Vertical Corridor: Gas Demand and Economic Viability

September 2026

Text:

Stavros Gennitsaris, Industrial Policy Associate, The Green Tank
Nikos Mantzaris, Partner & Lead Policy Analyst, The Green Tank

Cite as:

The Green Tank (2026) “Vertical Corridor: Gas Demand and Economic Viability”

Layout Design

Design Nature

Contact Details

50, Vas. Sofias Avenue, 115 28 Athens
210 7233384
thegreentank.gr
info@thegreentank.gr

Summary

The Vertical Corridor (VC) is a plan to interconnect the fossil gas systems of Southeastern and Central European countries, including Western Balkans, starting from Greece. The project regained momentum following the adoption of the regulation phasing out imports of Russian fossil gas by 2027 and was further reinforced by the strategic promotion of US LNG as a key source of gas supply for countries in the region. At the same time, interest was renewed in plans to proceed with four new LNG terminals (FSRUs) in Greece, in addition to the two already in operation at Revithoussa and Alexandroupolis.

These developments raise two main questions: first, what is the actual gas import "gap" that the VC is intended to address through the Greek FSRUs; and second, to what extent is gas transit through Greece economically competitive compared with alternative routes from other entry points in Europe? To address these questions, two scenarios were developed through 2040 (A: increased fossil gas use; B: faster phase-out of fossil gas), based on the NECPs of the countries along the VC and other official sources. However, a series of political developments signals a shift by key countries along the Vertical Corridor toward the decarbonization of their energy mix. Specifically, gas demand in the region is expected to decline due to a number of factors, including the political shift in Hungary following the election of Peter Magyar, the EU accession processes of Ukraine and Moldova and their expected alignment with the union's climate objectives, as well as Ukraine's very low gas import needs, which served as the initial catalyst for the development of the Vertical Corridor.

Nevertheless, even under the high gas-use scenario, in the hypothetical case where the needs of the Vertical Corridor countries are met entirely by FSRUs in Greece, just one of the four proposed new terminals, in addition to the two existing ones, would be sufficient to cover the region's additional needs. Under the more ambitious scenario, which is based on the NECPs of the countries, no additional FSRU would be warranted. Interestingly, the utilization rate of the second operating terminal would fall to approximately 75% already in 2030, and the terminal would no longer be required by 2035.

With regard to gas transit to Ukraine, VC costs (€11.2–13.1/MWh) are 21–76% higher than those of alternative routes from Poland, Croatia, Germany, and Lithuania. A similar picture emerges for gas transit to Hungary: only the route from Germany via the Czech Republic has costs comparable to those of the VC, while competing routes through Austria and Croatia remain significantly less expensive. Furthermore, expressed as a share of the total gas delivery cost and based on an indicative average LNG supply price of €45/MWh, VC transit costs account for approximately 25–29% and 16.5–21% of the total cost for Ukraine and Hungary, respectively, compared with 7–20.5% for alternative routes.

These findings call into question both the necessity and the economic viability of the VC plan. Moreover, committing funds to infrastructure that may remain largely underutilized could impose a substantial economic burden on end consumers through investment recovery charges. Finally, this trajectory could lock Southeastern Europe and the Western Balkans into prolonged reliance on a fuel that is costly and highly exposed to geopolitical developments.

Contents

SUMMARY **3**

THE VERTICAL CORRIDOR PLAN **5**

ASSESSMENT OF GAS DEMAND IN THE COUNTRIES ALONG THE VERTICAL CORRIDOR **6**

Current fossil gas demand 6

Assessment of future fossil gas demand 7

Comparison of projected gas demand with LNG terminal capacities in Greece 10

ALTERNATIVE ROUTES & TRANSIT COSTS **12**

CONCLUSIONS **15**

The Vertical Corridor Plan

The Vertical Corridor (VC) is a plan to interconnect the fossil gas transmission systems of nine countries in Southeastern and Central Europe: Greece, Bulgaria, Romania, Hungary, Slovakia, Moldova, Ukraine, North Macedonia and Serbia[1]. It provides for the development of a two-way gas transit route, starting in Greece -via the Trans Adriatic Pipeline (TAP) and the Revithoussa and Alexandroupolis LNG terminals- and extending to the other eight countries.

The Vertical Corridor was initially conceived in 2014; nonetheless, it saw limited progress for nearly a decade[2]. Interest in the implementation of the project was revived during the 2022 energy crisis, caused by Russia's invasion of Ukraine and the subsequent sharp decline in Russian gas imports to Europe. In this context, in December 2022, the gas system operators of Bulgaria, Greece, Romania, and Hungary signed a Memorandum of Understanding on the development of the Vertical Corridor[3]. The gas system operators of Slovakia, Moldova, and Ukraine followed the same path in early 2024[4].

The European Union's decision to phase out Russian fossil gas imports by 2027, as provided for in Regulation 2026/261[5], has been a key factor in accelerating planning for the development of the VC. In parallel with this European decision, and in view of the anticipated supply gap, the United States has been seeking to expand LNG exports to European markets; the VC -and Greece in particular- is therefore being promoted as the main gateway for US gas to Southeastern and Central Europe.

This policy direction is reflected in Greece's participation in the Partnership for Transatlantic Energy Cooperation (P-TEC), a US-led initiative promoting co-operation with Central and Eastern European countries in order to strengthen the region's energy security[6]. During the 6th P-TEC Ministerial Meeting, which was hosted in Athens in November 2025, the Greek government presented the country as the "natural entry point" for US LNG into the region[7]. Several commercial agreements were signed on the sidelines of this meeting, including the long-term LNG supply agreement between Greece's ATLANTIC SEE LNG TRADE and the US-based company 'Venture Global', as well as the memoranda of understanding on

[1] The Vertical Corridor is comprised by the following network of operators: the National Natural Gas Transmission System Operator (DESFA) and Gastrade (operator of the Alexandroupolis LNG terminal) from Greece; Bulgaria's Bulgartransgaz and ICGB (operator of the Greece–Bulgaria Interconnector, IGB); Romania's Transgaz; Hungary's FGSZ; Slovakia's Eustream; Moldova's Vestmoldtransgaz; Ukraine's Gas Transmission System Operator (GTSOU); North Macedonia's NOMAGAS; and Serbia's Transportgas Serbia.

[2] European Commission, Joint Press Statement by Ministers and Representatives of Austria, Bulgaria, Croatia, Greece, Italy, Romania and Slovenia and VP Šefčovič (December 2014): https://shorturl.at/5h6as

[3] Memorandum of Understanding between gas systems operators from Bulgaria, Greece, Romania, and Hungary for the development of the "Vertical Corridor" (December 2022): https://shorturl.at/Ksb63

[4] DESFA, Cooperation for the Vertical Corridor is strengthened with the signing of a Memorandum of Understanding for the participation of Slovakia, Moldova and Ukraine (January 2024): https://shorturl.at/FGLFF

[5] Regulation (EU) 2026/261 of the European Parliament and of the Council of 26 January 2026 on phasing out Russian natural gas imports and preparing the phase-out of Russian oil imports, improving monitoring of potential energy dependencies and amending Regulation (EU) 2017/1938: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L_202600261

[6] U.S. Department of Energy, The Partnership for Transatlantic Energy Cooperation (P-TEC): https://shorturl.at/6AO8X

[7] Hellenic Republic – Prime Minister, Speech by Prime Minister Kyriakos Mitsotakis at the 6th Ministerial Meeting of the Partnership for Transatlantic Energy Cooperation (P-TEC), in November 2025: https://shorturl.at/pWkSJ

LNG supply between the former and Vertical Corridor countries[8]. Moreover, following a quadrilateral ministerial meeting held in May 2026, Greece, Serbia, North Macedonia, and Bulgaria agreed to extend the Vertical Corridor to North Macedonia and Serbia via the Greece–North Macedonia interconnector, currently under construction, and the planned North Macedonia–Serbia pipeline[9]. This decision was endorsed via the recent signing of a MoU by the entities participating in the VC, held on the sidelines of the 10th Southeast Europe Energy Forum[10].

These developments have rekindled interest in previously announced investment plans to expand Greece's LNG infrastructure beyond its two existing operating terminals, through the development of four new LNG terminals across the country. Nonetheless, the proposed expansion raises certain questions: **What are the projected future gas needs of the Vertical Corridor countries arising from the phase-out of Russian gas imports that Greece's LNG stations will be required to meet? To what extent will the transportation of gas from Greece to the VC countries be economically competitive relative to alternative routes already in place across Europe?**

In order to address these questions, two scenarios were developed to assess the future fossil gas import requirements of VC countries, including Greece; particular emphasis was placed on the supply gap anticipated due to the phase-out of Russian gas imports. The scenarios draw primarily on these countries' National Energy and Climate Plans (NECPs), as well as on requests for information and additional official documentation. In parallel, data on the monthly transmission tariffs applied by gas transmission system operators along the relevant supply routes were collected and analyzed to provide a comparative assessment of the economic competitiveness of alternative LNG supply routes to the countries in question.

Assessment of gas demand in the countries along the Vertical Corridor

The Vertical Corridor plan was conceived as an alternative source of gas supply for Central and Southeastern European countries following the EU's decision to phase out imports of Russian fossil gas. Therefore, as a first step in assessing the necessity of the plan, this analysis seeks to quantify the anticipated supply gap.

Current fossil gas demand

In order to assess current fossil gas demand, this analysis drew on Eurostat's monthly data on primary fossil gas consumption; these data were used to calculate the average annual consumption over four years in the case of Moldova, and over five years for all remaining participating countries except Ukraine. As Eurostat provides insufficient data on the latter,

[8] Public Gas Corporation (DEPA) Commercial, Agreement between ATLANTIC – SEE LNG TRADE and Venture Global for the supply of LNG (November 2025): https://shorturl.at/rkPAj
[9] Joint Press Communiqué by Greece, Serbia, North Macedonia, and Bulgaria following Ministerial Meeting in Athens (May 2026): https://shorturl.at/qSPhi
[10] DESFA, Vertical Corridor expands into the Western Balkans with the participation of North Macedonia and Serbia (September 2026): https://shorturl.at/I33Ai

data from the country's latest announced NECP[11] were used to assess import requirements following the interruption of Russian gas supplies. The examined time periods were selected to ensure data representativeness, with the analysis considering the most recent years for which non-zero imports of Russian gas were recorded in each country. Specifically, the analysis covers 2018–2022 for Bulgaria and Romania, 2020–2024 for Greece, Hungary, and Slovakia, and 2020–2023 for Moldova. In order to estimate the supply gap resulting from the phase-out of Russian gas imports, Eurostat data on gas imports[12] by country of origin were used for the aforementioned countries and periods. Given that, with the exception of Romania and Hungary, the countries considered are not gas producers, average fossil gas consumption was assumed to be equivalent to total imports. In the case of Romania and Hungary, domestic fossil gas production was also taken into account when estimating average gas imports from sources other than Russia[13].

Table 1 presents the average annual imports of fossil gas per examined country, the corresponding imports of Russian gas, as well as gas imports from other sources; the latter reflect the difference between the first two figures during the respective reference periods.

Table 1. Average total annual imports of fossil gas, gas imports from Russia and from other sources by country (TWh)

Country	Average annual fossil gas imports	Russian gas imports	Imports from other sources
Bulgaria	32.45	24.70	7.75
Greece	62.37	27.33	35.04
Hungary	87.62	71.25	16.37
Romania	21.46	13.17	8.29
Slovakia	51.83	33.79	18.04
Moldova	9.19	7.46	1.73

Assessment of future fossil gas demand

The historical consumption data presented in the previous section reflects the current gas demand of the countries along the Vertical Corridor. However, assessing the need for new infrastructure requires a longer-term perspective, given that the proposed terminals are expected to remain operational for several decades. To that end, two scenarios were developed: **Scenario A** assumes **increasing gas demand**, whereas **Scenario B** assumes a more **rapid phase-out of gas consumption**. The assessment of gas demand through 2040, under both scenarios, was based on the official energy plans of the countries under consideration, as set out in their respective NECPs.

In particular, Scenario A reflects the WEM (With Existing Measures) projections set out in the NECPs, while Scenario B, which assumes lower gas requirements, draws on the WAM

[11]Ukraine's National Energy and Climate Plan (NECP) for the period up to 2030 – Available in Ukrainian (June 2026): https://shorturl.at/ote8V

[12] Imports of natural gas by partner country: https://shorturl.at/MLVO3

[13] In the case of Romania and Hungary, gas imports from other sources are obtained by subtracting both gas imports of Russian origin and domestic production from the average gas consumption. According to Eurostat data, the average value of domestic gas production of Romania over the 2018-2022 period was 101.57 TWh, while the average value of domestic gas production of Hungary over the 2020-2024 period was 15.92 TWh: https://shorturl.at/uTepk

(With Additional Measures) scenario. Both WEM and WAM scenarios presented in the NECPs describe the projected evolution of domestic energy consumption. Therefore, gas import requirements are assumed to equal primary gas consumption, except in Romania and Hungary, where domestic fossil gas production is deducted from the latter. Nonetheless, the NECPs of Moldova, Greece, and Ukraine do not include both WEM and WAM scenarios. In the case of Greece, while NECP data were used to develop Scenario B (rapid phase-out), Scenario A (higher gas requirements) was based on the most recent National Natural Gas System Operator's (DESFA) forecasts[14], which differ substantially from those set out in Greece's NECP. In the case of Moldova, gas import requirements were assumed to follow the same trajectory under both scenarios, based on the country's NECP. Given that Moldova's gas imports are among the lowest across the Vertical Corridor countries, this assumption is not expected to have a significant impact on the overall results.

In the case of Ukraine, the high gas-demand scenario (Scenario A) was based on the country's gas import requirements for 2025, which amounted to approximately 6.5 billion cubic meters (bcm). This figure represents a ninefold increase compared to 2024, due to attacks on gas infrastructure[15], which affected 60% of domestic gas production capacity. However, the country's recently revised NECP provides that, by 2030, Ukraine's domestic fossil gas demand will be met entirely through domestic production, with the latter expected to reach at least 21.5 bcm annually[16]. In line with this target, annual gas import requirements are expected to remain minimal, at below 1.4 bcm from 2025 onward[17]; this figure was therefore adopted as the projected gas import requirement under Scenario B (rapid phase-out). Finally, regarding the recent extension of the Vertical Corridor to North Macedonia and Serbia, projected gas import requirements were assumed to range from 1 bcm to 2.8 bcm under Scenarios B and A, respectively. Under the assumption that gas imports for these two countries will be facilitated via the Greece–North Macedonia pipeline, the lower value corresponds to the planned initial capacity of the Greece–North Macedonia interconnector, while the higher value represents the maximum capacity that could be achieved following the implementation of upgrades to the Greek gas transmission system[18].

Following the determination of gas import requirements under both scenarios, imports from all sources other than Russia were deducted from the corresponding values; the contribution of Russian gas to meeting demand in VC countries was assumed to remain unchanged through 2040. In the case of Romania, projected domestic gas production through 2040 was also deducted. This approach allowed for the estimation of the resulting import 'gap' for each country, representing the volume of gas imports that could theoretically be supplied through the Vertical Corridor. The results for 2030, 2035, and 2040 are presented by country and scenario in **Table 2**.

[14] For Greece, data for Scenario A are derived from DESFA's gas demand forecast for the period 2026–2035. For 2035, gas demand is extrapolated using linear regression: https://shorturl.at/25eWE
[15]Ukraine's National Energy and Climate Plan (NECP) for the period up to 2030 (p. 367) – Available in Ukrainian (June 2026): https://shorturl.at/ote8V
[16]Ukraine's National Energy and Climate Plan (NECP) for the period up to 2030 (p. 84) – Available in Ukrainian (June 2026): https://shorturl.at/ote8V
[17]Ukraine's National Energy and Climate Plan (NECP) for the period up to 2030 (Figure 4.46, p. 393) – Available in Ukrainian (June 2026): https://shorturl.at/ote8V
[18] Energypress.gr, Vertical Corridor: 22 GWh per day were reserved in today's annual auction - Atlantic SEE participated successfully, 'locking' an annual capacity of 4.7 TWh (July 2025): https://shorturl.at/MZaRO

Table 2. Estimated fossil gas import needs in all countries of the Vertical Corridor for 2030, 2035, and 2040 under Scenarios A & B (TWh)

Country	2030 - Scenario A	2035 - Scenario A	2040 - Scenario A	2030 - Scenario B	2035 - Scenario B	2040 - Scenario B
Bulgaria[19]	21.31	21.12	17.95	17.33	8.34	0.00
Greece[20,21]	27.37	28.24	33.23	7.46	0.00	0.00
Hungary[22]	56.73	45.48	38.73	40.95	29.70	18.45
Romania[23]	0.00	0.00	0.00	0.00	0.00	0.00
Slovakia[24]	28.96	26.96	23.96	23.96	9.96	0.00
Moldova[25]	7.53	7.94	7.03	7.53	7.94	7.03
Ukraine	63.50	63.50	63.50	13.68	13.68	13.68
North Macedonia & Serbia	27.35	27.35	27.35	9.77	9.77	9.77
Total (all countries along the Vertical Corridor)	**232.76**	**220.59**	**211.76**	**120.68**	**79.38**	**48.93**

As shown in **Table 2**, Ukraine is the country with the highest gas import needs under Scenario A (higher gas demand), followed by Hungary. This picture changes significantly under Scenario B, where Ukraine's import needs are minimal and Hungary's gas import needs are the highest. Therefore, in such a scenario, the main focus of the Vertical Corridor is expected to shift from Ukraine toward other countries in the region, as reflected in its recent expansion into the Western Balkans[18]. Indeed, in 2025, the VC accounted for merely 1.5% of Ukraine's total fossil gas imports. Further confirming this trend, no interest was recorded in transporting fossil gas to Ukraine in the recent VC capacity auction[26]. Similarly, Romania is a large gas consumer with zero import needs, thereby reducing the region's

[19] For Bulgaria, data for Scenario A are based on import projections reported in the most recent NECP (2025), specifically Figure 75: Net imports by fuel WEM (p. 289). Data for Scenario B are derived from net import projections presented in Figure 14: Net fuel imports – WAM (p. 87): https://shorturl.at/Y1jsE

[20] For Greece, data for Scenario A are derived from DESFA's gas demand forecast for the period 2026–2035. For 2035, gas demand is extrapolated using linear regression: https://shorturl.at/25eWE

[21] For Greece, data for Scenario B are derived from the Primary Energy Distribution from fossil gas reported in the most recent NECP (2025), specifically Table 29: Summary Energy Balance for the Period 2022 (historical)–2050 (p. 386): https://shorturl.at/OcCWS

[22] For Hungary, data for Scenario A are derived from the Primary Energy Distribution from fossil gas reported in the most recent NECP (2024), specifically Figure 40: Evolution of Primary Energy Consumption Composition by Energy Carrier, WEM Scenario (2019–2050, PJ/year) (p. 188). Data for Scenario B are derived from the projected evolution of primary energy consumption by fuel reported in Figure 107: Expected Evolution of Primary Energy Consumption, by Fuel and Its Composition in the WEM and WAM Scenarios – Impact of New Policy Measures (2019–2050, PJ) (p. 249). For 2035, gas demand is extrapolated using linear interpolation: https://shorturl.at/OOFdE

[23] For Romania, data for scenario A are derived from the Primary energy consumption from fossil gas reported in the most recent NECP (2024), combining Figure 130: Primary energy consumption by fuels - WAM scenario and Figure 131: Difference in Primary energy consumption by fuels –between WEM and WAM scenarios (p. 253); data for Scenario B are derived from Figure 130: Primary energy consumption by fuels - WAM scenario (p. 253): https://shorturl.at/CiMr9

[24] For Slovakia, data was obtained via an official request for information to the Slovak Ministry of Economy, as the country's NECP does not provide detailed data on primary energy consumption per fuel.

[25] In the case of Moldova, the same demand profile is used in both Scenarios, due to the lack of a different scenario from an official source. Given the relatively low demand for fossil gas compared to the other countries considered in the analysis, this approach is not expected to affect the final results. The data are derived from the forecast of imports by fuel as reported in the most recent NECP (2024), in Table 41: Energy insurance structure of the Republic of Moldova (2010-2040) (pp. 173-174): https://shorturl.at/W4u75

[26] DESFA, Capacity Auctions (July 2026): https://shorturl.at/TokjJ

overall gas import needs to be met by the VC. However, Hungary and Ukraine remain the countries with the highest gas import needs among the VC countries.

In the case of Greece, a significant discrepancy is observed between NECP targets and DESFA's projections. The NECP provides for the cessation of gas imports from Russia from 2035 onwards, thereby eliminating the 'import gap'. In contrast, DESFA's demand forecast study suggests significantly higher gas import needs for Greece. Overall, as indicated by the data in **Table 2**, most countries along the Vertical Corridor show declining or even zero import needs under Scenario B (rapid gas phase-out). This trend calls into question whether new fixed investments in gas infrastructure would effectively contribute to energy security at a time when the region -albeit at different rates across countries- appears to be phasing out fossil gas.

Comparison of projected gas demand with LNG terminal capacities in Greece

The new LNG terminals in Greece have been planned to address anticipated 'gaps' in gas supply in the countries along the Vertical Corridor. To assess whether this additional infrastructure is warranted, the analysis compares the total capacity of the planned terminals with the projected gas demand of the VC countries. Currently, the country has two LNG terminals in operation, at Revithoussa[27] and Alexandroupolis[28] with annual regasification capacities of 77.6 TWh and 86.7 TWh, respectively[29]. At the same time, the development of four additional FSRUs has been announced. In particular, the company that operates the Alexandroupolis terminal is planning to build a second FSRU in Thrace with a capacity of 57.8 TWh; this project has already received an environmental permit (AEPO)[30]. The Dioriga Gas[31] terminal in Corinth, albeit at an earlier licensing stage than the aforementioned Thrace FSRU, has recently secured a seven-year commercial agreement, attracting public attention due to the potential inclusion of additional companies in the consortium implementing the project[32]. Finally, the other two FSRUs are at an earlier stage of implementation; the Thessaloniki FSRU (54.8 TWh)[33] remains at the investment-planning stage, while the Argo FSRU in Volos (54.4 TWh)[34] recently received a negative opinion from the Ministry of Environment and Energy on the project's Environmental Impact Study[35].

---

[27] DESFA – LNG facility: https://shorturl.at/xob97

[28] GASTRADE – Alexandroupolis INGS – The project: https://shorturl.at/j2Gpj

[29] Where regasification capacity was not provided by the LNG terminal operators in GWh, it was calculated using a calorific value of 10.55 kWh/Nm^3

[30] Decision YPEN/DIPA/54618/3827 by the Ministry of Environment and Energy: Approval of Environmental Terms for the installation and operation of the Thrace FSRU, in the Regional Unit of Evros (January 2026): https://shorturl.at/PscQY

[31] DIORIGA GAS – The project: https://shorturl.at/WPzzP

[32] Aktor Group, Comment on media reports (June 2026): https://shorturl.at/OmsTW

[33] Thessaloniki FSRU - The project: https://shorturl.at/1eiLl

[34] DESFA, Publication of Advanced Reservation of Capacity Application Summary at New Entry Point of National Natural Gas System in Volos – "ARGO" FSRU – non-Scheduled Project (April 2025): https://shorturl.at/846Gy

[35] Decision YPEN/DIPA/14856/1019 by the Ministry of Environment and Energy: Rejection of the EIA file of the project "Installation & Operation of a FSRU entitled 'ARGO', Municipality of Volos, in the Regional Unit of Magnesia" (June 2026): https://shorturl.at/g6aAP

Figure 1 illustrates the comparison between the estimated fossil gas import needs of all Vertical Corridor countries for 2030, 2035, and 2040 under the two scenarios considered and the regasification capacities of both existing and planned LNG terminals in Greece.

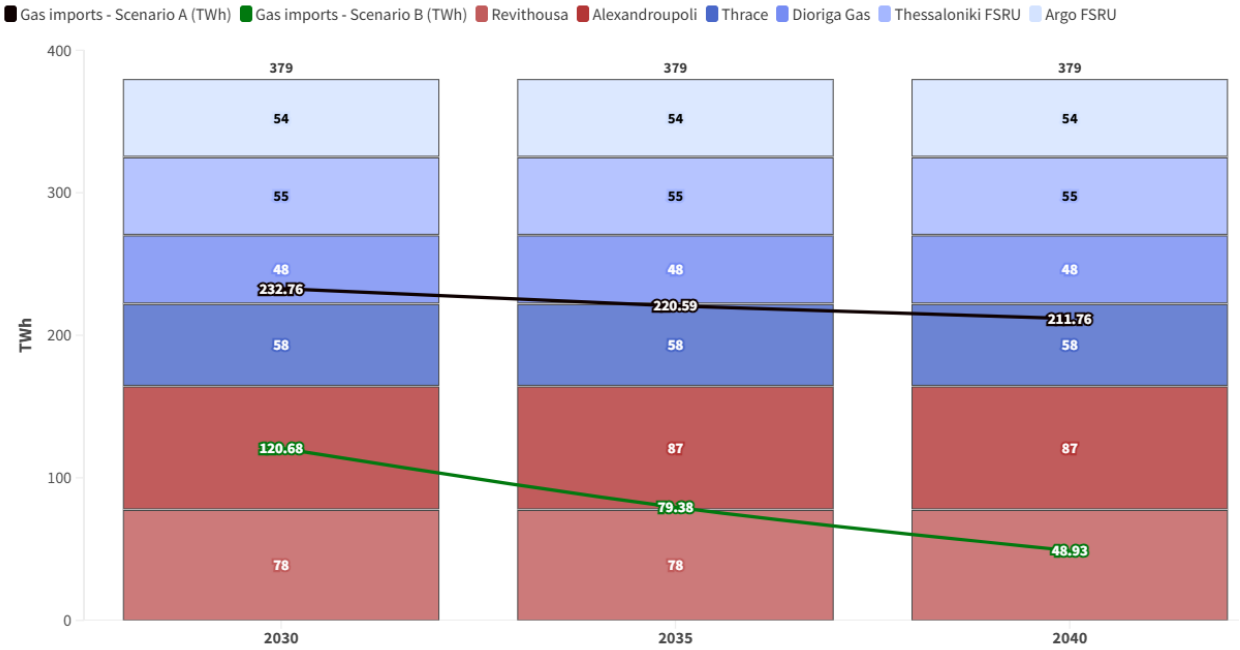

Figure 1. Cumulative regasification capacity of LNG terminals in Greece and estimated fossil gas import needs in all countries along the Vertical Corridor for the years 2030, 2035, and 2040, under Scenarios A and B.

The above analysis indicates that, even under the least ambitious scenario -where countries along the Vertical Corridor maintain a high dependence on imported fossil gas and the entire supply deficit resulting from the interruption of Russian gas imports is met exclusively through Greek LNG terminals- the construction of most of the planned new infrastructure is not warranted. In particular, neither the Thessaloniki nor the Argo FSRU will be required to meet gas demand at any point through 2040. Moreover, even the Dioriga Gas terminal -namely, the fourth project in terms of licensing maturity- is expected to operate at a very low utilization rate from the outset and essentially become unnecessary as early as 2035.

In fact, if certain countries along the Vertical Corridor adopt a more ambitious strategy to reduce gas use, in line with the targets set out in their National Energy and Climate Plans, the need for additional infrastructure would be further reduced. Under Scenario B (see green line in **Figure 1**), all new LNG terminals planned in Greece would become unnecessary, even if all gas imports to VC countries were to originate from Greece. Furthermore, this scenario foresees that the Alexandroupolis FRSU, the second terminal currently in operation, would have a utilization rate of approximately 75% in 2030 and would no longer be required by 2035, thus raising significant concerns regarding its economic viability.

Alternative Routes & Transit Costs

The results presented in Figure 1 are based on the assumption that all fossil gas import needs of VC countries will be met exclusively through LNG terminals in Greece. However, there exist other potential entry points for supplying these countries. Ukraine already sources LNG from alternative terminals, including in Germany[36], Poland[37], and Lithuania[38]. In fact, Ukraine's Naftogaz secured long-term capacity at Lithuania's Klaipėda LNG terminal in the recent auction for the 2033–2044 period[39]. In addition, Croatia, and specifically the LNG facility on the island of Krk, provides the starting point for another alternative supply route to Ukraine and the wider region. The terminal's annual capacity was recently expanded to 6.1 bcm, while an upgrade of the transmission network toward Slovenia and Hungary is also underway. The project is expected to be completed by the end of 2026[40], further strengthening Croatia's position as an alternative entry point for supplying fossil gas to countries along the Vertical Corridor.

Figures 2 and 3 map the potential supply routes to Ukraine and Hungary, respectively, with the former country representing the endpoint of existing VC routes and the latter being a country with equally high gas import needs and the highest projected import needs under the faster fossil gas phase-out scenario (see **Table 2**). Against this background, the analysis then turned to assessing the competitiveness of the identified routes and, by extension, their potential to meet gas demand in the VC countries. A key determinant of route competitiveness is the cost of transmitting gas to its final destination. Transit costs were calculated as the sum of the regulated entry-exit tariffs imposed by each national transmission system operator at the respective points along the route. Specifically, the calculation included the exit tariff at the LNG entry terminal, the entry-exit tariffs at each cross-border interconnection point, as well as any applicable additional charges. For each route, these costs were derived from the tariffs published by the respective gas infrastructure operators for monthly products for the 2026–2027 gas year, with particular focus on the winter months, when gas flows are highest[41,42].

[36] Naftogaz Group, Naftogaz secures first ever delivery of LNG via Germany terminal (February 2026): https://shorturl.at/K9QOD

[37] CEENERGY NEWS, Record imports in 2025: where did Ukraine get its gas from? (July 2026): https://shorturl.at/Gm8qT

[38] Naftogaz Group, Naftogaz to deliver U.S. LNG to Ukraine via Klaipėda terminal for first time (February 2026): https://shorturl.at/xbpYU

[39] KN Energies, Long-term Klaipėda LNG terminal capacities allocated (June 2026): https://shorturl.at/D5MJU

[40] Ministry of the Economy of Croatia, Strategic energy projects presented in Dubrovnik: Croatia strengthens energy security and regional connectivity – Available in Croatian (June 2026): https://shorturl.at/sAwJU

[41] In particular, the analysis used the tariffs published on the official websites of DESFA (Greece); Bulgartransgaz and ICGB (Bulgaria); Transgaz (Romania); FGSZ (Hungary); Eustream (Slovakia); Vestmoldtransgaz (Moldova; GTSOU (Ukraine)[41] ; Plinacro (Croatia); Gaz-System (Poland); Amber Grid (Lithuania); Net4Gas (Czech Republic); Gas Connect Austria (Austria); and GASCADE (Germany).

[42] For operators publishing gas transit tariffs in their national currency, the following exchange rates were applied: 1 Romanian leu = €0.19; 1 Moldovan leu = €0.05; 1 Hungarian forint = €0.0028; 1 Polish zloty = €0.24; and 1 Czech koruna = €0.041.

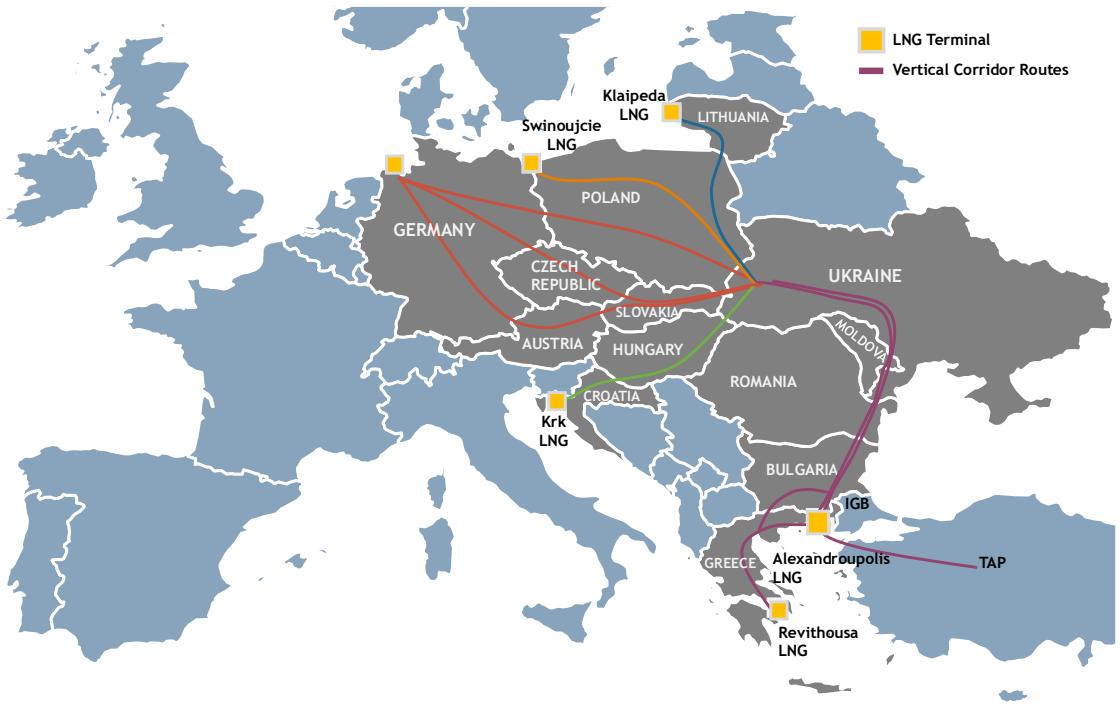

Figure 2. Vertical Corridor routes and alternative fossil gas supply routes to Ukraine

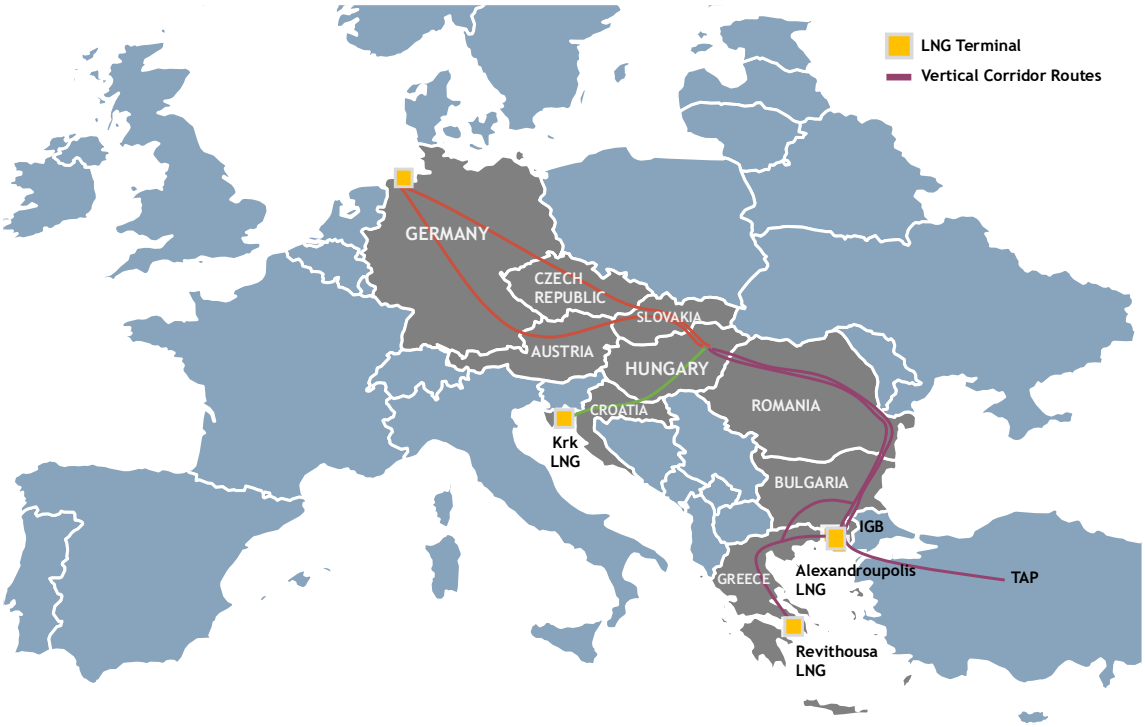

Figure 3. Vertical Corridor routes and alternative fossil gas supply routes to Hungary

The results of the aforementioned calculations based on monthly products are presented in **Figures 4** (Ukraine) and **5** (Hungary). The gas transit cost from Greece to Ukraine via the Vertical Corridor ranges from €11.2/MWh (Revithoussa LNG terminal) to €13.1/MWh (Alexandroupolis LNG terminal), while the corresponding cost via the TAP pipeline amounts

to approximately €12/MWh. Despite recent efforts to reduce them[43], these costs remain significantly higher than those of alternative routes. In particular, the routes originating in Poland (€3.2/MWh) and Croatia (€8.86/MWh) are, respectively, 76% and 21% less expensive than the VC routes. In addition, two routes originating in Germany -via the Czech Republic and Austria- share similar transit costs, 30–44% lower than those of routes via the VC. Finally, both the gas transmission route from Germany via Poland and the route originating at Lithuania's Klaipėda LNG terminal cost approximately €5/MWh, namely, 55–62% less than the Vertical Corridor routes.

The significantly lower transit costs of alternative routes can only be partially attributed to the fact that the Vertical Corridor involves multiple network operators, each imposing separate entry and exit tariffs. Indeed, while operators along the VC are seeking to coordinate so as to contain the overall transit costs of the routes they offer, key operators on competing routes have already significantly reduced their network usage tariffs. In particular, GAZ-SYSTEM, Poland's gas transmission system operator, has lowered entry and exit tariffs by 19% and 14%, respectively, for 2027. At the same time, the cost of importing fossil gas from Germany to Poland via the SGT (the Polish section of the international Yamal-Europe pipeline) is being reduced by 58%[44].

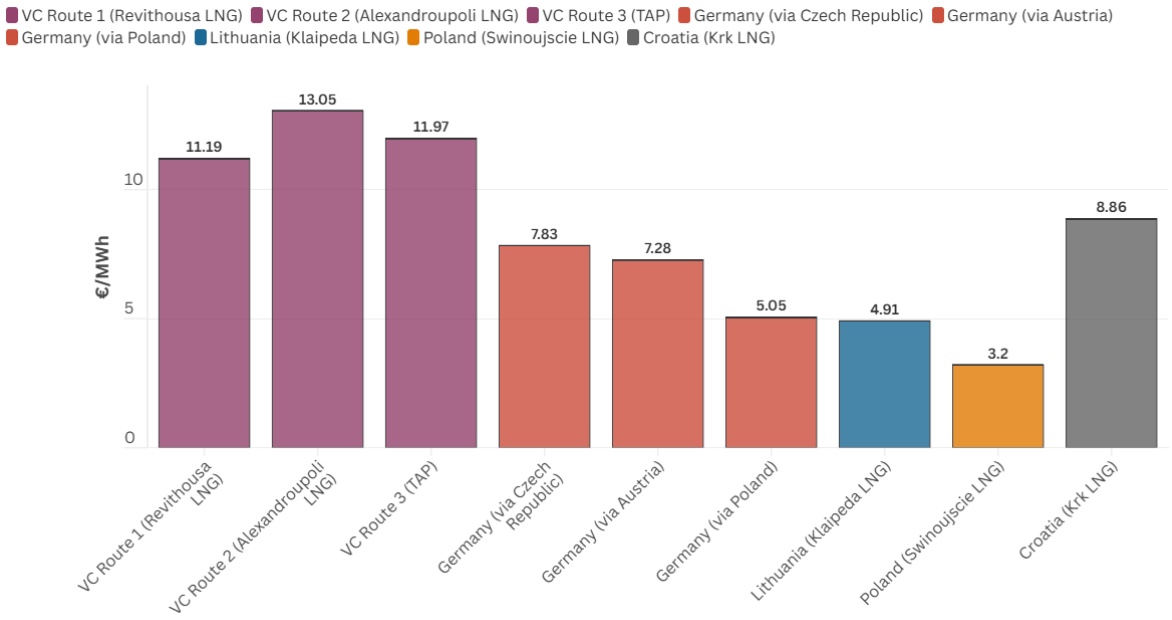

Figure 4. Fossil gas transit costs to Ukraine via the Vertical Corridor and alternative routes (monthly products).

With regard to Hungary (**Figure 5**), which records the highest projected gas import needs among VC countries, the total transit cost of routes starting in Greece and traversing the Vertical Corridor ranges from €7.6/MWh (Revithoussa LNG terminal) to €9.5/MWh (Alexandroupolis LNG terminal), while the corresponding cost via the TAP pipeline amounts to €8.3/MWh. These costs are comparable to, or lower than, the cost of the route

[43] DESFA, Agreement between the Operators and the European Commission on the Vertical Corridor (March 2026): https://shorturl.at/WTrXj
[44] Gaz-System, GAZ-SYSTEM significantly reduces gas transmission costs and simplifies access to the system (June 2026): https://shorturl.at/49Mjx

transporting fossil gas from Germany via the Czech Republic (€9.2/MWh). They are, nonetheless, clearly higher than the transit costs of both the route originating at the LNG terminal on the island of Krk in Croatia (€5.6/MWh) and the route reaching Hungary via Austria (€5.3/MWh).

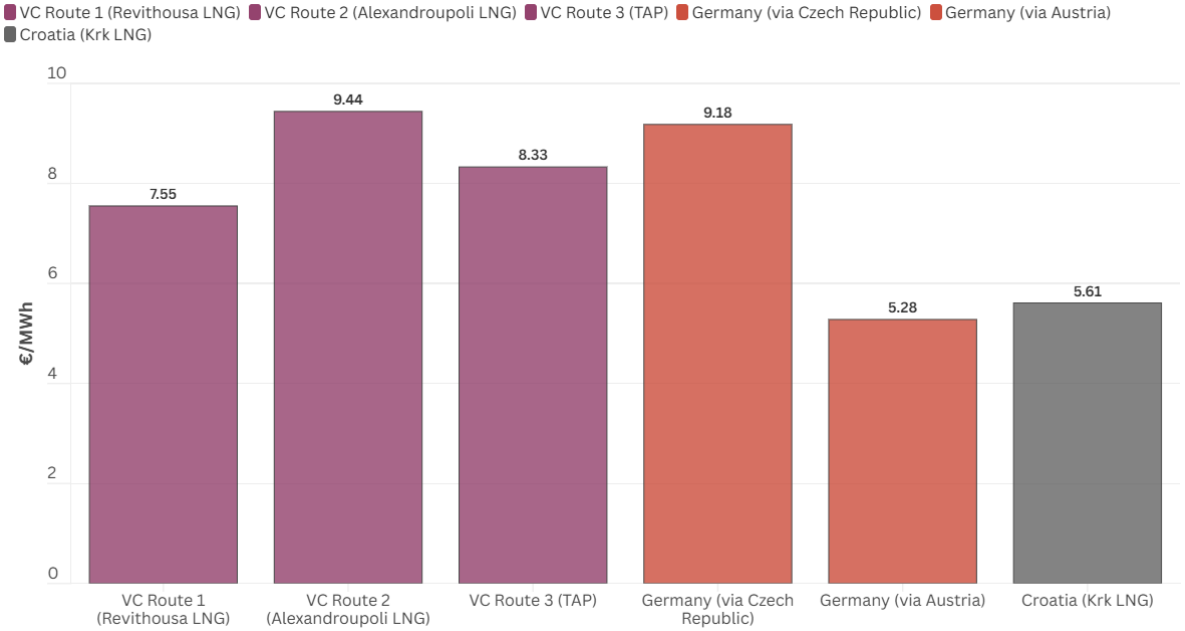

Figure 5. Fossil gas transit costs to Hungary via the Vertical Corridor and alternative routes (monthly products).

Conclusions

The case for the Vertical Corridor -and, consequently, for the development of new infrastructure along its routes and additional LNG terminals in Greece- rests on the assumption that fossil gas demand in the region in question will remain stable or increase significantly. However, the National Energy and Climate Plans of the VC countries point in the opposite direction.

Under Scenario B, which assumes a faster phase-out of fossil fuels, the two LNG terminals currently operating in Greece (Revithoussa and Alexandroupolis), with a combined annual regasification capacity of 164.3 TWh, will already exceed the estimated import needs of the VC countries by 2030. Moreover, by 2035, projected gas imports will not even require a single terminal's full capacity.

The faster phase-out scenario is, in fact, considered the most realistic, as developments in recent months have undermined the assumption that LNG can serve as a reliable "bridge fuel" offering supply stability and cost predictability. Indeed, following the U.S.-Israeli attacks on Iran, major producers declared force majeure, with prices skyrocketing from €28-29/MWh to €40-50/MWh. Indicatively, EU-27 LNG imports have already declined by 1.2% between March and May 2026 compared with the corresponding period in 2025[45]. This trend

[45] Institute for Energy Economics and Financial Analysis, One hundred days of disruption: How the Iran war exposes Europe's energy vulnerabilities (June 2026): https://shorturl.at/DmjMP

is further reinforced by a series of political developments indicating that countries constituting important links along the Vertical Corridor are moving towards the decarbonization of their energy mix. In particular, Hungary, which has the highest fossil gas import needs in the region, has undergone a major political change. The new government of Péter Magyar was elected on an ambitious pre-election program that, inter alia, put forward decarbonization measures, including doubling the share of renewables in the domestic energy mix by 2040, developing wind farms, implementing energy renovation and home insulation programs, as well as modernizing electricity grids[46]. Hungary's new government has a strong incentive to swiftly implement these measures, as one of its immediate priorities is to unlock billions of euros in funding from the EU Cohesion Funds that remain frozen due to rule-of-law breaches under the previous government[47].

Furthermore, Hungary's change of stance on EU enlargement is facilitating accession negotiations with Ukraine[48], which together with Moldova, has made significant progress towards EU membership[49]. The accession process, in turn, is anticipated to result in the two countries fully aligning with the European Green Deal's climate neutrality targets. Moldova is therefore expected to accelerate measures already underway to phase out fossil fuels[50], while Ukraine will have a strong incentive to integrate the decarbonization of its energy system into its post-war reconstruction plans.

Both the absence of interest in transporting gas to Ukraine in the recent VC capacity auction is fully consistent with the aforementioned findings regarding the region's gas import needs. Against this background, the recently announced plans to extend the VC project to the Western Balkans, with a focus on North Macedonia and Serbia[51,52], could be interpreted as an effort to broaden the route's potential market base, given Ukraine's very low estimated gas import needs.

Even under a scenario of significantly increased gas demand and assuming that the region's needs would be met exclusively through Greek LNG terminals, only one of the four newly announced FSRUs would achieve a satisfactory utilization rate in the medium term. Nonetheless, given both the infrastructure's finite capacity and the availability of competitive alternative supply routes, meeting all regional gas demand through Greek LNG terminals cannot be considered realistic. In any event, even the least ambitious scenario would not warrant the development of the Thessaloniki and Argo FSRUs, the latter of which has already been denied an environmental permit.

[46] Tisza, The Foundations of a Functioning and Humane Hungary (Tisza Party Election Manifesto – available in Hungarian): https://shorturl.at/ej7ni
[47] Péter Vigh, Hungary's green reset: what to expect from the post-Orbán era (Μάιος 2026): https://shorturl.at/5ingd
[48] Politico, Hungary announces deal with Ukraine on minority rights, clearing Kyiv's path to EU entry talks (June 2026): https://shorturl.at/GLton
[49] European Commission, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, 2025 Communication on EU enlargement policy (November 2025): https://shorturl.at/DT0ii
[50] Marta Kos (Commissioner for Enlargement), Speech by Commissioner Marta Kos at EU-Moldova Investment Conference (June 2026): https://shorturl.at/EXxTL
[51] Press Release of the Ministry of Environment and Energy, Stavros Papastavrou: "We Join Forces and Strengthen the Region's Energy Security and Geopolitical Stability" (May 2026): https://shorturl.at/6hSxj
[52] Athens-Macedonian News Agency, Working Group for the Development of the Vertical Corridor for fossil gas (July 2026): https://shorturl.at/6e5yL

With regard to European funding, financial support for fossil gas infrastructure is increasingly being constrained. Notably, the TEN-E Regulation (2022/869)[53] excludes new fossil gas projects from eligibility for Projects of Common Interest (PCI) or Projects of Mutual Interest (PMI) status, while the European Investment Bank (EIB) has ceased financing fossil fuel production and transportation projects as of 2022[54]. Furthermore, despite strong pressure, the European Commission remains opposed to the continuation of fossil fuel subsidies. This stance is reflected in the Commission's recent guidance under the 2026 European Spring Package. In particular, the scope of the existing national escape clause for defense expenditure has been broadened to include measures addressing the energy crisis, with the explicit stipulation that such expenditure should be directed towards reducing dependence on imported fossil fuels[55].

Finally, the head of the Copelouzos Group, which participates in the consortium managing the Alexandroupolis FSRU and developing the Thrace FSRU, has publicly acknowledged that a second FSRU in Greece would be a low-return project, with its viability depending on the cost of transit through the Vertical Corridor[56]. Nevertheless, despite participating operators' efforts to coordinate tariffs, gas transportation via the VC remains more expensive than through competing supply routes to Ukraine and Hungary. With regard to gas transit to Ukraine, VC costs (€11.2–13.1/MWh) are 21–76% higher than those of competing routes from Croatia, Germany, Lithuania, and Poland. A similar picture emerges for gas transit to Hungary, which has the highest projected future import needs: only the route from Germany via the Czech Republic has costs comparable to those of the VC, while competing routes through Austria and Croatia remain 26–45% less expensive.

If expressed as a share of the total gas delivery cost, based on an indicative average LNG supply price of €45/MWh, the cost of transit through the VC would account for approximately 25–29% and 16.5–21% for Ukraine and Hungary, respectively. By comparison, when gas is transported via existing alternative routes, transit costs account for just 7–19.5% (Ukraine) and 11.5–20.5% (Hungary) of the total cost, underscoring the additional financial burden imposed by the VC and ultimately passed on to consumers.

The above findings call into question both the necessity and the economic viability of the VC plan. It is worth noting that the investment costs of the Thrace and Dioriga Gas (Corinth) FSRUs are estimated at €600–650 million[57] and €400 million[58], respectively. Moreover, increasing the Greek gas system's export capacity to 11.8 bcm, as planned, would require the development of new pipelines and additional gas transmission infrastructure. The financial implications of potential overinvestment in additional gas transmission assets are indeed significant; earmarking funds of this magnitude for infrastructure that may remain

[53] European Parliament and of the Council of EU, Regulation (EU) 2022/869 of the European Parliament and of the Council of 30 May 2022 on guidelines for trans-European energy infrastructure, amending Regulations (EC) No 715/2009, (EU) 2019/942 and (EU) 2019/943 and Directives 2009/73/EC and (EU) 2019/944, and repealing Regulation (EU) No 347/2013 (June 2022): https://shorturl.at/hA2VP

[54] European Investment Bank, EIB energy lending policy: Supporting the energy transformation (November 2019): https://shorturl.at/BN6YT

[55] European Commission, 2026 Spring Semester Package presents a roadmap for advancing economic resilience and social cohesion across the EU (June 2026): https://shorturl.at/KfaMJ

[56] World Energy News, D. Copelouzos: Reduction of tariffs in the countries of the Vertical Corridor is necessary for the second FSRU (December 2025): https://shorturl.at/rolk0

[57] Institute for Energy Economics and Financial Analysis, European LNG Tracker – Data Summary (May 2026): https://shorturl.at/HnyZB

[58] To Vima newspaper, "Mercuria is coming to Greece: The 'vote of confidence' in Motor Oil and the behind-the-scenes negotiations" (May 2026): https://shorturl.at/q2UQY

largely underutilized could impose a substantial economic burden on end consumers through investment recovery charges. Furthermore, this trajectory would entail a prolonged commitment by Southeastern Europe and the Western Balkans to a fuel that is costly and highly exposed to geopolitical developments, at a time when the region's energy and climate policies are moving in the opposite direction.


The
Green
Tank