
# Report on the IENE Roundtable on Energy Security in SE Europe

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***held at the European Parliament, Brussels,***
***on 19 March 2026***

## A. Introduction

Southeast Europe faces the prospect of having to tackle both the immediate consequences for oil and gas supplies stemming from the closure of the Strait of Hormuz and the ongoing issue of the threat posed by European regulation to oil and gas imports in general.

These points, and the corollary that in addition to oil and gas, both renewable energy supplies and energy storage must therefore be boosted, were at the heart of discussions at a Round Table on Energy Security in South East Europe held in the European Parliament in Brussels on 19 March 2026. Equally important was the focus on protecting infrastructure, as well as requirements for new infrastructure.

The Round Table, organised by IENE under the auspices of Professor Nikolas Farantouris, Member of the European Parliament and Jean Monnet Professor of Energy Law, was held against the backdrop of an energy crisis that the head of the International Energy Agency, Dr. Fatih Birol, subsequently described as being greater than the combined impact of both the 1973 and 1979 oil shocks and the gas shortages stemming from Russia's 2022 invasion of Ukraine.

As we were meeting it was already clear that the closure of the Strait of Hormuz had reduced both oil supplies to the global market by around 20%, liquefied natural gas (LNG) supplies by around 25% and fertilisers by 40%.

As a result, both oil and gas prices had soared. In the three weeks between the start of the US and Israeli assault on Iran on 28 February and our discussions three weeks later. Brent Futures settled at $72.48 a barrel on 27 February while on 19 March, the most volatile day in the markets since the war began, prices peaked as high as $119.13 before settling at $108.65. Likewise, the Dutch TTF price for gas, which closed at €31.859 per megawatt hour on 27 February, soared to reach €69.350 at one point on 19 March before closing on €61.852.

Such key questions as the outcome of the US/Israeli war on Iran, the closure of the Strait and the time it might take for crude oil and LNG shipments to return to something approaching their pre-war levels were simply unanswerable at the time we met. We might hope that the consequences of the war would be short-lived, but we had to prepare for a radical reshaping of energy flows that might well last for months – or years.

Against this background such key issues as the need to reform and simplify European regulatory constraints, to promote energy efficiency and to tackle energy poverty – which is still prevalent in some areas of South East Europe – took on increased importance. The watchwords, reiterated throughout the day, were diversification and resilience.

Map **The SE European Area Defined**


| CORE COUNTRIES | | PERIPHERAL COUNTRIES | |
|---|---|---|---|
| Albania | Hungary | Azerbaijan | Syria |
| Bosnia and Herzegovina | Montenegro | Ukraine | Lebanon |
| Bulgaria | Romania | Austria | Jordan |
| Croatia | Serbia | Italy | Egypt |
| Cyprus | Slovenia | Slovakia | |
| North Macedonia | Türkiye | | |
| Greece | Israel | | |
| Kosovo | Moldova | | |

[1] The region under study by IENE, consists of the following countries: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, North Macedonia, Greece, Kosovo, Hungary, Montenegro, Romania, Serbia, Moldova, Slovenia, Türkiye, and Israel.

## B. Overview

### *Diversification and the cost of the Gulf Crisis*

In his opening speech, Professor Farantouris stressed the need for diversification of energy sources, mix and routes. He then posed the overarching question: "Is Europe ready to really diversify its energy mix, its energy sources, its energy routes, and especially is this possible for Southeast Europe, one of the most vulnerable and dependent regions in Europe."

In this line of thought, the chairman of IENE Costis Stambolis in his opening remarks said, "Securing adequate and continuous energy supply at affordable prices has always been an important aspect in the running of economies worldwide. Even more so at times like today when we face geopolitical turmoil in many parts of the globe, and which tend to

disrupt energy supplies- oil, gas and electricity-while sending prices sky high. With often disastrous impact on the economy. In this context energy security is no longer simply a matter of maintaining supply but it is rapidly evolving into a complex challenge that encompasses infrastructure, geopolitics, geoeconomics, and resilience planning. Right now, Europe, and SEE in particular, find itself in the middle of two fully fletched wars, one in Ukraine and one in Iran, which exert daily pressure on energy supplies and prices. With SE Europe, as we shall argue during the course of the day, being a lot more vulnerable in terms of energy security than the rest of the continent."

This led, naturally both to discussion on current fossil fuel reliance, the need for boosting indigenous production in Europe in addition to the need of accelerating the energy transition through development of renewable wind and solar power.

Between them, Dr. Charles Ellinas and Dr. Amit Mor and Prof. Yannis Maniatis, drew a grim picture of the problems caused by the war in the Gulf and the crisis in the Strait of Hormuz. Mr. Ellinas detailed the main consequences of the closure for oil, LNG and fertilisers before adding that the crisis "has a disproportionate impact on the price of distilled products like petrol, diesel and jet fuel," with jet fuel costing twice as much as before the war and with diesel soaring to $155 per barrel, compared to a Brent crude price of $105 a barrel. And both Dr. Ellinas and Dr. Mor noted that the Dutch TTF price for gas had risen to around $70 euros per megawatt hour.

The war with Iran was having a severe impact on regional energy, said Dr. Ellinas. Israel had shut down its Leviathan and Karish gas fields, reducing its output by around 1.1 billion cubic feet per day and halting gas exports to Egypt and Jordan. In consequence, Egypt, which relied on Israel for around 20% of its gas, had been forced to secure more LNG to replace the lost supply from Israel at a time when the war had cut global LNG supply by around 20%. With the rest of the world "fighting to get their hands on less LNG, Egypt has to pay dearly for that LNG" which was costing Egypt more than twice the price the price of gas at the Dutch TTF point. "Egypt, in other words, has to pay a massive amount of money at a time when its economy is in tatters and it is relying on IMF handouts to survive."

While no one wanted to under-estimate the severity of the crisis, Dr. Mor noted how changes in energy usage following Russia's full-scale invasion of Ukraine in 2022 were impacting on the current crisis. The world is much less dependent on oil than before, he argued. Energy intensity had reduced 50% since the Ukraine crisis. So, while the US-Israel war on Iran had cut oil flows by 20%, the price of oil had only increased by 7%. But he painted a rather different picture for gas. "It is very important to have onshore strategic and commercial storage for gas," he said, whilst noting a serious lack of storage in some South East European countries, as well as in Israel, Egypt and Jordan.

Professor Neven Duić, Co-Chair of the European Academies Science Advisory Council (EASAC) and Mr. Panagiotis Panousos, Director, System Operation, ENTSO-G, put these developments further into context. Professor Duić argued that the energy transition needs to be much faster. "With decarbonisation, we also solve the problem of security of supply and reduce dependence on far away fossil fuels," he said. "As long as gas is source

of marginal electricity supplies, prices will be higher." When wind accounts for 10% of supply and solar for 20%, then at peak times they become the marginal price setter.

Mr. Panousos, said the need to cover peak gas demand rather than volume was the biggest energy risk that Europe currently faced. "The new risk is the interdependency between natural gas, renewable gases and electricity." The volumes of gas being transported were going down, but the amount needed to cover peak demand was going up. "So, we must be ready to cover the peak demand rather than the volume. This is the biggest risk." It was not a matter of simply assessing how storage fitted in with market rules. "As operators, we want to see them as full as possible. I'm not talking about the market rules," he added, "I feel comfortable when I see 90% of filling level in storages, then I know that I can manage the winter."

***Regulatory Issues: Power Markets and the SGC...***

This was one of many comments on key regulatory issues. Professor Maniatis said early on that "We need to fix the regulatory constraints we face inside the EU borders. Unfortunately, the electricity market design fails to allow lower green production electricity prices to become lower retail prices." He continued: "As Acer recently put it 'despite strong growth in renewables, the (EU) bloc's wholesale electricity prices in 2025 remained structurally higher than the United States and daily fluctuations were five times greater than in 2020.' We need better regulatory oversight."

Problems caused by European regulatory practices were also the focus of the address by Murad Heydarov, Head of the Regional Office for Balkan Region at SOCAR, the State Oil Company of Azerbaijan. John Roberts had previously noted that Azerbaijan had already begun work on developing two relatively new sources of gas, the deep level gas underneath the ACG oil field and a further extension of the Shah Deniz field. According to Roberts, "Both of these are proven resources but they require expensive and intensive investment because they are not easy to produce." Roberts added that they will also require expansion of the Southern Gas Corridor if they are going to meet the concept of the July 2022 Memorandum of Understanding between the EU and Azerbaijan that would see the capacity of the SGC, at the point at which it reaches Europe, increase from 10 BCM to 20 a year. But although Azerbaijan had already managed to increase through to around 13 BCM a year, there were two main obstacles to full-scale MoU implementation. One was the effective ban by the European Investment Bank on investing in fossil fuels projects and the accompanying reluctance of the EBRD to make such investments. The other was that upstream investments on this scale required long-term contracts to underpin them.

Commenting on the above, Mr. Heydarov said: "It's very difficult to forecast something as far as upstream development is concerned," when the European Union adopts a contradictory approach to regulation. Production of fossil fuels, he argued, "requires at least at least six years and if during these six years the regulations are constantly changing, it's very difficult to predict the business model." He asked: "What if, in the middle of upstream development, the regulations could again change and that would impact negatively on the upstream development?"

Mr. Heydarov then drew attention to the issue of market tests, which aim to ensure that whoever wants to buy the gas books capacity in order for upstream producers to deliver the gas, thus contributing to the development of expansion. Markets tests are mandatory, but so far two market tests had proved unsuccessful, he said. “The question is, does Europe indeed wish additional gas? If it's a genuine wish when why does the market respond negatively?” “If the market keeps silence, what can we do under these circumstances?” he asked. “Azerbaijan itself cannot finance the expansion of the southern gas corridor,” Mr. Heydarov stated. “This is about the uncertainty: uncertainty which from my perspective is not so beneficial for upstream producers nowadays.”

***…and the methane regulation issue***

A further specific demand for regulatory adjustment came from Maria Karagiannidou-Rosiek, Head of Policy (Europe), at the International Association of Oil & Gas Producers (IOGP. She called for targeted adjustments to the EU’s current Methane Regulation, which mandates strict monitoring and reduction of methane emissions both for fuels produced within the EU and for imports into the EU, requires major reform. If the regulation were to be implemented as it stands, she warned, “it might sound very technical but it what it basically means is that from the 1st January of 2027 we will not be able to import natural gas and crude oil in a significant amounts.” She cited a study prepared by Wood Mackenzie showing that up to 43% of EU gas imports and 87% of EU crude oil imports could be deterred from the EU market in 2027. “We are already living in a very difficult situation geopolitically with imports of natural gas and crude oil and that and you see what effect that has on the prices. But it can even farther deteriorate as of 1 January 2027 due to methane regulation provisions. Implementation of the methane regulation had to be workable, pragmatic and aligned with Europe’s broader energy security objectives. Methane policy could not be treated in isolation from security of supply.”

Liana Gouta, Director General of Fuels Europe, stressed the problems faced by European refineries, not least because of the impending methane regulation. First she noted that 35 refineries had closed in recent years, then warned that if 87% of crude oil imports were impacted, that would result in a 50% decline in throughput and might lead to a closure of 40 refineries – and not in just 10 or 30 years as might have been expected, but in the next two or three years. In contrast, the US is actually opening its first new refinery in 50 years.

The refining sector required a coherent – and simplified – regulation, if it was to play its part in the energy transition, she argued. “Unfortunately, right now there is no business case for our sector,” she said. “We estimate that around 400 billion euros will be needed for the transition of our sector by 2050 in the most cost-efficient scenario” based on conversion of existing refineries. Building greenfield refineries would cost 30-50% more. She also said that some of the EU’s policies should have a greater focus on incentives on rewards. For example, she said, “there are no incentives, there is no framework that incentivizes the development of low carbon hydrogen currently.” The timeframes for the EU’s policies to promote CCS needed to be adjusted, she argued, because while oil and gas companies in, for example, the North Sea were already engaged in such activities, the fact that CCS obligations were based on production levels in a specific time period

meant that for potential new projects the development of actual energy resources might not keep pace with CCS obligations, thus incurring penalties. “Now how would you feel if you want to further develop oil and gas resources in Europe, given that there are those risks that you might be penalized retrospectively?” she asked.

This was, indeed, the very issue that was addressed by Mr. Kostis Oikonomopoulos, a petroleum geologist and the coordinator of IENE’s Research programmes. “Why does domestic production still matter? “Mr Oikonomopoulos asked. “It's actually quite self-explanatory. It reduces import dependency. It enhances security of supply, which is our main topic these days. It supports infrastructure and creates buffer zones for supply and creates fiscal revenues. Even modest resources and discoveries have a huge regional impact, a disproportionate impact,” he argued.

Upstream oil and gas, he said, is not a legacy sector, it is “a strategic pillar for every country.” Romania’s Neptun Deep, he termed “a big game changer for the region.” But while Israel, Egypt and Cyprus were moving forward with their upstream activities, as is the Black Sea, it was a different picture elsewhere in the region. “Then we have the southeast European countries, the Balkan countries where there's been declining exploration interest in recent years due to transition policies and regulations, which has caused limited upstream activities,” Mr. Oikonomopoulos said.

There was one very specific plea for the European Commission to ease its regulations. It came from Nurzhan Aitmakhanov, Counsellor of the Embassy of Kazakhstan in Brussels. Kazakhstan routinely supplies around 12% or 13% of the EU’s oil. But its deliveries now faced both security and regulatory problems, he said. While Kazakhstan had managed to increase its oil deliveries through the BTC pipeline to Ceyhan in Türkiye, the bulk of its exports still relied on the CPC pipeline to the Russian Black Sea port of Novorossiysk, which, he noted, has been attacked recently by drones, causing stoppages and reducing export capacity. However, he argued, “overall this is, right now, the most sustainable way of delivering oil to the EU.”

Mr. Aitmakhanov continued: “So, as you can see, this is not an economic relationship with the European Union; it's a strategic one.” Europe need reliable partners to help ensure its energy security as it continued its own energy transition. As for Kazakhstan itself, it is currently working to double the role of renewables in its electricity mix from 7% at present to 15% in 2030. Moreover, it was working to deliver green electricity to the EU. Kazakhstan’s parliament, he said, had recently ratified an agreement with Uzbekistan and Azerbaijan to deliver green electricity produced from solar and wind energy to the European Union. That requires construction of a 2,500-kilometre line, including a cable under the Caspian Sea. “But this could help us provide green energy and thus add our value to the green transition in European markets.”

Nonetheless, Kazakhstan, which has its own ambitious agenda to become carbon neutral by 2060, now finds itself in a very hard position, particularly because of European regulations on methane and seaborne energy deliveries. “Because of these regulations, we would not be able to supply around half of our exports now” which means also that Kazakhstan could lose 50% of its oil revenues. However, he added: “We think that this

could be somehow solved. We have to ask the Commission to somehow ease these regulations; to give us some more time." Kazakhstan, he said, needed more time to overhaul its own regulations and standards and to construct the necessary infrastructure to deliver green electricity to Europe.

The need for infrastructure expansion

Several speakers drew attention to the need for infrastructure development, not least our own Chairman, Costis Stambolis. The key elements, he noted were the development of the Vertical Gas Corridor, to enable gas to flow northwards from LNG terminals in the Mediterranean, notably Greece, rather than south from Russia. The detail, of course is to be found in IENE's own South East Europe Energy Outlook 2025/2026, which was the focus of Mr. Stambolis's own presentation to the conference.

Amongst the Chairman's key points were these:

- "These are very exciting times because we see the economies growing; energy differentiating and growing at the same time."
- There is a clear divergence on energy between the region and the bulk of the European Union, since Southeast Europe is more vulnerable in terms of supply than the rest of Europe.
- Energy security is emerging fast as a key energy as a key policy issue. The region has high hydrocarbon dependence, with gas used for electricity power generation that alters the supply balance. Yet there is still lack of adequate electricity and gas interconnections. The region needs more coal and lignite and this will continue to be relevant for some time because certain countries, especially in the western Balkans, see solid fuels as their ultimate energy security pillar. They cannot lose this very easily, so their path towards decarbonization is more difficult.
- In its *2021 Energy Outlook*, the IENE estimated the region's energy investment requirement to be €436bn over the next 10 years. In the *2026 Energy Outlook*, the estimate is €668 bn. "And if we take into consideration the cross-country projects, we have even higher cost in investment outlays of €711 billion." He added: "So we're talking about 70 billion investment potential in the region every year." For this to prove successful, Dr. Stambolis argued, that means the region has to a large extent be able to attract outside investment.
- Despite a lot of investment in renewables over the last 10-15 years, emissions for the region as a whole have not actually dropped off that fast. Türkiye has led the way because of its size and the size of its investments, but while emissions have fallen in Greece and Romania, in other countries they are rising.
- Greece, Cyprus and Israel now have the opportunity to export low-cost renewables-based electricity northwards by means of giant projects such as the East Mediterranean Interconnector and the planned Green Aegean Interconnector between Greece and Germany. This project would involve laying a 3000 MW HVDC subsea cable along the full length of the Adriatic before crossing the Alps to Munich and might then be followed by two more 3,000 MW cables along the same route.

- The Vertical Gas Corridor is progressing steadily but a lot more work remains to be done for it to become as effective as other pipelines, such as those bringing gas from the Baltic to Hungary, Ukraine and the rest of Central Europe.
- One “very regrettable” element highlighted by Mr. Stambolis was that although Greece is becoming a hub of transportation of gas to the Balkan peninsula and also further north to Central Europe, it notably has no gas storage at all.

### *The view from Brussels*

With all the concern about EU policies and regulations, there was a need to learn just what Brussels, and specifically DG Energy, was thinking in terms of promoting energy security in Europe as a whole, and specifically in South East Europe. This came from Andreas Huber, who represented Cristina Lobillo Borrero (Director, Energy Security and International Relations DG Energy, European Commission) as she was called at short notice to support the Heads of Governments Summit which was held on the same day in Brussels. Andreas Huber was introduced by Ambassador Christides as “the deputy head of unit for relationship with member states and energy and the Energy Community.”

Energy security, argued Mr. Huber, is not just about securing energy supplies. “It is also going beyond this. It is going into securing supply chains and technologies that we need to be able to build key energy production and other related facilities. I'm talking about wind. I'm talking other important energy projects that that Europe needs to be able to keep control of or gain control of.” After the 2022 invasion of Ukraine: “Russia cannot be trusted any more as a reliable energy supplier.” The goal, he said, is to secure energy autonomy or energy independence as much as can be ensured in a world which is otherwise very much integrated.

Mr. Huber said: “It's important when we talk about energy security that we don't need to be relying on long supply chains” and cited two developments that he considered were particularly helpful: the expansion of Croatia’s Krk LNG terminal and the development of Romania’s offshore Neptun field. Krk would be able to send more gas into the centre of Europe whilst plateau production at Neptun would contribute 8 to 10 bcma of gas to a region which, in large parts, uses relatively little.

With regard to the Vertical Gas Corridor, he reiterated the Commission’s position. He did not think the EU would now review its policy and start putting money into building corridors. Then he added: “Countries along the Corridor have taken decisions on actually doing this partially. So, Bulgaria has been, from its own resources, developing this and adding capacities to this. So maybe not from EU funds, but from other funds. This increase of capacities along this route is actually happening.” However, Mr. Huber cautioned that it was important to get the right commercial conditions for the Corridor. “We have here small countries on the way where transportation costs add up as gas moves through the pipeline and that makes it very expensive to bring Greek-landed LNG into Ukraine. I think if you just try to do this based on the advertised tariffs, you will pay something like 15 (euros) per megawatt hour to get this gas into Ukraine.”

In terms of regulatory changes, Mr. Huber said that since 2009 the EU had introduced separate legislation on gas and electricity. He then added: “We would like to now review these rule books to integrate these two to make sure that we have the right focus and we have the rule books that can handle situations that we have just faced with Russia and future other ones where cyber-attacks and other kind of threats will be handled appropriately. This work is ongoing. We're going to come out very soon with legislative updates on this.”

Mr. Huber closed his remarks by saying explicitly that although Europe had made a lot of investments in the region, it no longer supported investments for fossil fuel infrastructure.

These funds are no longer available, he stated. “In our understanding the infrastructure is largely there. What is coming in the near future is enough to cover the wider need.”

When asked by IENE’s chairman to what extent the EC could support gas route diversification, including the Vertical Corridor, Huber replied that under current regulations, the EC cannot support financially projects related to fossil fuels, including gas.

### *Energy Efficiency and Energy Poverty*

We were reminded - not least by Konstantinos Theofylaktos, Chairman of IENE’s Energy Efficiency Committee, that in much of South East Europe, where household incomes are generally lower than in northern or western Europe, that the issue of energy poverty remains a key concern. While consumers in many of the EU member states can afford – however reluctantly – to pay the increased cost of petrol and diesel, and their industries the burden of higher prices for LNG, it is a much greater problem for consumers in the non-EU member states of the European Energy Community. In addition, these income disparities make it much, much harder for farmers in the region to pay for the increased costs of fertilisers, a particularly acute problem since the prime planting season in the northern hemisphere is March and April. And, of course, reduced fertiliser use now means reduced yields later, with all the implications that has for food prices.

Energy poverty and energy efficiency are naturally linked. It is possible, and may be necessary, for governments to subsidise fuel costs for a while to counter the impact of price shocks, but throughout our discussions it was notable that while there was considerable emphasis on the need to promote energy efficiency, particularly in buildings and electricity grid operations, there was no mention whatsoever of subsidies. This may, of course, reflect the current financial constraints of European and regional governments and institutions.

On energy efficiency, Theofylaktos, stressed: “Every day…vast amounts of energy we produce with fossil fuel, with renewables, with hydrogen, with nuclear, with whatever, are lost forever due to the inefficiency of our systems, our homes, our grids and so on. This is not just an environmental issue. It is a massive economic drain on our economies.” However, as Mr. Theofylaktos also noted: “energy efficiency is important, but it is a privilege not everyone has. Energy poverty is the reality for those who cannot afford the

energy we need, as it is expensive to keep their homes warm." In the Western Balkans, he said, 25 to 40% of the population was affected by energy poverty. In Bulgaria, 22-24% Greece, 17-19 %; in Romania, 11-13% and in Cyprus about 9-11%.

### *Resilience*

Resilience has become the watchword of the International Energy Agency in its approach to tackling the energy consequences of Russia's war against Ukraine and the US/Israeli assault on Iran. It was stressed by several speakers, notably with regard to the need for resilient electricity grids and combatting cyber-attacks.

The need for resilience was stressed by Konstantinos I. Chatzifotis, European Affairs Manager of Greece's Motor Oil Group. "Energy security and resilience particularly through the protection of critical energy infrastructure are emerging as fundamental pillars for uh the national sovereignty, social cohesion and global economic stability," he said. He reminded us that the threats were not confined to open warfare, such as the wars in Ukraine and the Gulf, but could be more insidious. Mr. Chatzifotis cited recent incidents, including the large-scale power disruption and cascading effects on telecommunications in Spain, as demonstrating how vulnerable highly interconnected systems can be in today's rapidly involving geopolitical environment. "Critical energy infrastructure can no longer be considered separate from defence. As these systems become more technological advanced and interconnected both the spectrum and sophistication of risks increase. Accordingly, the battlefield of our time is expanding from the physical to the cyber domain, placing the protection of critical infrastructure at the centre of strategic planning." He then added: "Resilience is therefore no longer a purely technical matter but is a strategic imperative."

Kristina Rimkūnaitė (Subject Matter Expert, Research and Lessons Learned Division, NATO Energy Security Centre of Excellence Vilnius, Lithuania) conveyed a similar message. Noting how NATO and the European Union were both addressing the need to safeguard energy infrastructure. NATO, she noted, currently had no less that 30 different centres of excellence, including one in Sweden that was currently in the process of certification and which is dedicated to security of supply. "This year, in our program of work, we have 55 different projects and most of them actually are related to critical energy infrastructure protection."

Defending energy infrastructure is very complicated, she said. "You can't hide your fuel tanks, you can't hide your storage. So basically, these areas are becoming first targets. So, the question is: 'How can we protect this infrastructure?' Basically, we can implement measures. There are anti-drone nets, there are walls, there are electronic jamming measures. But none of them is working 100%. Basically, it's just matter of time and effort, when your energy object will be eliminated if your adversary is putting enough effort."

"It's important to win time" Ms. Rimkūnaitė argued, because of the differences in the timescales involved in trying to tackle crises involving different types of energy. "We can't store electricity, so basically if we have an emergency in the electricity grid, we have blackouts and you have to solve any issue within milliseconds or seconds not to use the

frequency." In contrast, she added, "With a gas grid you have 24-hours-timeframe; with oil - and I was talking with colleagues about this in the NATO supply and procurement agency that is covering this - basically a 72-hours window."

### *Nuclear Issues*

Energy efficiency is one way of improving resilience; others include grid security and storage. Aliki van Heek, from Bèta Research in Vienna, argued that nuclear energy provided a predictable base load that reduced dependence on volatile fuel supplies. This would normally have been a reference to solar and wind power; but in current circumstances it also applies to oil and gas. "Nuclear energy is not a theoretical option in Southeast Europe; it is already a strategic asset," she said. However, she adopted a cautious approach to an issue attracting considerable attention throughout South East Europe, the development of small modular reactors (SMRs). "We will should be careful not to oversell their maturity," she warned. "It is just a future thing still, at least in Europe. But they could become an important part of the future mix, especially in countries looking for firm clean capacity alongside growing shares of renewables." She added: "In that sense, they are not a silver bullet but they could become an important strategic tool for Southeast Europe and for Europe more broadly. So SMRs are not yet the full answer but they could become a very practical part of the European answer."

In this context Ionut Purica, Executive Director of the Romanian Academy's Advisory

Center for Energy and Environment, noted the request by Greek Prime Minister Kyriakos Mitsotakis for cooperation between Romania, Bulgaria and Greece on nuclear development, saying this "is something that comes at a very good moment and opens up the possibility to increase the safety and the security of the generation of energy in the region."

Turkey, of course, is due to start producing energy from its giant nuclear power plant at Akkuyu very soon, as we were informed by Dr. Halil Yurdakul Yigitgüden. Dr. Yigitgüden described nuclear as "a solid part of the Turkish energy security discussions" and noted that the first unit of the giant Akkuyu plant was now at the commissioning stage, adding "we hope to have the other three units also commissioned in the coming three to four years."

He said Türkiye was targeting to have renewables account for 65% of installed capacity in 2035 and a 55% share in actual generation that year. But the target for renewables in the primary energy mix that year was still just 24%. For all its efforts Türkiye was still facing a stubborn problem in trying to reduce the share of fossil fuels in the primary energy mix. Improving energy efficiency, however, would help to reduce fossil fuel usage.

### *Hydrogen*

The use of hydrogen both to improve energy efficiency and promote resilience was stressed by Ivan Delibasic of Hydrogen Europe. Curtailment of electricity costs Europe billions of euros a year, Mr. Delibasic argued. Moreover, he added, "while we're investing,

or not investing enough, in energy efficiency, at the same time we are facing the regulatory inefficiency which forces us to waste the things that we produce – and often we don't just waste it, we pay for it to be wasted. This is one simple example where hydrogen can serve as a natural bridge." Limits to electricity grids meant that Europe was designing its energy systems in a way that would promote congestion. "We're designing curtailment instead of trying to design to prevent that." Originally, he continued, hydrogen was envisaged as a balancing factor for the variability of renewables. It would also be cheaper to deliver energy through hydrogen pipelines than through power cables. "However, we ended up with the regulatory framework which effectively prohibits that kind of use."

Regarding South East Europe, Mr. Delibasic remarked: "South East Europe does not appear in any of the relevant corridors for hydrogen in the planning uh and of course politically there is a reason to that." The western Balkans, he added, "is a black hole in that map." "So of course it is difficult to plan with someone who's not a partner, who's not part of a family so to speak." Nonetheless, Mr. Delibasic was emphatic that hydrogen could provide long-term flexibility with regard to the security of fossil fuel imports, in the not-so-distant future. At present, he argued, batteries were tremendous, but they only offered backup for a limited time, leaving gas as the only current source of long-term storage to cover energy disruptions.

Dimitris Triantafyllopoulos, Managing Director of Hellenic Hydrogen, described his company as the front-runner in Southeast Europe and the Eastern Mediterranean for development of large-scale facilities to produce green hydrogen. After 2-1/2 years of planning, Hellenic Hydrogen was now "very close" to making these plans a reality, he said.

However, Mr. Triantafyllopoulos was clearly worried about the way things were going. He took issue with regulatory constraints which had hampered the development of hydrogen, whilst acknowledging that they stemmed, in part, from "the fear that we had that we would cannibalize the electrification route of the European Union; that hydrogen would come and take up all this renewable energy that we would produce." Today, he argued, his industry had a new concern. "Now we have a very big competitor, we have a competitor which is called data centre business. The data centre business is coming to Europe and it will create circumstances and events that you will never see; that I've never seen before in the energy sector. It is a business hungry for energy. It is a a business that can pay for this energy, you know and will consume all the renewable energy possible."

"If we don't change this narrative now – today, not in 2028 – then I'm afraid that the hydrogen business will stay in this valley of death and will not be able to start growing in the way a new business should grow."

### *Digital and Cyber Issues*

Both DG Energy's Filipo Castro Baragon, and Kristin Lucie Munthe, a board member of ENTSO-E, made the point that our infrastructure is both physical and digital, and that both aspects must be safeguarded. "The power system is both a physical system and a digital system," Ms Munthe noted. This has consequences, with Mr. Baragon saying that

“basically all products that are put into the market in the EU that have a digital part inside are potentially a target for cyber-attacks, including, of course, those that are installed in energy infrastructure.” There was a need to ensure both physical and digital updates for energy infrastructure, not least because energy infrastructure was often old, and, therefore, long-lasting. The issue, he said was how to manage this type of risk to make sure that these There was naturally a focus on physical infrastructure, with particular regard to electricity grid connections.

Ms Munthe stressed the need to build and protect electricity grids. The energy crisis that followed Russia’s invasion of Ukraine in 2022 demonstrated, she said, “the security aspect, the resilience made from grids.” ENTSO-E had identified more than €800 billion worth of investments that needed to be made in cross-border transmission grids between now and 2050. In SE Europe, she argued, there’s hardly a border here where it's not valuable to build more transmission capacity. Moreover, she stated, “for each euro spent wisely on building the right infrastructure, you get two back.”

### *Technical standards*

The reason why much cross-border transmission was required was furnished by Davor Bajs, Electricity Expert with Energy Community Secretariat in Vienna. The transmission system operators in each country determine their technical standards unilaterally, Mr. Bajs noted. When cross-border link-ups are arranged, the system with the lower standard is used for cross-border flows, “so exchange possibilities are not so high, although the network is in place.”

The need to improve resilience was further highlighted by Jakub Przyborowicz, a Manager at GAZ-SYSTEM. Mr. Przyborowicz warned us that although a huge decline in gas demand was expected by 2040, at present gas played a major role “because we need to have stability of the grid and gas fired power plants most probably will serve on the days when we don't have enough and not enough solar.” Moreover, the Gulf crisis raised the prospect of immediate gas shortages.

In terms of GAZ-SYSTEM helping develop the infrastructure to cope with the energy transition, Mr. Przyborowicz noted that greater sector integration was needed so that transmission operators could handle more than just gas, wind and solar. As operators of LNG terminals, transmission systems and storage, we also have to think, he said, “how our infrastructure can be utilized in the future towards hydrogen, biomethane maybe even carbon capture and storage (CCS).”

### *Cyber Security*

But when it comes to countering cyber-attacks, we received some grim warnings. Ms. Munthe had noted that “the power system is both a physical system and a digital system,” an overlapping of the physical and digital worlds that naturally led to a focus on cyber security. However, as Vytautas Butrimas, of Lithuania’s Industrial Cybersecurity Consulting, noted: “Many decision makers have no idea of the environments that industrial control systems operate in on an energy grid, water grid or any area of critical

infrastructure." While decision makers may well secure a lot of input from IT consultants and suppliers, there's a problem in that these tend to be standard solutions, they are not necessarily applicable "for process control real time, where something can go boom in the night." There are standards but how many people know of them? "We need a way to convey the importance of industrial cyber security risk to both governments and industrial end users."

### C. Key Messages

The event highlighted with unusual clarity the depth, complexity, and urgency of the challenges facing both the region and the European Union as a whole. What emerged from the discussions was not simply a set of discrete policy concerns, but rather a systemic picture of an energy framework under strain, geopolitically, economically, technologically, and institutionally.

At the core of this evolving landscape lies a fundamental tension: the simultaneous pursuit of rapid decarbonisation and the immediate, non-negotiable requirement for energy security. Nowhere is this tension more pronounced than in Southeast Europe, a region structurally more vulnerable than the rest of the continent due to its higher dependence on hydrocarbons, limited infrastructure, and persistent socio-economic disparities.

*1. A System Under Stress: Geopolitics and Supply Disruptions*

The timing of the Roundtable, amid the closure of the Strait of Hormuz and a major escalation in the Middle East, served as a stark reminder that global energy markets remain highly exposed to geopolitical shocks. The scale of disruption, with significant reductions in oil, LNG, and fertiliser flows, reinforced the reality that energy security cannot be treated as an abstract or long-term policy goal. It is immediate, tangible, and deeply interconnected with global stability.

The discussions demonstrated that while Europe has made progress since the 2022 Ukraine crisis in reducing dependence on single suppliers, it remains vulnerable to systemic shocks affecting global supply routes. The Hormuz crisis illustrated that diversification of suppliers alone is insufficient; diversification of routes, infrastructure, and energy forms is equally critical.

For Southeast Europe, the implications are even more acute. The region's limited storage capacity, insufficient interconnections, and continued reliance on imported hydrocarbons create structural weaknesses that amplify external shocks. This reality underscores the need for a more region-specific approach to energy policy within the broader European framework.

*2. Diversification and Resilience: From Concepts to Imperatives*

Two concepts dominated the discussions: diversification and resilience. These are no longer aspirational objectives but operational imperatives.

Diversification must extend beyond simple supplier substitution. It encompasses:

- Energy mix diversification, including renewables, nuclear, and domestic hydrocarbons
- Route diversification, through corridors such as the Vertical Gas Corridor
- Technological diversification, integrating electricity, gas, hydrogen, and storage systems

Resilience, meanwhile, has evolved into a multidimensional concept. It includes not only physical infrastructure protection but also:

- Cybersecurity and digital system integrity
- Flexibility in energy systems to respond to peak demand
- The ability to absorb and recover from supply disruptions

A key takeaway is that resilience cannot be achieved through market mechanisms alone. It requires strategic planning, public investment, and coordinated policy frameworks at both national and European levels.

### *3. The Persistent Role of Hydrocarbons*

One of the most consistent and, at times, implicit conclusions of the Roundtable was the continued centrality of hydrocarbons, particularly natural gas, in the European and regional energy system.

Despite ambitious decarbonisation targets, gas remains indispensable for:

- Power generation stability and peak demand coverage
- Industrial processes (i.e. fertilizer production, chemical industry, steel industry)
- Long-term energy storage (in contrast to short-duration battery solutions)

Moreover, oil continues to underpin transport and petrochemical sectors, while also playing a role in energy security through strategic reserves.

However, European policy appears increasingly disconnected from this reality. The effective withdrawal of institutional support for hydrocarbon investments, combined with regulatory uncertainty, has created a paradox: Europe continues to depend on hydrocarbons, yet discourages both domestic production and long-term import arrangements.

In other words, although the EU relies heavily on oil and gas use (representing 58% of its energy mix, with no tangible signs of this being reduced any time soon) it has no long term policy when it comes to hydrocarbons exploration and production or downstream activities such as refining. The only policy that exists today is that of a roadmap for the gradual phase out of oil and gas use by 2050, because of ill-defined climate sensitivities.

This contradiction has tangible consequences:

- Reduced upstream investment within Europe and neighbouring regions
- Increased dependence on external suppliers with less regulatory alignment
- Higher price volatility due to constrained supply options

The case for maintaining a pragmatic approach to hydrocarbons is not an argument against the energy transition. Rather, it reflects the need for a managed transition that acknowledges current dependencies while building future alternatives.

*4. The European Commission's Policy Gap*

A recurring and critical theme throughout the discussions was the perceived lack of a coherent and realistic energy policy from the European Commission regarding both hydrocarbons and nuclear energy.

On hydrocarbons, the EU's stance is characterised by:

- Withdrawal of financial support for fossil fuel infrastructure
- Increasingly stringent regulatory frameworks (e.g., methane regulations)
- Lack of long-term signals to markets and investors

This approach creates uncertainty across the value chain, particularly for upstream investments that require long development timelines and stable regulatory environments. The result is a structural disincentive to invest in supply, even as demand persists.

On nuclear energy, the situation is equally ambiguous. While some Member States actively pursue nuclear development, including large-scale plants and emerging SMR technologies, the EU lacks a unified policy framework that:

- Clearly defines the role of nuclear in the energy transition
- Provides consistent financial and regulatory support
- Integrates nuclear into broader energy security strategies

This absence of clarity undermines long-term planning and creates fragmentation within the European energy landscape. For Southeast Europe, where nuclear could provide stable baseload power and reduce import dependence, this policy gap represents a missed opportunity.

In essence, the European Commission's approach risks creating a "policy vacuum" in two critical areas of the energy mix. By not fully supporting hydrocarbons during the transition and not decisively endorsing nuclear as part of the solution, the EU may inadvertently weaken its own energy security.

*5. Infrastructure: The Backbone of Energy Security*

The discussions at the Roundtable made it clear that infrastructure is the cornerstone of both diversification and resilience. Without adequate infrastructure, even the most well-designed energy strategies cannot be implemented.

Key priorities include:

- Expansion of gas interconnections and storage capacity
- Development of electricity transmission networks, particularly cross-border
- Integration of LNG terminals into regional systems
- Preparation for hydrogen and CCS infrastructure

The investment requirements are substantial, estimated at hundreds of billions of euros over the coming decades. However, these investments are not optional. They are prerequisites for:

- Market integration
- Price stability
- Security of supply

A critical issue raised during the Roundtable is the mismatch between investment needs and available financing mechanisms, particularly in light of EU restrictions on fossil fuel infrastructure funding. This raises fundamental questions about how the transition will be financed and whether current policies align with real-world requirements.

*6. Energy Poverty and Social Dimensions*

Energy security is not solely a technical or economic issue; it is also a social one. The persistence of energy poverty in Southeast Europe highlights the human dimension of the energy transition.

High energy prices, exacerbated by geopolitical crises and regulatory impacts, disproportionately affect:

- Low-income households
- Rural populations
- Non-EU countries within the Energy Community

The discussions underscored that energy efficiency is a critical tool in addressing energy poverty. However, it is not a universal solution. Efficiency improvements require upfront investment, which many households cannot afford.

This creates a policy dilemma: how to balance market-based approaches with targeted interventions that ensure equitable access to energy. The absence of significant discussion on subsidies or direct support mechanisms suggests that this issue remains insufficiently addressed at the policy level.

*7. The Emerging Role of Nuclear and Hydrogen*

Both nuclear power and hydrogen were identified as potential components of a more resilient and diversified energy system.

Nuclear power offers:

- Stable, low-carbon baseload generation
- Reduced exposure to fuel price volatility
- Long-term supply security

However, its development is hindered by regulatory uncertainty, high capital costs, and the lack of a cohesive European framework.

Hydrogen, on the other hand, represents a longer-term solution with significant potential for:

- Energy storage
- Sector coupling
- Decarbonisation of hard-to-abate industries

Yet, the hydrogen sector currently faces a "valley of death," characterised by:

- Regulatory constraints
- Lack of infrastructure
- Competition for renewable electricity

The absence of Southeast Europe from key hydrogen corridor plans further exacerbates regional disparities and limits the region's ability to participate in future energy systems.

*8. Resilience and Security: A New Strategic Paradigm*

Perhaps the most profound shift highlighted during the Roundtable is the redefinition of energy systems and infrastructure as critical security assets.

Energy infrastructure is now:

- A target in physical conflicts
- Vulnerable to cyber-attacks
- Integral to national and regional security strategies

This necessitates a new paradigm in which energy policy is closely aligned with defence, cybersecurity, and geopolitical strategy.

In this context, resilience is not merely about redundancy or backup capacity. It is about:

- Anticipating threats
- Designing systems that can adapt and recover
- Integrating security considerations into all aspects of energy planning

*9. A Call for Policy Realignment*

The overarching conclusion of the Roundtable is that Europe and particularly Southeast Europe, requires a fundamental realignment of its energy policy framework.

Key elements of such a realignment should include:

- A pragmatic approach to hydrocarbons, recognising their continued role during the transition period and hence the need of well-defined policies.
- A clear and unified policy on nuclear power, integrating it into the EU's energy strategy
- Regulatory stability, providing long-term signals to investors
- Targeted financial support for infrastructure development, including in SEE
- Integration of energy security with broader strategic and defence considerations

Without such adjustments, there is a risk that Europe's energy transition will become increasingly disconnected from the realities of global energy markets and geopolitical dynamics.

## D. End Message

The Roundtable served as a timely and necessary forum for confronting uncomfortable truths. The energy transition, while essential, is not occurring in a vacuum. It is unfolding in a world characterised by geopolitical instability, economic uncertainty, and technological disruption. A world where fossil fuels continue to cover almost 86% of all energy needs.

For Southeast Europe, the challenge is particularly acute. The region stands at the intersection of major energy corridors, geopolitical fault lines, and evolving market dynamics. Its success or failure in navigating the energy transition will have implications far beyond its borders.

For the European Union, the stakes are equally high. Energy policy is no longer just about decarbonisation; it is about sovereignty, resilience, energy self-reliance and strategic autonomy.

The absence of a coherent policy on hydrocarbons and nuclear power represents a critical gap that must be addressed. Without it, Europe risks undermining its own objectives, both in terms of climate goals and energy security.

In conclusion, the path forward requires not only ambition but also realism. It demands policies that are grounded in the complexities of the energy system, responsive to geopolitical realities, and inclusive of regional specificities. Only through such an approach can Europe and Southeast Europe in particular, achieve a secure, sustainable, and resilient energy future.