the Caspian would require transit through the Russian canal system or building new tankers locally.

In July 2023, Kaztransoil announced that it had succeeded in boosting exports of oil from the Tengiz field via Azerbaijan more than 18-fold, to 27,844 bpd using the route from Aktau to the Baku-Tbilisi-Ceyhan (BTC) pipeline between April and June 2023.[5] Of course, this represents a comparatively small number compared to Kazakhstan's total oil production. But in addition, over 65,000 bpd were to be transported through the Baku-Supsa pipeline – which has nevertheless experienced problems as shippers have been reluctant to load oil at Black Sea port due to security concerns. In total, this brings the capacity up to 100,000 bpd – which constitutes close to a tenth of the volume shipped through the CPC pipeline. Much, in other words, remains to be done. But in April 2023, Kazakhstan's merchant marine authority purchased two new Emirati tankers with a deadweight of 8,000 tons, and is exploring building tankers locally.[6]

Natural Gas

As for new transport of gas, the main potential lies in the export of Turkmenistan's large gas reserves across the Caspian to Azerbaijan. Even before the Russian invasion of Ukraine led to rapidly growing European interest in Caspian gas, leaders in Azerbaijan and Turkmenistan had worked to resolve their disagreements over the ownership of oil and gas fields in the Caspian Sea. They agreed in January 2021 to jointly develop a large field they renamed Dostluq, meaning "friendship" in both languages.

In response to the European energy crisis, Azerbaijan committed in July 2022 to double its natural gas exports to Europe by 2027. Azerbaijan has boosted its supplies to Europe to 11 billion cubic meters (bcm) in 2022 from 8 bcm in 2021, on top of its supplies to Turkey and Georgia. Turkmenistan's massive natural gas reserves could play a role in these increased supplies to Europe. Ashgabat has expressed its support for further development of the project to build a Trans-Caspian pipeline to transport Turkmen gas to Europe. However, delivering larger volumes – such as 30 bcm – to Europe would require, aside from a Trans-Caspian pipeline, expanding the capacity of the Southern Gas Corridor (from Azerbaijan to Italy). This project was built as a scalable project and thus could scale up capacity relatively quickly. This would, however, require significant investment.

In the short term, however, it would be possible to connect Turkmenistan's Magtymguly field with the Azeri-Chirag-Guneshli field by a 48-mile pipeline (an "intra-Caspian" connection versus a Trans-Caspian pipeline). While both are primarily oil fields, associated gas from the Turkmen field is currently flared, whereas ACG associated gas is piped to terminals in Azerbaijan. The Turkmen gas could be injected into the Azerbaijani oil fields for operational needs, and thus free up more Azerbaijani gas for export.

Energy investments across the Caspian

The increased regional cooperation around the Caspian has affected the energy sphere beyond the proposed energy infrastructure connections discussed above. New energy investments among the region's states and lines of cooperation have emerged. Most notably, Azerbaijan's national oil company, SOCAR is advancing major investments throughout Central Asia. SOCAR is pursuing some of these investments together with international major oil companies, such as BP. Uzbekistan is a special focus of Azerbaijan's investments in the energy sector in Central Asia. Uzbekistan is particularly attractive for investments in the gas sector, since it is a large gas market that doesn't require export in order to be commercially viable. In recent years, Uzbekistan has been experiencing extensive gas shortages and requires exploration to find new reserves. In August 2023, SOCAR and Uzbekneftegaz signed an agreement on the mutual participation of the two companies in oil and gas projects in each other's countries.[7]

Container Trade

Before the Russian invasion of Ukraine, the China-Russia-Europe route – the “northern corridor” – transported an estimated one million Twenty-Foot-equivalent container units (TEU). This number has dropped by almost 40%.[8] This volume of trade has been rerouted to other channels, most likely switching to the maritime route, as the Caspian corridor is currently in no position to swallow the volumes that were going through Russia, being limited at 100,000-120,000 TEUs.[9]

There are, on paper, several routes to transport goods across Central Asia and the Caucasus. Uzbekistan is working on a route connecting it to China across the territory of Kyrgyzstan, and the project of building a railway to make this route more efficient has received renewed momentum. Westward, Uzbekistan can connect either through Kazakhstan to Azerbaijan, or through the Turkmen port at Turkmenbashi. Theoretically, it is also possible to bypass the Caspian Sea entirely by transiting through Iran. But as a recent EBRD study has detailed, these latter routes are impracticable as Iran and Turkmenistan are not party to international agreements, thus requiring a set of bilateral agreements for trade. Their regulatory environments are far from transparent, making this route more risky and prone to delays. As a result the EBRD concluded that the route connecting China with Kazakhstan and then on toward Azerbaijan through Kazakh ports on the Caspian sea is the most efficient route at present.

Indeed, regional states have not been idle. They have spent considerable energies for a number of years building road, rail and port infrastructure. Kazakhstan has built not one but two substantial ports at Aktau and Kuryk. Azerbaijan has invested heavily into the Alat port south of Baku, and Turkmenistan has done the same at the port of Turkmenbashi. The harmonization of regulatory environments, however, has lagged behind. Generating delays and cost increases.

In spite of these issues, the Russian invasion of Ukraine led to a massive increase of demand for trade along this corridor in 2022. In February 2023 it was announced that the total volume of traffic had more than doubled in 2022 compared to the previous year. Kazakhstani exports along this route increased by six times.[10] This sudden burst of activity made it clear that rapid action was necessary to boost the potential of the “Middle Corridor.” In November 2022, the Foreign and Transport Ministers of Azerbaijan, Georgia, Kazakhstan and Turkey signed a roadmap for the development of the Trans-Caspian International Transport Corridor and the elimination of bottlenecks for 2022-27. By 2025, the aim is to increase the capacity of the corridor to 10 million tons, from a present capacity of ca 2 million.[11]

Work is ongoing for the unification of tariffs and simplification of customs and regulatory procedures. Speaking alongside Azerbaijani President Ilham Aliyev in April 2023, President Tokayev spoke about “the improvement of logistical services, the creation of unified transport operators, the modernization of technical and tariff conditions, the elimination of administrative barriers and the emergence of a closed logistical cycle” as priorities in the cooperation between the two countries.[12] The low-hanging fruit in this regards is the optimization of soft infrastructure, the clearing of customs ahead of time or on board of vessels to save valuable time at port docks, faster loading, the institution of x-ray checks and the like to reduce delays.

In summer 2023, Astana merged the two ports of Aktau and Kuryk into the Aktau Special Economic Zone in order to strengthen the attractiveness of the ports to logistics companies.[13] Kazakhstan also invested in a new container terminal at Georgia's Poti port, with a maximum capacity of 450,000 Twenty-Foot Equivalent Units (TEU).[14]

A related issue is the connection of Central Asia to the internet, which largely goes through Russia. In 2023, Azerbaijan and Kazakhstan have made significant progress in establishment of a fiberoptic cable across the Caspian Sea. This project is of high strategic significance since today most of the internet traffic of the Caspian states is vulnerable to disruption and surveillance.

Looking Ahead

The prospects for establishment of Trans-Caspian infrastructure, especially in the energy sphere, are greater than at any time since the Soviet breakup. However, many obstacles, as detailed in this article, are still in place. Insecurity in the Black Sea is not likely to subside anytime soon. Shipping in and out of the region is at permanent risk, and this insecurity puts upward pressure on the global oil price, world grain prices, and shipping and insurance rates in the Black Sea. Black Sea insecurity especially constrains Kazakhstan and Georgia. Astana seeks alternative routes to reduce its dependence on Russia's Black Sea ports for oil export.

Kazakhstan clearly wants to keep the CPC pipeline functioning, and alternatives cannot in the short or medium term absorb the Kazakh oil export and the planned expansions. However, diversification is an important element in keeping the CPC open. If Russia knows that Kazakhstan is less dependent on its ports for oil export, it is less likely to disrupt and more likely to court transit through its territory.

The lack of public finance for fossil fuel projects is a major impediment to the development of projects that could increase global oil and gas supplies to Europe. When asked about the prospects for a Trans-Caspian gas pipeline from Turkmenistan to Azerbaijan, President Aliyev responded that it will be difficult to attract funding to the project from European banks, which are no longer funding gas projects.[15] Furthermore, Aliyev noted that the interests of the West and China are matching at this time. He noted that a change of only 1-2 percent points of the total trade between China and Europe going to the Middle Corridor would have huge implications. China also wants this, and it would give China a greater stake in the stability of this route.

One of the most significant missing pieces is American presence and leadership. Washington championed the infrastructure projects established in the Caspian region and the later Southern Gas Corridor to Europe. American leadership was critical in bringing these complicated and expensive projects to realization. Washington's policies brought significant geopolitical benefit to the United States, including enabling the region's states to assert their independence from China and Russia and forge cooperation with the U.S. and the West.

The increased independence of the foreign policies of the region's states and the cooperation between them, their threat perception from Russia and subsequent desire to significantly strengthen the interconnection across the Caspian, creates a major geopolitical opportunity for the United States. However, instead of grasping this opportunity, America is sitting on the sidelines. The Biden administration has hamstrung itself by prohibiting policy activity involving fossil fuels, and by extension, a role for Washington in the advancement of the proposed Trans-Caspian pipelines. Moreover, American and broader G-7 prohibition of funding fossil fuel projects constrains the U.S. resources to promote these projects, and essentially encourages the states of the region to turn to China for investments and public finance. The U.S. and G-7 policy aims to aid phasing out of fossil fuels, but with global consumption of fossil fuels meeting 84 percent of the global energy demand, oil and natural gas projects will continue to be developed. The withdrawal of Western public finance only means that China will finance these new fossil fuel projects and reap the geopolitical benefits.

As during the first phase of the development of the Caspian infrastructure projects westward in the 1990s and early 2000s, the U.S. would benefit from strong coordination with Turkey in the next stage of advancement of Caspian infrastructure. Turkey's position across both sides of the Caspian is even more critical at present with the emergence of the strategic cooperation between Turkey, Azerbaijan and the states of Central Asia, especially Kazakhstan and Uzbekistan. In addition, Washington has an opportunity to promote its interests vis-à-vis Iran also through policies in the Caspian. While Iran is often perceived as part of the Middle East, its northern borders are along Caspian Sea.[16] However, there is uncertainty surrounding U.S. policy as elements in the Biden Administration have continued to seek a normalization with Iran.[17]

Through greater involvement in the emerging projects in the Caspian region, the U.S. can promote policy objectives related to checking China, Russia and Iran. China and Russia cooperate on a global level to mitigate U.S. power, but in Central Asia their divergent interests are quite apparent. Through a greater presence in the region, the U.S. could contribute to preventing Russian-Chinese cooperation from cementing in Central Asia.

Conclusion

The process of developing Trans-Caspian infrastructure has been three decades in the works. This is a process with considerable implications that affect areas far beyond the region itself. Indeed, its success would link Central Asia firmly with the Caucasus and Europe, which would provide this landlocked region with a stable window to the outside world. In turn, it would provide large economic actors like China with a stake in the stability of the Caspian and the Caucasus – something that in turn would help stabilize that region. By contrast, the failure of developing solid Trans-Caspian linkages would undermine the economic security of the broader region, and spell continued instability. Further, it would heighten the risk that the Central Asian states suffer the fate of landlocked countries elsewhere – which are poorer and less stable than comparable countries with access to the ocean.

Much has been accomplished since the TRACECA project saw the light of day thirty years ago. And in recent months and years, the regional states themselves have embarked on cooperative initiatives that are groundbreaking and should generate optimism for the region's future. Still, it is unrealistic to expect that the region itself would be able to realize the big-ticket items like pipelines connecting Central Asia with the Caucasus, which would be needed to make a serious difference going forward. In this regard, there is much the U.S. and EU and international financial institutions can do to help.

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[1] "UAE's ADNOC looking for global gas assets after Azeri investment," S&P Global, August 16, 2023.

(<https://www.spglobal.com/commodityinsights/en/market-insights/latest-news/natural-gas/081623-interview-uaes-adnoc-on-the-hunt-for-global-lng-assets-after-azeri-gas-investment>)

[2] China's imports of oil from Kazakhstan along the Atasu-Alashankou have decreased significantly since mid-2022, with China's access to discounted oil from Russia and Iran, global benchmark-linked oil from Kazakhstan is less attractive.

[3] Interview with Kazakhstani official, Astana, September 2022.

[4] Interview with Kazakhstani officials, Astana, September 2022.

[5] "Kaztransoil says Tengiz oil shipments from Aktau to BTC pipeline soared in Q2 2023," BNE Intellinews, July 10, 2023.

"<https://www.intellinews.com/kaztransoil-says-tengiz-oil-shipments-from-aktau-to-btc-pipeline-soared-in-q2-2023-284147/?source=azerbaijan>

[6] Paul Goble, "Kazakhstan Building Up Caspian Tanker Fleet to Bypass Russia," Eurasia Daily Monitor, April 25, 2023.

[7] "SOCAR, Uzbekneftegaz to develop joint energy projects - agreement signed," Trend.az, 21 August 2023.

[8] Interview with Kazakhstani officials.

[9] Anton Usov, "EBRD researches sustainable transport connections between Central Asia and Europe" European Bank for Reconstruction and Development, November 2022. (<https://www.ebrd.com/news/2022/ebd-researches-sustainable-transport-connections-between-central-asia-and-europe-.html>)

[10] "Trans-Caspian Transport Route Sees Double Growth of Traffic Volume in 2022", Astana Times, February 10, 2023.

[11] "Kazakhstan, Azerbaijan, Georgia and Turkey signed a Roadmap for the development of the Middle Corridor for 2022-2027," New Silk Road Discovery, November 28, 2022. (<https://www.newsilkroaddiscovery.com/kazakhstan-azerbaijan-georgia-and-turkey-signed-a-roadmap-for-the-development-of-the-middle-corridor-for-2022-2027/>)

[12] Nigar Bayramli, "Azerbaijan, Kazakhstan Agree to Leverage Full Capacity of Middle Corridor," Caspian News, April 12, 2023. (<https://caspiannews.com/news-detail/azerbaijan-kazakhstan-agree-to-leverage-full-capacity-of-middle-corridor-2023-4-11-55/>)

[13] Salman Akhtar, "Kazakhstan Bolsters Logistics Sector, Merges Aktau and Kuryk Ports into Special Economic Zone" BNN, DATE. (<https://bnn.network/finance-nav/business/kazakhstan-bolsters-logistics-sector-merges-aktau-and-kuryk-ports-into-special-economic-zone/>)

[14] "Kazakhstan and Georgia to jointly build a new container terminal at the Port of Poti, construction work started," New Silk Road Discovery, August 14, 2023. (<https://www.newsilkroaddiscovery.com/kazakhstan-and-georgia-to-jointly-build-a-new-container-terminal-at-the-port-of-poti-construction-work-started/>)

[15] "Global Media Forum was held in Shusha President Ilham Aliyev addressed Forum," APA, July 22, 2023. (<https://apa.az/en/official-news/global-media-forum-was-held-in-shusha-president-ilham-aliyev-addressed-forum-updated-photo-408122>)

[16] See Brenda Shaffer, "Iran's Policy toward Central Asia and the Caucasus," Central Asia-Caucasus Analyst, August 17, 2023. (<https://www.cacianalyst.org/publications/feature-articles/item/13728>)

[17] In the event that the U.S. and Iran come to a new agreement on nuclear matters, Tehran could play a bigger role in Central Asia and the Caucasus than it does at present. The Biden administration has already approved several export endeavors from the region via Iran, such as export of natural gas from Turkmenistan via Iran.