No 405 | MARCH 2024

SEE ENERGY BRIEF

Monthly Analysis

The New Gas Infrastructure Landscape in SE Europe

Introduction

The Russian invasion of Ukraine exposed Europe's most severe and deep-rooted energy security vulnerabilities and exacerbated the energy crisis caused by gas supply deficits on global markets since 2021. Countries in SE Europe are particularly vulnerable to energy security risks. The region's historical lack of alternative energy sources to Russian oil and gas, the slow pace of the energy transition, and the more acute issue of energy poverty have all made the economic pain that resulted partially from joining the energy sanctions on Russia particularly unwelcome, both for policymakers and the general public. As a result, many SEE countries have been hesitant to follow the rest of Europe's example, requesting derogation from common EU sanctions or even openly opposing measures to reduce the region's dependence on Russia.

Natural gas use across the SEE region has been either stagnant or on the decline for most of the 2010s, due to a number of factors including improving energy efficiency, the switch to electricity (and even back to biomass in some countries), and limited competition due to incomplete gas market liberalization and integration. However, this trend has recently been changing, especially in Greece, where natural gas has been replacing coal in the power generation mix. With plans in place for boosting natural gas capacity across the whole region over this decade, dependence on gas could increase significantly.

The main purpose of this Monthly Analysis is to describe latest gas infrastructure developments and consequent changes to gas supply flows, and to assess how flows might further change as planned infrastructure is built over the next few years. The central question is whether, as a result of these improvements, the SEE region can eventually have a non-Russian gas supply future. The conclusion is that sufficient capacity is almost in place to import and distribute enough alternative volumes to replace Russian imports – assuming of course that this alternative supply is available and at a competitive price.

Gas Demand and Supply in SE Europe

SE Europe, as defined by IENE (see Map 1), contains 7 EU member states[1] and several members of the Energy Community[2], bound by its Treaty to incorporate EU energy directives and regulatory standards. Even

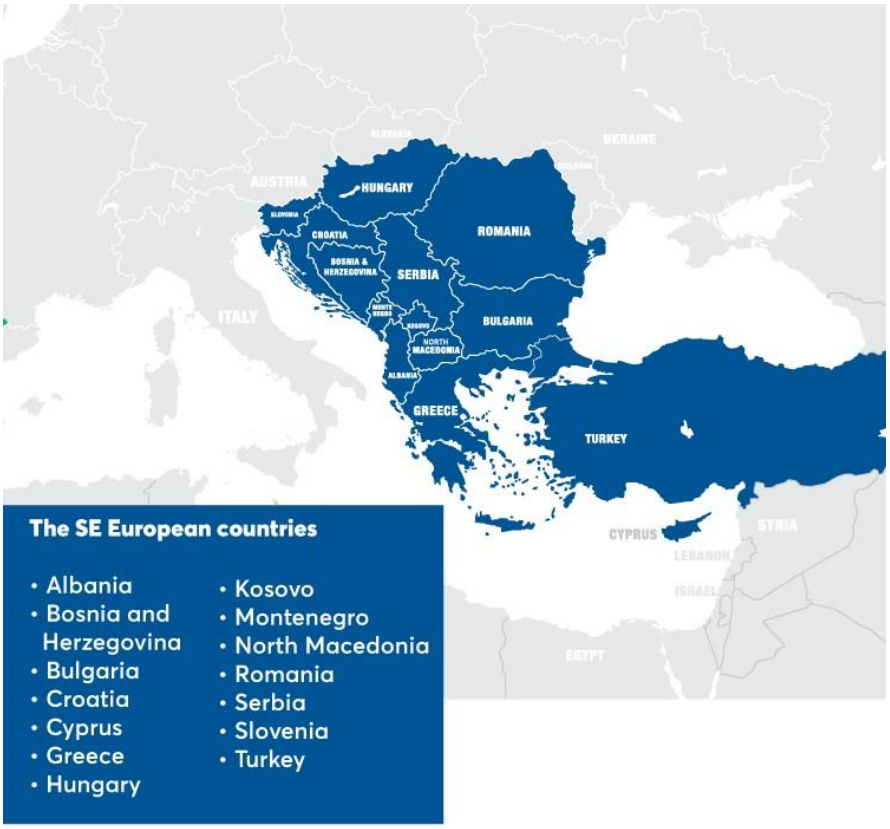
[1] The SEE EU member states include Bulgaria, Croatia, Cyprus, Greece, Hungary, Romania and Slovenia.

[2] The Energy Community is an international organisation which brings together the European Union and its neighbours to create an integrated pan-European energy market. The organisation was founded by the Treaty establishing the Energy Community signed in October 2005 in Athens, Greece, in force since July 2006. The key objective of the Energy Community is to extend the EU internal energy market rules and principles to countries in SE Europe, the Black Sea region and beyond on the basis of a legally binding framework. The Energy Community has nine Contracting Parties - Albania, Bosnia and Herzegovina, Kosovo, North Macedonia, Georgia, Moldova, Montenegro, Serbia and Ukraine.

though Turkey is not, strictly speaking, part of the region, it has become important in IENE's analysis as a transit country for the Southern Gas Corridor - it feeds gas into the TANAP-TAP system and has for some years exported small gas volumes to Greece through a small pipeline connection.

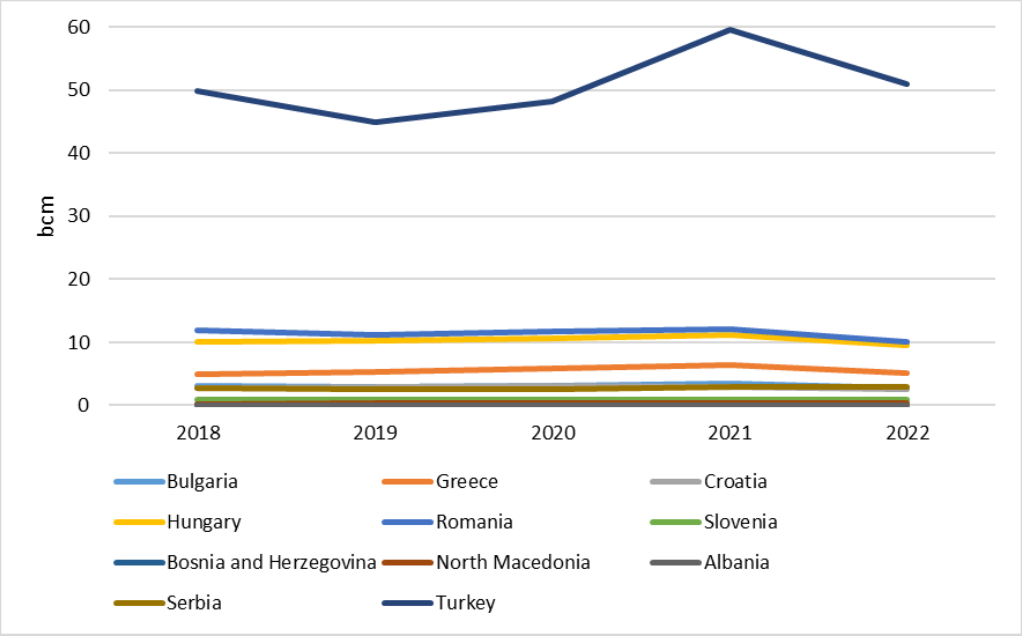
The regional gas markets are immature compared with the northwest European gas markets, which were rapidly liberalising. Gas consumption in the region has been resilient through the pandemic period. It dipped in 2019, but then grew in both 2020 and 2021, before declining again in 2022. It is worth mentioning that the total SE European gas consumption, including Turkey, accounted for 23.5% of total EU-27 gas consumption in 2022, based on Eurostat's data. With the 7 EU member states in SE Europe alone accounting for 8.5% of total EU-27 gas consumption in 2022, it comes down to basically five EU countries driving consumption in the region – Romania (10.1 bcm in 2022), Hungary (9.6 bcm in 2022), Greece (5.2 bcm in 2022), Bulgaria (2.7 bcm in 2022) and Croatia (2.5 bcm in 2022), as shown in Figure 1.

Map 1: The SE European Region as Defined by IENE



Source: IENE

Figure 1: Gas Consumption in SE Europe, 2018-2022

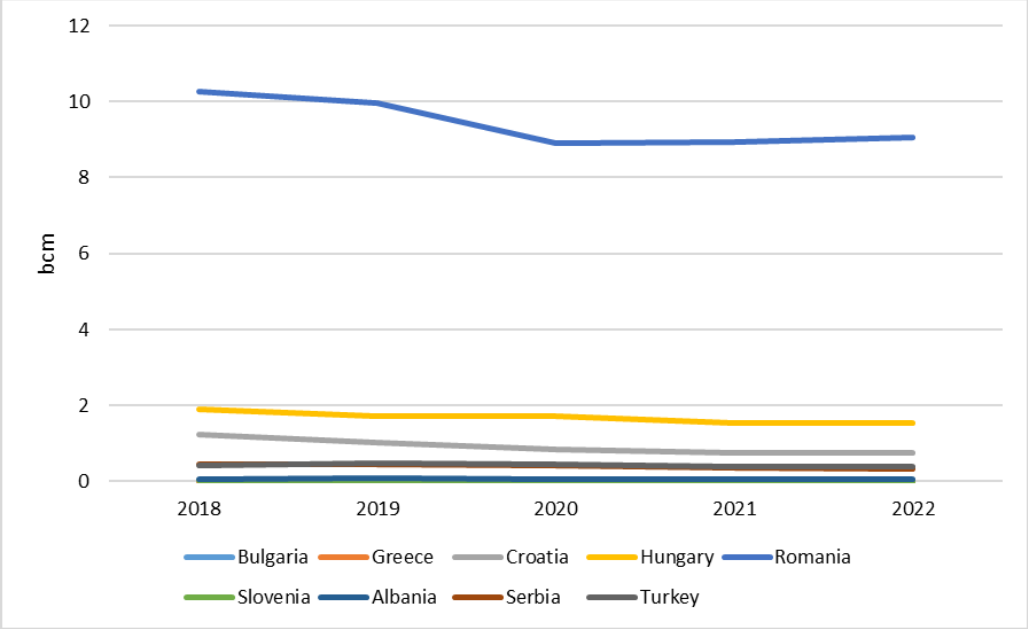


Note: Cyprus, Montenegro and Kosovo do not consume natural gas.

Sources: Eurostat, IENE

Gas production in SE Europe is very low and only Romania (9.1 bcm in 2022), Hungary (1.5 bcm in 2022) and Croatia (745 mcm in 2022) contribute substantial volumes to the region, as shown in Figure 2.

Figure 2: Gas Production in SE Europe, 2018-2022



Note: Bosnia and Herzegovina, Cyprus, Montenegro, North Macedonia and Kosovo do not produce gas.

Sources: Eurostat, IENE

Gas Infrastructure in SE Europe

Another main feature of these markets has been the lack of gas interconnections among them, as analysed in IENE's major study, the "SE Europe Energy Outlook 2021/2022" **(1)**. Much had been talked about linking up these largely "island" markets, but very little had been achieved before 2019-2020. Whether this was due to policy failure at the national and EU level, or local TSOs with limited technical capability serving relatively small markets not having sufficient financial resources, is debateable.

However, the SE European region with respect to gas is currently under transformation. A number of gas interconnections have already been built (e.g. Interconnectors Hungary-Romania, Croatia-Hungary, Bulgaria-Romania, Greece-Bulgaria, Turk Stream and the TANAP-TAP system), while several new ones are under construction or planned, including the East Med gas pipeline and the Vertical Corridor. Similarly, there is a number of operational FSRUs in the region, such as the Croatia LNG and Dortyol and Etki LNG in Turkey, and planned ones or under construction, especially in Albania, Montenegro, Turkey, Cyprus and Greece, as well as several plans for the expansion or construction of underground gas storage facilities.

Underground Gas Storage (UGS) Facilities

More specifically, there are underground gas storage facilities in 6 countries – Romania, Bulgaria, Croatia, Hungary, Serbia and Turkey. Bulgaria's storage is the Chiren UGS with a capacity of 0.5 bcm, which is planned to double to around 1 bcm in order to provide additional storage for Bulgaria and a storage service for the broader region. Greece has no storage, but there are plans for the South Kavala project for 0.7 bcm. Romania has a much larger gas market and a larger storage system with some expansion planned. The current capacities and planned expansions are shown in Table 1.

Table 1: Technical Working Gas Volumes (TWh) of UGS in SE Europe, 2022

Countries	Number/Site	Operational	Planned	Total Future
Bulgaria	Chiren	5.8	4.8	10.6
Croatia	Okoli	5.2	0.3	5.5
Romania	6	33	12.5	45.5
Greece	South Kavala	0	3.9	3.9
Hungary	5	69.6	0	69.6
Serbia	Banatski Dvor	4.5	0	4.5
Turkey	3	35	43.2	78.2

Sources: GIE, IENE

Gas Interconnections

Between 2019 and 2023, several gas infrastructure projects have been completed. Turk Stream came on-stream at the start of 2020, diverting all Trans Balkan Pipeline gas flowing south. TAP came on-stream at the very end of 2020, introducing Caspian gas into the supply mix. Croatia LNG (Krk FSRU) began operations at the start of 2021. Moreover, the Revithoussa LNG terminal in Greece increased its throughput, supporting exports to Bulgaria and other neighboring countries and providing comfort to Greece's own rising demand. Bulgaria's imports of gas from non-Russian sources started well before its April 2022 Russian cut-off, and before it started receiving its Shah Deniz Stage 2 gas. **(2)**

In Romania, the BRUA[3] 1 expansion of the domestic gas system was completed in late 2020. Gas Interconnector Greece-Bulgaria is now in operation (from October 2022), and the Alexandroupolis FSRU is expected to launch commercial operations by the end of April 2024 **(3)**. The gas interconnector between Bulgaria and Serbia is also operational since December 2023 **(4)**.

The North Macedonia-Greece Interconnector is a planned gas interconnector that would supply gas from Greece to North Macedonia, providing direct connection to Greece's existing Revithoussa LNG Terminal, bringing gas from Azerbaijan, and possibly providing transit for gas to Serbia. The project has received grants from the EU's technical assistance fund CONNECTA and the Western Balkan Investment Framework, as well as a €25 million loan from the European Investment Bank. Five potential investors have submitted bids in a tender by North Macedonia's state-owned gas transmission company Nomagas for the construction of the North Macedonian part of the gas interconnector with Greece, while Nomagas expects that the construction works will start by the end of March 2024, if there is an acceptable offer. **(5)**

On pipelines, there are several projects across the SEE region, but typically these are more in the form of expansions rather than new builds. Romania has BRUA 2, which foresees extending the pipeline from Hungary to Austria and is proceeding by fits and starts, currently with a nominal completion date planned by 2024. Phase 2 has had problems and was postponed, primarily due to uncertainties around new Romanian gas production from the Black Sea offshore. Phase 3 would then involve expansion within Romania with a further Black Sea connection. It is in the planning stage and has no confirmed timeline. **(6)**

However, for pipelines in the medium-term, much will depend on whether and how many of the numerous FSRU projects currently under consideration will proceed. If some of the FSRUs, as described below, do come on-stream, then potential onshore pipeline bottlenecks will need to be resolved.

[3] The BRUA pipeline is a natural gas pipeline which is part of the future Bulgaria, Romania, Hungary and Austria gas interconnector.

Table 2: Major Gas Interconnections in SE Europe

Countries	Capacity (bcm)	Status
Interconnector Hungary-Croatia	5.5-7.5	In operation
Interconnector Slovenia-Croatia	5.0	In operation
Interconnector Croatia-Serbia	7.0	Planned
Interconnector Croatia-BiH	1.5	Planned
Interconnector Romania-Hungary	1.75	In operation
Interconnector Serbia-Hungary	6.0-10.0	In operation
Interconnector Serbia-BiH	1.2	Planned
Interconnector Albania-Kosovo	1.5-2.0	Planned
Interconnector Serbia-North Macedonia	1.6	Planned
Interconnector Greece-Bulgaria	3.0-5.0	In operation
Interconnector Greece-North Macedonia	1.5-3.0	Planned
Interconnector Bulgaria-North Macedonia	1.0	In operation
Interconnector Bulgaria-Romania	1.5	In operation
Interconnector Bulgaria-Serbia	1.8	In operation
Interconnector Bulgaria-Turkey	18.8	In operation
Ionian Adriatic Pipeline	5.0	Planned
TANAP-TAP system	TANAP: 16.0 TAP: 10.0	In operation
Trans Balkan Pipeline	Initially: Up to 27.0 Currently: 1.0-2.0	Idle
Turk Stream	31.5	In operation
East Med Pipeline	10.0-20.0	Planned

Sources: GIE, IENE

Table 3: Major Gas Pipelines in SE Europe

Countries	Capacity (bcm)	Status
Ionian Adriatic Pipeline	5.0	Planned
TANAP-TAP system	TANAP: 16.0 TAP: 10.0	In operation
Trans Balkan Pipeline	Initially: Up to 27.0 Currently: 1.0-2.0	Idle
Turk Stream	31.5	In operation
East Med Pipeline	10.0-20.0	Planned

Sources: GIE, IENE

An important step towards the security of supply for Central, South Eastern Europe, Moldova and Ukraine was taken on January 19, 2024, by the natural gas infrastructure operators participating in the Vertical Corridor initiative, with the signing of a Memorandum of Understanding (MoU) for the inclusion of Slovakia (Eustream), Moldova (Vestmoldtransgaz) and Ukraine (GTSOU) in the initiative on the sidelines of the Ministerial meeting of the High Level Group on Central and South Eastern Europe Energy Connectivity (CESEC) held in Athens. **(7)**

This MoU seals the intensive cooperation developed by gas and LNG transmission system operators from Greece, such as DESFA and Gastrade, Bulgaria (ICGB, Bulgartransgaz), Romania (Transgaz), Hungary (FGSZ) and Slovakia (Eustream), following the meeting organized at the initiative of DESFA last September in Thessaloniki, in order to respond in a coordinated manner to the need to strengthen energy security and further diversify sources of supply.

The full activation of the Vertical Corridor, through the appropriate upgrading of the networks of the above countries, will allow the transport of gas from the South to North and vice versa, through European natural gas and LNG transmission systems, leveraging the enhanced capabilities of the new and under development FSRUs in the area. This potential can be further extended by the use of said infrastructures for renewable gases and hydrogen.

The Operators signing the MoU express their commitment to promote PCI and other necessary projects, jointly or individually, for the activation of the Vertical Corridor, underlining at the same time their intention to support each other in securing funding from European and other funding sources for these projects. They also agree to seek, where appropriate, the facilitation and guidance of the European Commission.

As for the next steps, the participants prioritize their coordination, according to market-based solutions and European legislation, as the best way forward. In this context, they agree to carry out simultaneously, in July 2024, one year earlier than the foreseen schedule, a binding market test for capacity allocation at their respective interconnection points, according to the CAM Regulation (EU) of the European Commission. Then, based on user interest, they will identify and size the most appropriate and targeted capacity expansion projects needed to meet demand along the Vertical Corridor route.

Furthermore, the European Commission has maintained the proposed East Med pipeline connecting the gas reserves in the Eastern Mediterranean to Greece via Cyprus and Crete on its latest list of Projects of Common Interest (PCI) published in November 2023. Projects included in the PCI list have access to a fast-track permitting process and special funding. Italy's Edison, a subsidiary of France's EDF and Greece's DEPA International Projects are the sponsors of the project through their joint venture IGI Poseidon. The joint venture has still to take a final investment decision (FID) on the pipeline, which would connect several gas fields in the Eastern Mediterranean, including some in offshore Israel, to Greece. The conflict in the Middle East has been a factor in delaying the decision, which was originally expected by the end of 2023. **(8)**

A market test for the East Med gas pipeline is anticipated to be held in the first quarter of 2024. The technical feasibility of the pipeline – to offer an annual 21 bcm capacity and cover 2,000 kilometers, of which over 1,400 kilometers will run underwater – has been proven and clarified through a number of studies. However, questions linger over the project's cost. Its budget, estimated at €6.1 billion, is likely to increase as

development costs have risen considerably since the previous evaluation. Discussions on the East Med pipeline date back nearly 15 years.

The East Med gas pipeline would be initially fed by Israeli gas fields already in production and others under development and at a later stage from Cyprus's field. These are Leviathan, Tamar and also the Tanin & Karish fields that have additional reserves to be developed. These fields produce around 28 bcm a year, with about a third exported to Egypt and Jordan. Production is expected to climb in the coming years as current projects are expanded and new discoveries are brought online.

In addition, one important upstream development was that last year Turkey started natural gas production from Sakarya field discovered in the Black Sea, which is expected to have a production capacity of 10 million cubic metres in the first phase. More specifically, Turkish oil and gas company Türkiye Petrolleri Anonim Ortaklığı (TPAO) commissioned the Sakarya gas field project located within the Turkey's Exclusive Economic Zone in order to help reduce the country's dependence on energy imports. Located within Block C26 in the western Black Sea, 165 km off the coast of Filyos in Zonguldak province, the field lies in a depth of nearly 2,200 meters. **(9)**

LNG Terminals and FSRUs

As already analysed, several FSRU projects are in early stages of definition, but until they are further advanced they must remain potential rather than firm. A number of additions of new FSRUs have been reported in Greece, Albania, Croatia, Cyprus and Turkey. Some of these plans are very recent and are clearly a reaction to the Russia-Ukraine war.

Concerning Croatia's LNG expansion, the country's Prime Minister Andrej Plenkovic announced in June 2022 a plan to more than double the size of the facility at Krk, from 2.9 billion to 6.1 billion cubic meters of gas annually. It is understood that the Croatian TSO Plinacro is currently working on pipeline expansion options to Slovenia and Hungary, as well as to Bosnia and Herzegovina. **(10)**

Apart from the Alexandroupolis FSRU, a second one, known as Thrace FSRU, is now being developed to be located in the Thracian Sea, offshore Alexandroupolis, as Gastrade, promoter of both projects, has already announced. In addition, Dioriga Gas, a unit of Greek refiner Motor Oil, aims to start construction of an FSRU facility off Agioi Theodoroi, near Athens, within 2024. It will have a storage capacity of up to 210,000 cubic metres of gas which will be either regasified and exported through Greece's gas grid or sold as LNG via vessels and trucks. Its binding market test was finalised in early 2023, while the FSRU is expected to start commercial operation by the end of 2024 or at the beginning of 2025, aimed at increasing the capacity of the country's natural gas system. **(11)**

Moreover, Elpedison, a joint venture by Italy's Edison and Helleniq Energy, plans to build an FSRU off the northern city of Thessaloniki, Greece's second largest, and be operational by the end of 2025. Also, Mediterranean Gas plans to build an FSRU off the port of Volos, in central Greece. In December 2022, Mediterranean Gas completed the market test for capacity allocation at the Argo FSRU import terminal in Volos, which will further enhance energy security and diversification of the region. The commissioning of the FSRU is anticipated in 2025/2026. The facility, which will have an annual regasification capacity of 5.2 billion cubic metres, will carry gas to North Macedonia, Bulgaria, Serbia, Romania, Albania, Italy and the rest of Europe. **(12)**

Regarding Cyprus, in a dramatic turn of events, the consortium behind the country's largest energy project, the Vasilikos FSRU, is sending ominous signals of a possible rupture with the Republic of Cyprus. More specifically, the China Petroleum Pipeline Engineering Co. Ltd, METRON S.A., Hudong-Zhonghua Shipbuilding Co. Ltd, and Wilhelmsen Ship Management Limited, involved in the project, have not only cut off communication but are hinting at a complete breakdown. The consortium's abrupt disappearance raises diplomatic concerns in Nicosia, leading to fears of a head-on collision that may impact the Republic's energy security and result in prolonged legal disputes.

Amid these uncertainties, discussions at the political level are reportedly underway to investigate the project's tendering process, evolution, and the circumstances leading to the sole bidder scenario, which some argue amounts to a direct award. If the worst-case scenario unfolds, and the terminal project is cancelled, criminal investigation may be initiated to determine responsibilities, both political and otherwise.

The government faces a delicate balancing act, considering the possibility of court action, while navigating arbitration proceedings initiated by the consortium, seeking an additional €200 million. With tensions escalating, the government has granted an extension until the end of March 2024, hoping for a resolution. If the current deadlock persists, bold decisions, including the termination of the contract, may become inevitable. Efforts behind the scenes to break the impasse include overtures to Beijing, with officials in contact with the Chinese ambassador in Nicosia. The Republic of Cyprus has already paid €245 million to the project consortium out of the total cost of €289 million, with the fate of the stranded FSRU ship in Singapore adding to the urgency of the situation. The Vasilikos FSRU project has a complex history dating back almost 20 years, with recent developments bringing it to the brink of a potential collapse **(13)**. Table 4 summarises the existing, under construction and planned LNG terminals/FSRUs in SE Europe.

Table 4: Existing, Under Construction and Planned LNG Terminals/FSRUs in SE Europe

	Country	Terminal or Phase Name	Start-up Year	Nameplate Receiving Capacity (MTPA)	Owners	Concept
Existing	Turkey	Marmara Ereglisi	1994	5.9	Botas (100%)	Onshore
		Aliaga Izmir LNG	2006	4.4	EgeGaz (100%)	Onshore
		Dortyol LNG terminal	2021	7.5	Botas (100%)	FSRU
		Etki LNG terminal	2019	7.5	Etki Liman (100%)	FSRU
		Gulf of Saros FSRU	2023	5.6	Botas (100%)	FSRU
	Greece	Revithoussa	1999	4.9	DESFA (100%)	Onshore
		Alexandroupolis FSRU	April 2024	4.0	Copelouzos Group (20%), GasLog Cyprus Investments (20%), DEPA Commercial (20%), Bulgartransgaz (20%), DESFA (20%)	FSRU
	Croatia	Krk LNG	2021	2.1	HEP (85%), Plinacro (15%)	FSRU
Under Construction	Cyprus	Vasilikos FSRU	-	0.6	DEFA (100%)	FSRU
Planned	Greece	Thrace FSRU	2025	4.4	Copelouzos Group (20%), GasLog Cyprus Investments (20%), DEPA Commercial (20%), Bulgartransgaz (20%), DESFA (20%)	FSRU
		Dioriga Gas FSRU	2025	1.9	Motor Oil (100%)	FSRU
		Thessaloniki FSRU	2025	3.8	Helleniq Energy (50%), Edison (50%)	FSRU
		Argo FSRU	2025	3.8	ExxonMobil LNG and Mediterranean Gas	FSRU
	Albania	Port of Vlora FSRU	-	-	Excelerate Energy, ExxonMobil, and the Ministry of Infrastructure and Energy of the Republic of Albania	FSRU
	Montenegro	Port of Bar	-	0.4-1.2	LNG Alliance, EPCG	Onshore

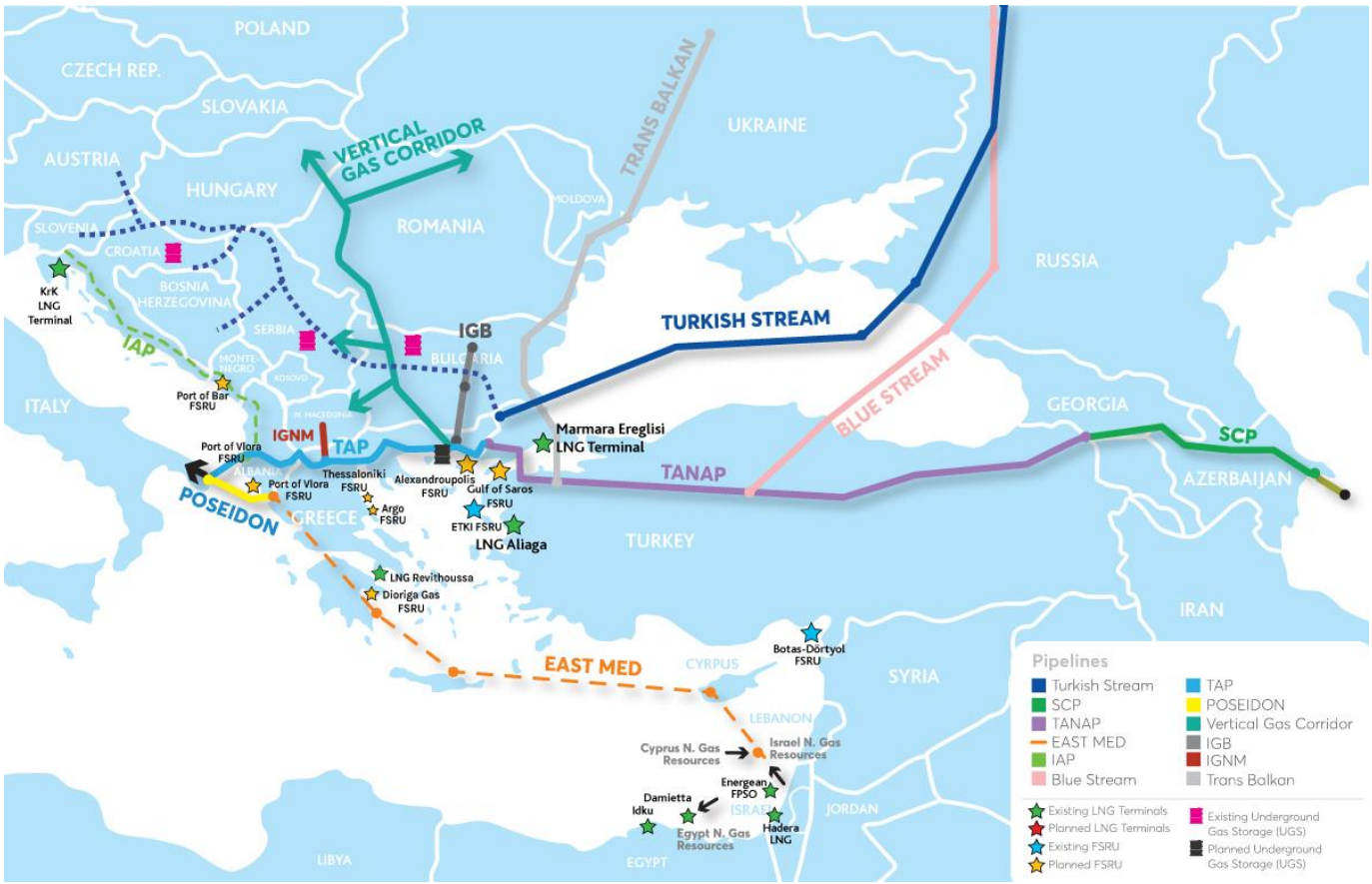
Sources: IGU, IENE

The Expanded South Corridor

In view of several new gas infrastructure projects under development in the SE European region, a redefinition of the Southern Gas Corridor is necessary by mapping all new potential gas supply sources and routes. Therefore, the concept of an Expanded South Corridor is introduced and defined as such to include all major gas trunk pipelines, LNG regasification terminals and underground gas storage facilities, which will ensure that gas is fed into the system with some of them being re-directed towards the main European gas markets. This Expanded South Corridor, with its multiple gas entry points and linked underground gas

storage and LNG facilities, already provides and will provide further the necessary background for the operation of regional gas trading hub(s).

Map 2: The Expanded South Corridor



Note: The TANAP, TAP, IGB and Turk Stream have been completed, while BRUA is still under construction. The IAP, the IGI Poseidon in connection with East Med pipeline and the Vertical Corridor and the IGNM are still in the study phase. Blue Stream and Trans Balkan are existing pipelines.

Source: IENE

Seen in a broader perspective, the construction and operation of huge gas infrastructure projects, such as TurkStream and the East Med, inevitably carries a heavy political concomitant burden as the rearrangement and reshuffling of gas flows causes ripple effects at various levels. Furthermore, they alter the energy security architecture and redistribute income from gas sales and transit fees. Judging from experience so far in the European scene, we see that in most cases energy security, at both the demand and supply end, prevails over all other considerations. In the case of SE Europe, the energy security dimension in major gas infrastructure works is even more pronounced.

Map 3: Gas Pipelines in SE Europe

Source: ENTSO-G

Discussion

This Monthly Analysis focused on the recent developments in the SE European gas market. It is a story of new infrastructure, gas flow changes, repositioning of pipelines (Trans Balkan reversal, TAP as potential regional pipeline), infrastructure expansions and of upstream potential. In this new energy landscape, Greece is emerging as a regional LNG hub, with strong links to Turkey; thus, enhancing regional cooperation. These developments will help secure the operation of each country's gas hubs.

Pulling all these elements together, it seems that if the gas supply is there, SE Europe appears to be in a very good position to replace its Russian volumes. However, in practical terms, a complete cut-off from Russian gas supplies is not yet possible, given Gazprom's long term contracts with Greece's DEPA and Turkey's BOTAS. Both companies are tied up with take-or-pay contracts with Russia. From a supply perspective, more LNG and a little more gas from the Southern Gas Corridor is expected by the end of 2024. Between 2025 and 2028, regional upstream comes into play, with Romania and Turkey as frontrunners. The Expanded South Corridor is of great importance to the region, providing real diversification, particularly if expanded in the future, and helping Western Balkan countries to diversify away from Russian gas as well as reduce their dependence on coal/lignite.

Despite abundant transmission and import capacity, SE Europe remains poorly connected because of numerous regulatory bottlenecks, including lack of interconnection agreements, delays in implementing congestion management mechanisms or failure to implement the use-it-or-lose-it principle. Lack of cooperation and coordination among TSOs largely caused by legal ambiguities at the interface between EU member states and Energy Community Contracting Parties, regulatory instability and unpredictability as well as political manoeuvring remain the most important barriers to regional gas market integration.

References

1. IENE (2022), "SE Europe Energy Outlook 2021/2022", https://www.iene.eu/en/congress/47/iene-study-see-energy-outlook-2021-2022
2. OIES (2022), "South East Europe gas markets – reconfiguring supply flows and replacing Russian gas", https://a9w7k6q9.stackpathcdn.com/wpcms/wp-content/uploads/2022/12/South-East-Europe-gas-markets-NG-177.pdf
3. LNG Prime (2024), "Gastrade: Greece's first FSRU to start commercial ops by end of April", https://lngprime.com/europe/gastrade-greeces-first-fsru-to-start-commercial-ops-by-end-of-april/106177/
4. European Commission (2023), "Inauguration of the Bulgaria-Serbia gas interconnector", https://energy.ec.europa.eu/news/inauguration-bulgaria-serbia-gas-interconnector-2023-12-11_en
5. Petrushevska, D. (2024), "N. Macedonia's tender for Greece gas link attracts five bids - report", https://seenews.com/news/n-macedonias-tender-for-greece-gas-link-attracts-five-bids-report-847973
6. Cutler, R. (2023), "Serbian Gas Deal Continues Azerbaijan's Penetration Of South-East European Energy Markets", https://natoassociation.ca/serbian-gas-deal-continues-azerbaijans-penetration-of-south-east-european-energy-markets/
7. DESFA (2024), "Cooperation for the Vertical Corridor is strengthened with the signing of a Memorandum of Understanding for the participation of Slovakia, Moldova and Ukraine", https://www.desfa.gr/en/press-center/press-releases/enisxyetai-h-synergasia-gia-ton-ka8eto-diadromo-me-thn-ypografh-mnhmonioy-synergasias-gia-th-symmetoxh-ths-slobakias-ths-moldabias-kai-ths-oykranias
8. Landini, F. (2023), "EU keeps EastMed gas pipeline on new list of priority projects", https://www.reuters.com/business/energy/eu-keeps-eastmed-gas-pipeline-new-list-priority-projects-2023-11-28/
9. Offshore Technology (2023), "Turkey's TPAO begins gas production from Sakarya field in Black Sea",

https://www.offshore-technology.com/news/tpao-production-sakarya/?cf-view

10. Energia.gr (2024), "Croatia Unveils 400 Mln Euro Gas Pipeline Project", https://www.energia.gr/article/215652/croatia-unveils-400-mln-euro-gas-pipeline-project
11. Reuters (2022), "Factbox: Greek LNG terminals in the pipeline", https://www.reuters.com/business/energy/greek-lng-terminals-pipeline-2022-11-30/
12. ICLG (2024), "Overview of Natural Gas Sector", https://iclg.com/practice-areas/oil-and-gas-laws-and-regulations/greece
13. Tomaras, A. (2024), "Crisis looms over vital energy project in Cyprus", https://knews.kathimerini.com.cy/en/news/crisis-looms-over-vital-energy-project-in-cyprus

IENE SEE ENERGY BRIEF MONTHLY ANALYSIS - Issue No. 405 – ISSN:179-9163

Prepared by IENE's Research Team

Monthly Analysis is published by the INSTITUTE OF ENERGY FOR SOUTH-EAST EUROPE (IENE)

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