DANUBE INSTITUTE

Energy Central: How strategic thinking and smart policy choices have positioned Hungary as a regional energy hub

Ibrahim Mammadov

April 2025

About the author

Ibrahim Mammadov is a Researcher at the Danube Institute. Previously, he served as a Research Fellow at the Caucasian Center for International Relations and Strategic Studies (QAFSAM), Young Scholar at Institute for Development and Diplomacy (IDD) and Research Assistant at the Caucasus Policy Analysis Center (CPAC) in Baku, Azerbaijan. He is about to finalize his MA in International Relations studies at Eötvös Loránd University in Budapest, Hungary. He obtained his BA in International Studies from ADA University in Baku, Azerbaijan. Ibrahim is the founder and current director of the voluntary Young Eurasian Scholars Network (YESN), which unites young researchers and enthusiasts interested in various regions of the Eurasian continent under one platform. His research articles have been published in esteemed platforms such as The National Interest, CABAR.asia under the Institute for War & Peace Reporting (IWPR), Commonspace.eu under the LINKS platform, the Institute for Development and Diplomacy Publications, and The Hungarian Conservative, among others. His main areas of expertise include Eurasian Affairs, focusing on Eastern European, Central Asian and Southern Caucasus regions.

Abstract

Hungary is rapidly emerging as a strategic energy hub in Central and Eastern Europe (CEE) due to a pragmatic foreign policy and targeted infrastructure investments. This article by Ibrahim Mammadov explores how Hungary's balanced approach—preserving traditional ties with Russia while forging new partnerships with Caspian and Central Asian nations—has enabled it to become a key transit and distribution center for both fossil fuels and green energy. Amidst the EU's broader push for energy diversification following the Ukraine crisis, Hungary has maintained access to affordable Russian gas via the TurkStream pipeline, while simultaneously integrating into the Southern Gas Corridor (SGC) through new interconnectors and supply deals with Azerbaijan and Turkmenistan.

The article highlights Hungary's strategic acquisition of port rights in Trieste, Italy, enhancing its maritime access and energy trade capabilities. Major national energy firms, such as MOL and MVM, are expanding internationally, reinforcing Hungary's role in regional energy security. Hungary is also at the center of major green energy initiatives, including the Black Sea Submarine Cable (BSSC), which will channel renewable electricity from the South Caucasus and potentially Central Asia into the European grid via Hungary.

Additionally, Hungary's partnership with Kazakhstan on oil imports and plans for a Kazakh terminal within its territory further diversify its energy portfolio. By 2028–2029, with the completion of key projects such as the Serbia–Hungary Interconnector, the Trieste logistics hub, and the BSSC, Hungary is set to become a central node in both conventional and renewable energy networks across Europe. This transformation reflects a strategic vision grounded in geopolitical realism, long-term cooperation, and infrastructure foresight, positioning Hungary as a linchpin in Europe's evolving energy architecture.

Table of contents

Introduction 3

Hungary's Emerging Role in the Southern Gas Corridor and European Energy Diversification 4

TurkStream: Hungary's Primary Gas Supply Line Amid Shifting European Energy Policies 7

Kazakh–Hungarian Partnership: An Emerging Oil Import Route for Central and Eastern Europe (CEE) 8

Trieste – A Strategic Hungarian Ownership for Regional Energy Security 9

Hungary: A Gateway for Green Energy from Azerbaijan and Central Asia 12

Conclusion 14

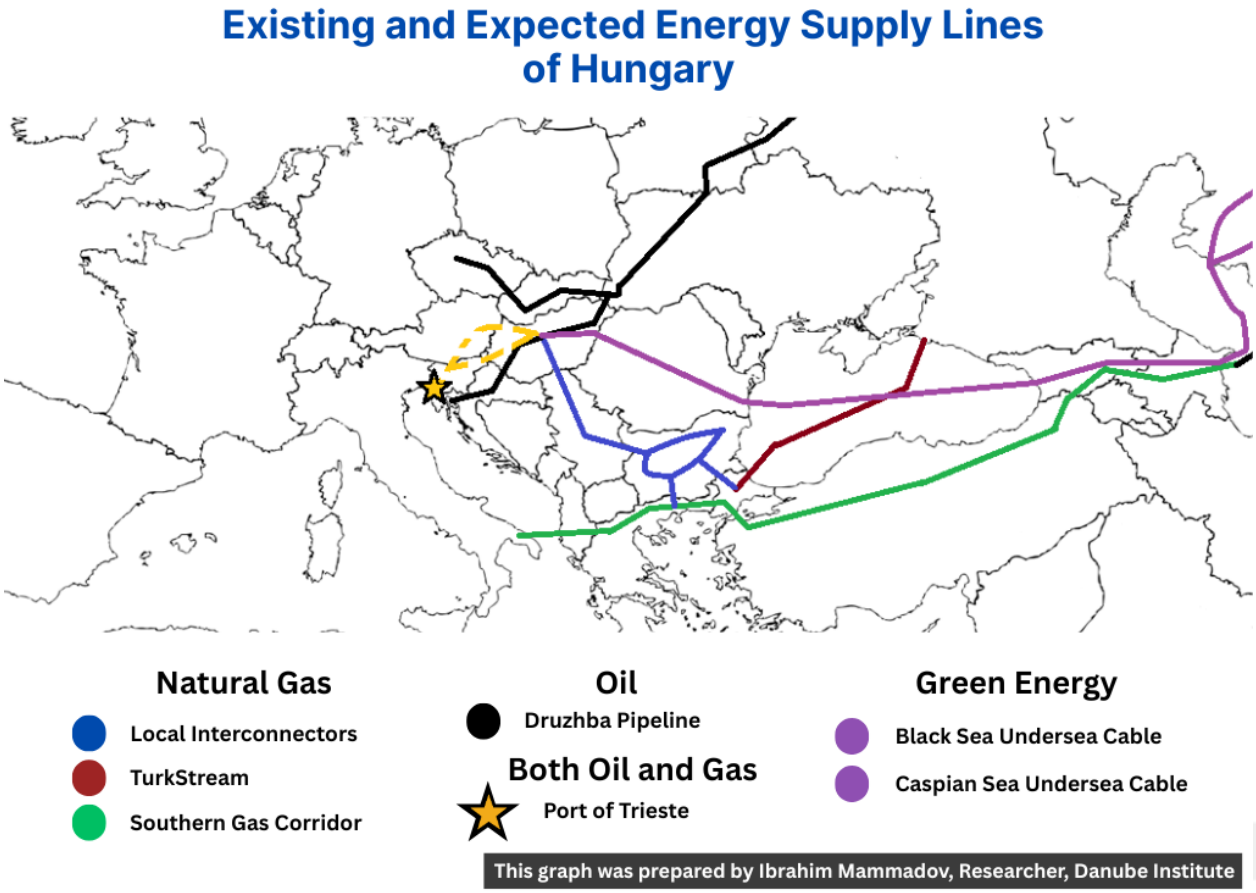
Introduction

A pragmatic stance in the newly emerging global geopolitical architecture has brought Hungary substantial privileges and benefits. By balancing national interests with regional cooperation, the country has not only solidified its position at the heart of the Danubian Basin but is also emerging as a key player in the broader Central and Eastern European (CEE) geopolitical architecture. One of the most promising dimensions of this ascent is Hungary's growing potential to become an energy hub for the region.

While many European Union member states rushed to curtail their dependence on Russian energy supplies in the wake of the war in Ukraine, Hungary pursued a more measured, pragmatic approach. This stance has allowed it to maintain a diversified and secure energy portfolio, earning trust among both Eastern and Western partners. Hungary's long-standing "Eastern Opening" policy, initiated during the second term of Prime Minister Viktor Orbán, has borne fruit, particularly in the energy sector. Leveraging these diplomatic and economic ties, Hungary has positioned itself as a reliable partner for energy-rich Caspian Basin countries such as Azerbaijan, Kazakhstan, and Turkmenistan.

Over the past decade, Hungarian companies have steadily expanded their footprint across this region. The result is a significant uptick in energy cooperation and a growing flow of resources east to west. The acquisition of concession rights to the Port of Trieste in Italy marks another strategic milestone, offering Hungary direct maritime access and strengthening its logistical capacity for global energy trade. National champions such as the MOL Group and MVM Group are poised to benefit immensely from these developments.

Looking ahead, several major infrastructure projects are set to reinforce Hungary's role as a regional energy hub by 2028. These include the completion of the Hungarian section of the Port of Trieste, the Serbia-Hungary Interconnector pipeline, and the construction of a Kazakh oil terminal. Together, they promise to transform the country into a central transit and distribution point for energy in Central and Eastern Europe. Hungary's strategy is distinguished by its dual-track approach of preserving access to Russian gas while actively championing green energy corridors. The following sections will analyse the key supply routes and future import lines that underpin Hungary's rising energy hub status and its strategic implications for the CEE region.



Hungary's Emerging Role in the Southern Gas Corridor and European Energy Diversification

One of the most secure and geopolitically significant routes for importing natural gas into the European Union, especially for countries in Southeast Europe, has proven to be the Southern Gas Corridor (SGC). This expansive infrastructure project was designed to transport natural gas from the energy-rich Caspian Sea region directly into European markets. Its primary objective has been to reduce dependence on Russian gas and diversify Europe's energy sources, thereby enhancing energy security and geopolitical stability. The SGC consists of a series of interconnected pipelines developed in multiple phases. It starts with the South Caucasus Pipeline (SCP), which carries natural gas from Azerbaijan's Shah Deniz field in the Caspian Sea through Georgia and into eastern Turkey. From there, it connects with the Trans-Anatolian Pipeline (TANAP), which runs across the length of Turkey, from east to west. TANAP then feeds into the Trans-Adriatic Pipeline (TAP), which continues through Greece and Albania before reaching the southern coast of Italy. This entire corridor became fully operational in 2020, with the completion of TAP marking the final phase of the project.[a]

[a] *Trans Adriatic Pipeline (2025),* "History," https://www.tap-ag.com/infrastructure-operation/history-timeline#period-12977 (Accessed: 15 April, 2025).

However, the SGC has not remained static. It has since evolved with the construction of several critical interconnectors, extending its reach into the Balkans and Central Europe. These include the Greece–Bulgaria Interconnector (IGB), completed in 2022[b], the Bulgaria–Serbia Interconnector (IBS), finalised in 2023[c], and the ongoing Serbia–Hungary Interconnector, expected to be operational by 2028[d]. Together, these connections have turned the Southern Gas Corridor into a living, expanding network. Its current trajectory brings it to Hungary, a country that has quickly assumed a pivotal role as a regional transit hub for gas delivery to Central and possibly Western Europe.

This expanded route now leaves open the possibility of further extension into northern markets such as Slovakia, which is already laying the groundwork for cooperation. In 2024, a Memorandum of Understanding (MoU) was signed between Azerbaijan and Slovakia to supply Azerbaijani gas to Slovak consumers. This positions Hungary as a critical transit country and reinforces its role in facilitating secure, diversified energy flows into the heart of Europe.

The SGC's expansion fits into a broader European strategy of energy diversification, especially in the aftermath of the energy crisis triggered by geopolitical tensions. While Turkey plays a central role as a transit state, it lacks its own significant fossil fuel reserves. In contrast, the Caspian region, particularly Azerbaijan, Kazakhstan, and Turkmenistan, is endowed with abundant hydrocarbon resources. These countries have increasingly been seen as alternative suppliers to support the EU's diversification goals.

On 5 September 2023, Azerbaijan and Hungary took a significant step forward when their respective foreign ministers announced the beginning of physical gas deliveries from Azerbaijan to Hungary, starting with a volume of 100 million cubic metres (mcm). Hungary's Foreign Minister Péter Szijjártó stated that the government plans to gradually increase this volume to 1 billion cubic metres (bcm) in the coming years[e]. This announcement followed the working visit of Azerbaijani President Ilham Aliyev to Budapest in August 2023, during which he met with Hungarian Prime Minister Viktor Orbán to strengthen bilateral cooperation. This bilateral progress complements the wider EU-level agreement signed in July 2022 - the Memorandum of Understanding on a Strategic Partnership in the Field of Energy between the European Union and

[b] *ICGB Interconnector (2022),* "The construction phase of the Greece-Bulgaria interconnector is completed," https://www.icgb.eu/news/the-construction-phase-of-the-greece-bulgaria-interconnector-is-completed/ (Accessed: 17 April, 2025).
[c] B.F.G. Fabrègue, 2024, "Interconnector Bulgaria-Serbia: closer ties with Azerbaijan and resilient European energy markets," *Blue Europe*, https://www.blue-europe.eu/analysis-en/short-analysis/interconnector-bulgaria-serbia-closer-ties-with-azerbaijan-and-resilient-european-energy-markets/#:~:text=The%20construction%20of%20the%20Ni%C5%A1,networks%20of%20Bulgaria%20and%20Serbia. (Accessed: 17 April, 2025).
[d] Lejla Biogradlija and Serdar Dincel, 2024, "Serbia-Hungary oil pipeline to be operational by 2028: Hungarian foreign minister," *Anadolu Agency,* https://www.aa.com.tr/en/economy/serbia-hungary-oil-pipeline-to-be-operational-by-2028-hungarian-foreign-minister/3526543 (Accessed: 17 April, 2025).
[e] *Hungary Today (2023),* "Physical Flow of Natural Gas from Azerbaijan Finally Starts," https://hungarytoday.hu/physical-flow-of-natural-gas-from-azerbaijan-finally-starts/ (Accessed: 18 April, 2025).

Azerbaijan[f]. Signed by European Commission President Ursula von der Leyen and President Aliyev, the agreement aims to double Azerbaijani gas exports to the EU, targeting a volume of 20 bcm annually by 2027. These commitments are not only economically beneficial but also strategically crucial as the EU seeks to reduce its reliance on Russian energy supplies.

Importantly, the SGC is not limited to current origin countries. There are concrete plans to expand it further eastward through the long-discussed Trans-Caspian Pipeline (TCP), a project that would connect Turkmenistan to the existing corridor via an undersea pipeline across the Caspian Sea. With Turkmenistan holding the sixth-largest natural gas reserves in the world, this addition would dramatically enhance supply options for Europe. The pipeline would link Turkmen gas directly with EU consumers, offering a long-term, competitively priced alternative to Russian gas. However, several hurdles remain. Chief among them is the lack of sufficient funding and the opposition of regional powers such as Russia and Iran, who view the project as a challenge to their own influence and energy export routes[g]. Still, with political will and financial backing from the EU, the Trans-Caspian Pipeline remains a viable option that could significantly alter the geopolitical energy landscape.

A breakthrough moment came on 20 August 2023, when Hungary and Turkmenistan signed a historic agreement during the official visit of Turkmen President Serdar Berdymukhamedov to Budapest. The agreement envisions annual deliveries of 1 bcm of Turkmen gas to Hungary, marking the first time Turkmenistan has committed to exporting gas directly to an EU country[h]. Though this initial supply will transit through Iran, Azerbaijan, and Turkey, rather than via the still-unbuilt Trans-Caspian route, it demonstrates a new era in Turkmenistan's energy diplomacy after years of strict neutrality.

While the expected volume remains modest in the broader context of EU demand, it is symbolically and strategically significant. It also revives serious interest in the Trans-Caspian project, which has been under discussion since 1996. The current delivery relies on a tripartite gas swap agreement between Azerbaijan, Iran, and Turkmenistan, but scaling this up will require major investments in infrastructure, especially in Iran. Nonetheless, Turkmenistan's willingness to participate and Europe's ongoing push for energy independence present a unique opportunity. With the right mix of diplomacy, investment, and coordination, the EU could soon gain access to one of the world's most promising untapped gas markets.

In this rapidly evolving landscape, Hungary has emerged as a strategic energy gateway. By anchoring the northern extension of the Southern Gas Corridor and initiating pioneering agreements with both Azerbaijan and Turkmenistan, Hungary is

[f] *European Commission, (2022),* "EU and Azerbaijan enhance bilateral relations, including energy cooperation," https://ec.europa.eu/commission/presscorner/detail/en/ip_22_4550 (Accessed: 19 April, 2025).
[g] Haley Nelson, 2023, "Turkmenistan Signs its First-Ever Energy Deal with the EU," *Caspian Policy Center,* https://www.caspianpolicy.org/research/energy/turkmenistan-signs-its-first-ever-energy-deal-with-the-eu (Accessed: 20 April, 2025).
[h] Ibid.

not only securing its own energy future but also shaping the contours of European energy security in the decades to come.

TurkStream: Hungary's Primary Gas Supply Line Amid Shifting European Energy Policies

Another critical pipeline that currently supplies Hungary with the largest volume of natural gas is the TurkStream pipeline. Finalised in 2020, TurkStream plays a vital role in ensuring the flow of Russian natural gas into Turkey, which then becomes a key transit country for exporting gas to South and Southeastern Europe[i]. The pipeline runs under the Black Sea, entering Turkey, and then passes through Bulgaria and Serbia before reaching Hungary. At present, it serves as the primary route for the delivery of Russian gas to the Hungarian market.

While many European countries opted to terminate long-term gas contracts with Russia and turned to more expensive alternatives following the outbreak of the war in Ukraine, Hungary took a different approach. It chose to uphold the terms of its pre-existing agreements with Moscow. This decision was based on Hungary's strategic aim to protect its economy from energy shocks and to maintain affordable domestic energy prices. As a result, Hungary has preserved a more pragmatic relationship with Russia, making it the EU member state whose ties with Moscow have arguably deteriorated the least since 2022. This has helped to solidify Hungary's image as a reliable and consistent partner—an important trait for countries that serve as energy transit hubs.

Although the TurkStream pipeline follows a separate route from the Southern Gas Corridor (SGC), it ultimately connects to the same broader Southeast European gas network via regional interconnectors. One such project, the Serbia-Hungary Interconnector, scheduled for completion by 2028, will further enhance the reach and reliability of Russian gas supplies into Hungary. This integration will help Hungary access a diversified supply structure while maintaining access to affordable Russian gas, despite growing political pressure from Brussels to cut such ties.

The technical specifications of TurkStream highlight its strategic significance. The pipeline stretches 930 kilometres across the Black Sea and Turkey, consists of two offshore lines, and has a total annual capacity of 31.5 billion cubic meters (bcm)[j]. In 2024 alone, Hungary imported 7.6 bcm[k] of natural gas through this pipeline, underlining its central role in meeting the country's energy needs.

Despite criticism from the EU, Hungary is expected to continue its strategy of gradual diversification, integrating new suppliers while retaining Russian imports. The

[i] *TurkStream (2025),* "Project: The TurkStream Pipeline," https://turkstream.info/project/ (Accessed: 22 April, 2025).
[j] Ibid.
[k] *Gas Processing & LNG (2025), "* Hungary imported 7.6 Bm3 of gas via Turkstream pipeline in 2024," https://gasprocessingnews.com/news/2025/01/hungary-imported-76-bm3-of-gas-via-turkstream-pipeline-in-2024/ (Accessed: 22 April, 2025).

TurkStream pipeline, due to its efficiency, capacity, and integration with the Balkan pipeline network, will likely remain Hungary's main natural gas supply route for the foreseeable future.

Kazakh–Hungarian Partnership: An Emerging Oil Import Route for Central and Eastern Europe (CEE)

Kazakhstan has long been a vital oil exporter to Western Europe, with Germany historically serving as the primary recipient. Over 70% of Kazakhstan's oil exports are destined for the European Union, positioning the country as the bloc's third-largest non-OPEC energy supplier[l]. Since the onset of the war in Ukraine and the subsequent EU sanctions on Russian energy imports, Kazakhstan's strategic importance in ensuring Europe's energy security has significantly increased.

Historically, the Caspian Pipeline Consortium (CPC), which transits through Russian territory, has served as the primary conduit for Kazakh oil exports to the EU. However, in light of geopolitical instability and the need to diversify transit routes, Kazakhstan has been exploring alternative corridors to bypass Russian infrastructure. Chief among these is the Baku-Tbilisi-Ceyhan (BTC) pipeline, which enables Kazakh oil to reach the Mediterranean via Azerbaijan, Georgia, and Turkey. To access this route, Kazakhstan relies on shipping oil across the Caspian Sea—a logistically challenging yet increasingly strategic option.

Nonetheless, recognising the continuing relevance of existing infrastructure, Kazakhstan struck a noteworthy agreement with Russia's Transneft in 2023 to utilise the Druzhba pipeline, historically a Soviet-era conduit, for oil transit to Europe. Germany became the first country to seize this opportunity, signing an agreement with Kazakhstan for the annual import of 2.5 million tonnes of oil via the Druzhba pipeline, thus ensuring energy imports from a non-Russian source while still using Russian infrastructure[m].

Hungary, with its unique positioning and balanced diplomatic approach between East and West, has strategically leveraged its relationships with both Russia and Kazakhstan. Celebrating a decade of strategic partnership with Kazakhstan in 2025, Hungary took decisive steps to deepen its energy cooperation with Astana. During a high-level visit in February 2025, Hungarian Foreign Minister Péter Szijjártó met with his Kazakh counterpart Murat Nurtleu in Astana, culminating in the signing of several bilateral agreements.

Among the most significant was a deal enabling Hungary to import Kazakh oil via the Druzhba pipeline, along with plans to establish a dedicated Kazakh oil terminal within

[l] Xhoi Zajmi, 2024, "Kazakhstan increasing oil exports, expanding its presence in European energy market," *EURACTIV*, https://www.euractiv.com/section/eet/news/kazakhstan-increasing-oil-exports-expanding-its-presence-in-european-energy-market/ (Accessed: 24 April, 2025).
[m] Ibid.

Hungarian territory[n]. This agreement marks a turning point for both nations. For Hungary, it represents a strategic move to position itself as a regional hub for energy distribution in Central and Eastern Europe (CEE), capitalising on its central geographic location and robust energy infrastructure. For Kazakhstan, it opens a new route into the heart of the European energy market, strengthening its long-term energy ties with the EU. Through this cooperation, Hungary not only reinforces its energy security but also enhances its emerging role as a key energy gateway between East and West.

Trieste – A Strategic Hungarian Ownership for Regional Energy Security

One of the most innovative initiatives of the current Hungarian leadership is the landmark agreement with Italy, finalised in 2019, which granted Hungary concession rights over a 300-metre extension of the seafront in the port of Trieste. This strategic concession, secured for 60 years at a cost of €31 million[o], represents a significant milestone for a country whose economy is deeply integrated into global markets and whose national champions are increasingly competitive on the international stage. For such a globally engaged economy, direct access to the sea is essential. This acquisition not only enhances bilateral relations between Hungary and Italy but also serves as a gateway for Hungary's wider global economic engagement and trade, potentially increasing the nation's wealth and connectivity.

Construction of the Hungarian section of the port began in 2025, with the first phase covering 250 metres of coastline. Plans are underway to extend this by a further 400 metres, giving Hungary a total of 650 metres of Adriatic access. Initial work includes the construction of a seawall and the deposition of 50,000 cubic metres of fill. A 30-hectare area is also designated for development into a major logistics centre, as announced by Levente Magyar, Parliamentary State Secretary at the Ministry of Foreign Affairs and Trade. The project is expected to be finalised in 2028[p].

This development aligns with Hungary's increasing trade with the East under the "Eastern Opening" policy, launched during Prime Minister Viktor Orbán's second term in 2010. This policy has expanded Hungary's trade horizons by engaging with dynamic Asian markets while attracting substantial investment into the country. As a result, Hungary has become a bridge between Western and Eastern economies in both trade and diplomacy.

---

[n] *Energynews (2025),* "Kazakhstan and Hungary Agree on Oil Exports via Druzhba Pipeline," https://energynews.pro/en/kazakhstan-and-hungary-agree-on-oil-exports-via-druzhba-pipeline/ (Accessed: 25 April, 2025).

[o] *Hungary Today (2022),* "Hungarian-owned Part of Italian Harbor Can Start Operations in 2026," https://hungarytoday.hu/hungarian-owned-part-of-italian-harbor-can-start-operations-from-2026/ (Accessed: 26 April, 2025).

[p] *Hungary Today (2024),* "MVM Acquires Majority Stake in Romania's Leading Energy Supplier," https://hungarytoday.hu/mvm-acquires-majority-stake-in-romanias-leading-energy-supplier/ (Accessed: 26 April, 2025).

To fully grasp the strategic significance of the Trieste port project, it is essential to consider Hungary's national energy champions, particularly the MOL and MVM Groups, and their growing global footprint.

MOL Group is a key player in Hungary's energy ambitions, operating in more than 30 countries[q] and actively involved in exploration and production. Some of its most notable international engagements include:

- Azerbaijan: MOL entered the Azerbaijani market in 2019 by acquiring a 9.57% stake in the Azeri-Chirag-Gunashli (ACG) oil field, along with an effective 8.9% share in the Baku-Tbilisi-Ceyhan (BTC) pipeline, which transports oil to the Mediterranean port of Ceyhan. The deal was finalised in April 2020. As the third-largest partner in ACG, one of the world's largest offshore oil fields operated by BP, MOL underscores the trusted strategic partnership between Hungary and Azerbaijan, particularly in the energy sector[r].
- Croatia: With over 45 oil fields and 30 gas fields developed, MOL has helped drill approximately 4,500 wells totalling about seven million metres in depth. The company now operates some 1,200 oil and gas wells and manages over 3,000 kilometres of pipeline infrastructure[s].
- Pakistan: MOL is a significant producer of oil, gas, condensate, and LPG in Pakistan. It holds key assets in the TAL Block, including Razgir-1 and the Mamikhel South-01 well, which began production in 2024. MOL is actively engaged in seismic reprocessing, new exploration, and field development, most notably in the Makori and Maramzai fields, demonstrating its long-term commitment to the Pakistani energy sector[t].
- Iraq: Since entering Iraq in 2007, MOL has operated through its subsidiary MOL Kalegran with a 20% stake in the Shaikan Production Sharing Agreement. In 2009, it acquired a 10% share in Pearl Petroleum, which manages the Khor Mor and Chemchemal gas fields, via a partnership with Crescent Petroleum and Dana Gas[u].
- Russia: MOL acquired the BaiTex company in 2007 and, in 2014, partnered with Turkey's TPAO by selling a 49% stake while remaining the operator. The Baitugan oil field, in production since 1947, benefits from well-developed infrastructure that enables cost-efficient operations[v].

---

[q] *MOLGROUP (2025),* "Company Overview," https://molgroup.info/en/about-mol-group/company-overview#:~:text=MOL%20Group%20is%20a%20leading,experience%20in%20the%20hydrocarbon%20field. (Accessed: 27 April, 2025).

[r] *MOLGROUP (2025),* "Azerbaijan," https://molgroup.info/en/our-business/exploration-and-production/azerbaijan (Accessed: 30 April, 2025).

[s] *MOLGROUP (2025),* "Croatia," https://molgroup.info/en/our-business/exploration-and-production/croatia (Accessed: 30 April, 2025).

[t] *MOLGROUP (2025),* "Pakistan," https://molgroup.info/en/our-business/exploration-and-production/pakistan (Accessed: 2 May, 2025).

[u] *MOLGROUP (2025),* "Kurdistan," https://molgroup.info/en/our-business/exploration-and-production/kurdistan (Accessed: 2 May, 2025).

[v] *MOLGROUP (2025),* "Russia," https://molgroup.info/en/our-business/exploration-and-production/russia (Accessed: 2 May, 2025).

- Kazakhstan: In collaboration with KazMunayGas and FIOC, MOL is developing the Rozhkovskoye gas-condensate field via their joint venture, Uralsk Oil and Gas (UOG). The company is currently focused on constructing surface facilities as part of the Trial Production Project[w].
- Egypt: MOL, through its subsidiary INA, is involved in four production concessions and one exploration licence, mostly in Egypt's Western Desert and the Nile Delta. These include partnerships in North Bahariya, Ras Qattara, West Abu Gharadig, and East Damanhur[x].
- Romania: Operating from its headquarters in Cluj-Napoca, MOL is exploring conventional hydrocarbons through three licenses: EX-1 and EX-5 in partnership with Sand Hill PR, and EX-6, where it serves as the sole operator[y].

MVM Group, Hungary's state-owned electricity and natural gas provider, is present in 23 countries and manages over 140 subsidiaries. As Hungary's second-largest company, MVM accounts for around 3% of the national GDP. It employs over 18,000 people and serves nearly 10 million clients. The company supplies 70% of Hungary's electricity and plays a central role in renewable energy generation. It also commands a 50% share of the industrial gas market and provides 100% of household gas through universal service providers[z]. A major milestone came with MVM's acquisition of a 5% stake in the Shah Deniz gas field[aa], located in the Azerbaijani sector of the Caspian Sea. This move has further cemented Hungary's position in EU-Azerbaijan energy cooperation.

Leveraging its partial ownership of the Trieste port and the global reach of its energy companies, Hungary is well-positioned to turn this seafront access into a vital node for energy imports, including oil, natural gas, and potentially liquefied natural gas (LNG). The establishment of an LNG terminal at Hungary's section of the port would fill a major infrastructural gap in the Balkans, enabling Hungary not only to secure its own energy supplies but also to become a key exporter of LNG to the region. Even without such a terminal, Hungary has the infrastructure and expertise to enhance both its own and the Balkans' energy security through oil exports and transit capabilities.

[w] *MOLGROUP (2025),* "Kazakhstan," https://molgroup.info/en/our-business/exploration-and-production/kazakhstan (Accessed: 3 May, 2025).
[x] *MOLGROUP (2025),* "Egypt," https://molgroup.info/en/our-business/exploration-and-production/egypt (Accessed: 3 May, 2025).
[y] *MOLGROUP (2025),* "Romania," https://molgroup.info/en/our-business/exploration-and-production/romania (Accessed: 4 May, 2025).
[z] *MVM (2025),* "About the company group," https://mvm.hu/en/Rolunk/AzMVMCsoportrol/ACegcsoportol (Accessed: 4 May, 2025).
[aa] *MVM (2024),* "Transaction completed: MVM Group has acquired a stake in one of the world's largest offshore natural gas fields," https://mvm.hu/en/Media/MediaTartalmak/Hirek/20240830_Azerbajdzsan (Accessed: 5 May, 2025).

Hungary: A Gateway for Green Energy from Azerbaijan and Central Asia

In recent years, Hungary has demonstrated a strategic commitment to diversifying its energy imports, both in terms of geographic sources and energy types. Traditionally reliant on fossil fuel supplies, Hungary is now positioning itself at the forefront of Europe's green energy transformation. While the country continues to strengthen energy ties with Silk Road nations such as Azerbaijan, Kazakhstan, Turkey, and Turkmenistan for fossil fuels, it is equally active in advancing renewable energy infrastructure. One of the most ambitious and promising projects in this realm is the Black Sea Submarine Cable (BSSC) initiative, a transregional undertaking that places Hungary at the heart of a future European green energy corridor.

The foundation for this green energy transition was solidified on May 21, 2024, when the World Bank's Board of Executive Directors approved a $35 million loan to finance the first phase of Georgia's participation in the ESPIRE project, Enhancing Energy Security through Power Interconnection and Renewable Energy Program. This initiative is not only the first phase of the broader BSSC project but also part of a Multi-Phase Programmatic Approach (MPA) that could eventually amount to $500 million across three implementation phases[bb].

The ESPIRE project aims to significantly improve energy connectivity between the South Caucasus and Europe by constructing an undersea high-voltage power cable that will transmit renewable energy from Azerbaijan, via Georgia and the Black Sea, through Romania and finally to Hungary. Hungary, as the final destination of the cable, is poised to become a major hub for green energy distribution within Central and Eastern Europe.

The initial phase of ESPIRE involves preparatory activities such as institutional capacity-building and comprehensive seabed surveys. These are critical for ensuring seamless cooperation among the participating countries and laying a solid technical and diplomatic foundation for the project's success. If successfully implemented, subsequent phases will upgrade Georgia's domestic power transmission infrastructure and eventually oversee the physical installation of the submarine cable[cc].

Beyond its energy implications, the BSSC project has far-reaching geopolitical and economic dimensions. According to Georgian officials, the project is a strategic priority that will not only enhance Georgia's role as a reliable energy transit partner for the European Union but also catalyse domestic job creation, attract international investment, and support the country's long-term development goals. It aligns closely with Georgia's 2025–2029 agenda focused on inclusive economic growth and

[bb] *World Bank Group (2024),* "World Bank Approves $35 Million Investment for Black Sea Submarine Cable Project Preparatory Activities," https://www.worldbank.org/en/news/press-release/2024/05/21/world-bank-approves-35-million-investment-for-black-sea-submarine-cable-project-preparatory-activities (Accessed: 6 April, 2025).

[cc] *World Bank Group (2024),* "Enhancing Energy Security through Power Interconnection and Renewable Energy Program," https://projects.worldbank.org/en/projects-operations/project-detail/P179950 (Accessed: 6 April, 2025).

improved connectivity, while also complementing the World Bank's Global Challenge Programs related to digital transformation and sustainable energy[dd].

The BSSC initiative dovetails with Azerbaijan's growing role in Europe's energy diversification strategy. Since the signing of a landmark Memorandum of Understanding between European Commission President Ursula von der Leyen and Azerbaijani President Ilham Aliyev in 2022, Azerbaijan has steadily advanced its position as a reliable energy partner. While oil and gas exports remain significant, the current momentum is shifting towards renewables, particularly wind and solar power, where Azerbaijan holds substantial untapped potential.

This new chapter in energy cooperation was further cemented through a joint commitment by Azerbaijan, Georgia, Romania, and Hungary to construct what is expected to be the world's longest undersea high-voltage cable[ee]. This pioneering infrastructure will facilitate the delivery of renewable electricity generated in Azerbaijan, and potentially in other energy-rich Central Asian states to European consumers[ff]. The region's abundance of solar energy, particularly in Kazakhstan and Uzbekistan, adds a new layer of promise to this east-west green energy corridor. In May 2024, Azerbaijan, Kazakhstan, and Uzbekistan signed an agreement to build a high-voltage cable line across the Caspian Sea[gg]. This cable will enable the transfer of renewable energy generated in Central Asia to Azerbaijan, and from there, potentially connect to the Black Sea cable infrastructure. This two-part initiative, linking both the Caspian and Black Seas, could dramatically increase the volume of green energy available to the European market.

Hungary's role in both projects is not only logistical but also strategic. As the designated endpoint of the Black Sea cable and a likely redistribution node for future expansions, Hungary is poised to become the European Union's key entry point for green energy from the east. This growing importance is reflected in recent diplomatic engagements. In September 2024, during a high-level ministerial meeting in Azerbaijan, Georgia, Romania, and Hungary, a joint venture was agreed upon that will oversee and facilitate the implementation of the BSSC project[hh]. This institutional framework will ensure long-term cooperation, efficient project management, and shared benefits among the countries involved.

The implications for Hungary are considerable. Upon completion, Hungary will not only serve as a transit country for green energy but may also become a distribution centre

[dd] Ibid, 10.

[ee] *Hungary Today (2024),* "Natural Gas Supplies from Azerbaijan Start for the First Time in History," https://hungarytoday.hu/natural-gas-supplies-from-azerbaijan-start-for-the-first-time-in-history/ (Accessed: 6 April, 2025).

[ff] *The Astana Times (2024),* "Kazakhstan, Azerbaijan, and Uzbekistan Sign Agreement on Energy Interconnection," https://astanatimes.com/2024/05/kazakhstan-azerbaijan-and-uzbekistan-sign-agreement-on-energy-interconnection/ (Accessed: 6 April, 2025).

[gg] *Daryo (2024),* "Kazakhstan, Azerbaijan, and Uzbekistan ink agreement for Caspian Sea energy cable," https://daryo.uz/en/2024/05/02/kazakhstan-azerbaijan-and-uzbekistan-ink-agreement-for-caspian-sea-energy-cable (Accessed: 6 April, 2025).

[hh] *Euronews (2024),* "Azerbaijan, Georgia, Hungary and Romania launch Black Sea power line to bring green energy to EU," https://www.euronews.com/green/2024/09/04/azerbaijan-georgia-hungary-and-romania-launch-black-sea-power-line-to-bring-green-energy-t (Accessed: 6 April, 2025).

for renewable electricity throughout Europe. This will add a green dimension to Hungary's existing role as a hub for fossil fuel imports via the Southern Gas Corridor and other initiatives. It reinforces Hungary's position as a linchpin in the EU's evolving energy architecture, one that is increasingly focused on sustainability, resilience, and independence from single-source dependencies. Moreover, Hungary's enhanced status as an energy hub aligns with broader European goals of reducing carbon emissions, securing diversified energy supplies, and fostering regional cooperation. The dual-track development of both the Black Sea and Caspian Sea projects ensures that renewable energy from some of the sunniest and windiest regions in the world can reach European households and industries through efficient and secure routes.

Hungary stands at the crossroads of a transformative era in European energy. Through its involvement in the BSSC and its potential role in the Caspian-Black Sea interconnection, Hungary is emerging as a vital link in the EU's efforts to create a more sustainable and interconnected energy future. With Azerbaijan and Central Asia as key suppliers, and Hungary as a central gateway, a new east-to-west corridor of green energy is taking shape - one that may well redefine the energy map of Europe for decades to come.

Conclusion

Strategic investments in critical infrastructure and a pragmatic foreign policy approach have positioned Hungary to take a central role in the evolving energy security architecture of Central and Eastern Europe. While many EU member states have opted to entirely abandon energy imports from Russia, Hungary's pragmatic stance has enabled it to retain access to more affordable energy without excluding any origin markets. Rather than isolate itself, Hungary has pursued an integrative energy policy over the past decade, built on trust, diplomacy, and long-term vision.

Recognizing both the advantages and limitations of its geographic and historical context, Hungary has turned these factors into strategic assets, setting itself apart from its regional peers. It has proactively identified high-potential energy projects within its orbit and formulated a comprehensive strategy to attract, integrate, and lead them into its domestic market, paving the way to becoming a regional energy hub by 2028.

One of the key pillars of this strategy is Hungary's "Eastern Opening" policy, which has facilitated deeper ties with Caspian Basin countries such as Azerbaijan, Kazakhstan, Uzbekistan, and Turkmenistan, nations rich in both fossil fuels and green energy resources. Through this initiative, Hungary has effectively joined the Southern Gas Corridor (SGC), strengthening its gas network via interconnectors that feed directly into its domestic market.

Notably, Hungary became the first European country to sign a natural gas supply deal with Turkmenistan, which holds the sixth-largest gas reserves globally. This breakthrough is especially significant given Turkmenistan's traditional policy of neutrality and the historical reluctance of regional powers to support its energy exports to Europe.

Further reinforcing its central energy role, Hungary has emerged as a key player in the ambitious Black Sea undersea high-voltage cable project, a strategic green energy initiative connecting Azerbaijan, Georgia, Romania, and Hungary. Slated for completion by 2029, this project will form the EU's largest green energy import channel. Hungary's leadership in this project is no coincidence, but the result of long-term trust-building and consistent policy alignment. Importantly, this cable is set to interconnect with another undersea project across the Caspian Sea, enabling clean energy flows from Central Asia into Europe through Hungary.

Hungarian energy giants like MOL and MVM have established a strong presence in resource-rich countries across Eurasia, and their untapped potential to supply the wider CEE region is vast. Aware of its landlocked position and the strategic need for maritime access, Hungary secured concession rights over a section of the Port of Trieste in Italy. This facility will serve not only as Hungary's gateway to global trade but also as a vital logistical hub for energy imports and exports. The port project, expected to be completed by 2028, will significantly enhance Hungary's energy connectivity and supply resilience.

To maximise the value of the Trieste hub, future projects could include a dedicated pipeline connecting the port to Hungary, enabling efficient transport and redistribution of energy resources across the region. Additionally, the construction of an LNG terminal at Trieste could be considered a much-needed facility in a region currently lacking adequate LNG infrastructure. Such a project would greatly contribute to the energy diversification of both Central and Southeastern Europe, while also yielding substantial economic benefits for Hungary.

Given the successful development of key initiatives, such as the Serbia-Hungary Interconnector, the Kazakh oil terminal in Hungary, and the planned Hungarian port in Trieste, Hungary is poised to become an indispensable energy hub for the entire CEE region. Its rise is not a product of mere circumstance, but rather the outcome of deliberate, pragmatic policy choices and a strategic embrace of opportunities that others hesitated to pursue. By recognising and leveraging its strengths, addressing its limitations head-on, and welcoming diverse markets and projects, Hungary is well on its way to becoming a cornerstone of regional energy security and cooperation.