



[Highlighting the Geopolitical Turmoil

Editorial

As geopolitical tensions rise across Europe, the Eastern Mediterranean, and the Black Sea, the importance of regional institutions capable of navigating energy-related uncertainties has never been greater. Among these institutions, the Institute of Energy for South-East Europe (IENE) has emerged as a key player in providing balanced, evidence-based insights into the region's complex energy landscape. From the ongoing war in Ukraine and its impact on European gas markets, to the conflicts in the Middle East and the Red Sea affecting global oil shipping routes, the energy sector is under unprecedented stress. The resulting energy insecurity has underscored the need for coordinated regional strategies. In this volatile environment, IENE's mission—to foster understanding, dialogue, and informed policymaking on energy issues—has taken on increased relevance and urgency.

A Trusted Regional Voice

Since its foundation in Greece 2003, IENE has consistently positioned itself as a regional knowledge hub and forum for discussion among policymakers, industry leaders, academics, and international organizations. Its geographic focus spans Southeast Europe, the Eastern Mediterranean, and the wider Black Sea region—areas deeply affected by energy transition challenges, security risks, and supply disruptions. IENE's influence stems from its impartial research, its convening power, and its sustained engagement across borders.

Over the past two decades, the Institute has built a network of 50 partners and more than 2000 experts and members across 16 countries, offering in-depth assessments on oil and gas markets, renewables, energy efficiency, power systems, climate policy, and critical infrastructure. With energy geopolitics at the forefront of regional debates, IENE has stepped up as a steady source of insight. Its analysis helps decision-makers distinguish between short-term market shocks and longer-term structural trends—such as the

gradual decoupling from Russian hydrocarbons, the diversification of supply routes, and the integration of renewables into fragile energy systems. In times of turmoil, the demand for timely and independent policy advice grows sharply. IENE has responded by enhancing its publications and briefings, focusing on issues such as LNG availability, electricity interconnections, energy storage, and the lately the feasibility of carbon capture and storage (CCS) solutions. In particular, IENE's flagship studies, like the "SE Europe Energy Outlook" and the Country Energy Profiles and Geopolitics Reports, have served as strategic references for governments and companies alike. These reports offer scenarios and forecasts based on rigorous modelling, grounded in the realities of each country's infrastructure and political economy.

Cross-Border Cooperation and Dialogue

Perhaps one of IENE's most important contributions in this period of geopolitical fragmentation is its role in facilitating cross-border dialogue. The Institute's conferences and forums—such as the "SE Europe Energy Dialogue", the "Energy & Development Conference" and "the Greek-Turkish Energy Forum", and thematic workshops—bring together diverse actors who might otherwise not share the same table. These gatherings promote cooperation on shared challenges, including energy poverty, decarbonization pathways, and infrastructure investment gaps. In regions marked by historical tensions and complex bilateral relations, IENE provides neutral ground where common energy interests can be identified and pursued.

The Institute has also played a bridge-building role between different countries in the region and between the public and private sectors. Last but not least, by encouraging the exchange of best practices, IENE supports the alignment of national strategies with EU energy and climate targets, while also factoring in the practicalities faced by utilities, investors, and local authorities.

■ IENE celebrates 21 years since its foundation



It was on July 16, 2003 that the group of 15 founding members of the Institute met formally in the premises of the National Research Foundation, in Athens, to sign the Articles of Association of the newly born Institute of Energy for SE Europe (IENE) and discuss its prospects in the then fast changing economic and social environment of South East Europe. The vast geopolitical changes that shook Europe and the world, following the fall of the Berlin Wall and the collapse of the communist regimes in Eastern Europe, were still fresh and the actual political and energy changes in SE Europe were still in their infancy.

The Energy Community had not even been formed (it was founded following Greece's initiative in 2005) while Athens, where the Institute is based, was then playing a leading role in the energy transformation of the region. This initial group of founding and forward-looking partners decided right from the outset to focus the Institute's activities in the broader area of South East Europe, including Turkey and the East Mediterranean, as they firmly believed that key energy issues should be

examined and tackled on a regional basis.

The founding partners of IENE were convinced that only through a regional approach they could make a useful contribution towards solving the apparently, at the time, intractable problems such as energy market liberalization and energy security. It is worth noting that decarbonization of the energy system had not yet emerged as an issue of top priority. Fast forward 21 years and in 2024 the Institute has managed to establish itself as one of the leading energy think tanks of SE Europe with regular presence in the various countries through the undertaking of regionally focused research and studies and the organisation of events and related activities.

Most important of which is the annual "SEE Energy Dialogue", which was launched back in 2007 in Thessaloniki and on June 2024 it celebrated 15 years of convention. The publication of IENE's seminal report, "The SEE Energy Outlook", now in its 4th edition, (under preparation) is another such major activity. Forming energy bridges in the region is yet another priority, as the recent 1st Greek-Turkish Energy Forum, successfully organised by the Institute in Istanbul on April 25, 2024, clearly attests.

Overall, the Institute's continuous engagement in energy issues, most importantly through the regular publication of newsletters and analysis, and participation in public consultations and the public dialogue at large, is indicative of its commitment towards achieving a better understanding and appreciation of the complex energy and related environmental issues confronting our society. In this context, IENE's role in the present economic and social environment in Greece and South East Europe is crucial and its partners, its members and supporting companies and organisations are determined to enhance the Institute's further development and advancement.

■ China's Ambassador to Greece Mr. Xiao Junzheng Stresses the Importance of the "Belt and Road Cooperation and European Power Highway Construction"

One of the highlights of **IENE's 15th South East Europe Energy Dialogue**, was the address by H.E. Mr. Xiao Junzheng, Ambassador of the People's Republic of China to Greece. Ambassador Junzheng's speech, delivered during the Conference's "Ambassadors' Forum", under the moderation of Mr. Michael Christides, Ambassador (a.h.), emphasized that, through the cooperation between State Grid and IPTO, China can assist Greece in building electrical connections with neighboring countries in SE Europe.

The full transcript of the address by H. E. the Ambassador of the People's Republic of China to Greece at **IENE's 15th SEEED** (Thessaloniki, June 19-20, 2024), entitled "Belt and Road Cooperation and European Power Highway Construction", is available on the Institute's website. The complete material from the "15th South East Europe Energy Dialogue", all addresses and presentations, the Background Paper and most importantly the Rapporteur's



Report, the visual material from the conference are available on event's microsite at www.iene.eu.



Watch the video on IENE's Youtube Channel

1st "Greek-Turkish Energy Forum" in Istanbul attracted huge interest from the energy business communities of Greece and Turkey



Following an initiative by the Institute of Energy for SE Europe (IENE), the first ever "Greek-Turkish Energy Forum" took place on April 25, 2024, in Istanbul, at the Swissotel the Bosphorus.

More than 30 top executives from leading energy companies and organizations in Greece and Türkiye, along with several distinguished academics and experts from both countries, participated in this unique event. The Forum, which was convened by IENE, aimed at underscoring the significant importance of the energy sector in bilateral economic and commercial relations, in the light of efforts by the governments of Greece and Turkey to establish a "positive agenda" between the two countries. The timing of the "Greek-Turkish Energy Forum" was opportune, as it sought to leverage cooperation opportunities for energy businesses in both countries. Furthermore, Greece and Turkey have been engaged in collaborative energy projects since the early 2000's. Presently, they are partners in various strategic energy projects, including electricity, natural gas, renewable energy sources (RES), electricity transmission, and energy exchanges. Over the last 15 years, important natural gas and electricity interconnections have become operational across the Greece-Turkey border at Evros, facilitating cross-border energy exchanges in both markets. Additionally, cooperation efforts are being pursued between the Energy Exchanges of both countries - EPIAŞ in Istanbul and HENEX in Athens - in areas of mutual interest. Moreover, both countries play significant roles in shaping the energy agenda in Southeast Europe and beyond.

The Athens based Institute of Energy for Southeast Europe (IENE) is one of the staunch supporters of a closer energy relationship between the two countries, as it has repeatedly invited Turkish businessmen and energy industry experts to the various events it has held in Greece, Bulgaria, Romania, Serbia and beyond, in the last 15 years or so. The event commenced with a welcome address by Mr. Costis Stambolis, Chairman and Executive Director of IENE. *"Although there are clear differences in the structure and distribution of the respective fuels in the two countries' energy mix, and, at first glance, their energy systems appear antagonistic, there are definitely certain distinct areas of mutual interest where both countries can benefit from closer cooperation"*, said the Chairman of IENE, Costis Stambolis in his opening statement at the Forum.

Opening remarks from Mr. Gokhan Yardim, Managing Partner of Turkish ADG Anadolu Natural Gas Consultancy Trade Ltd. and Senior Partner of IENE in Turkey, followed. Subsequently, introductory remarks were made by Mr. Michalis Christidis, Ambassador-at-Large and former Secretary General of the Permanent International Secretariat (PMS) of the Black Sea Economic Cooperation Organization (BSEC). Then Dr. Halil Yurdakul Yigitgüden, independent energy consultant and former Coordinator of Economic and Environmental Activities of the OSCE, who is also a Distinguished Fellow of IENE presented an overview of Turkey's energy sector and the key issues it faces as it continues to expand. Following that, Prof. Athanasios Dagoumas, President of the Greek Waste, Energy, and Water Regulatory Authority (RAAEF), presented an overview of Greece's energy market and the challenge it confronts in its path towards energy transition.



The second session, chaired by Dr. Halil Yurdakul Yigitgüden, focused on the energy markets and electricity systems of both countries. Speakers included Mr. Taha Meli Arvas, CEO of the Istanbul Energy Exchange (EPIAŞ), Ms. Efi Milioni, Head of the Market Analysis Department of Elpedison (online), Mr. Deniz Coşkun, Deputy General Manager of the Turkish Electricity Transmission Company (TEİAŞ), and Dr. Stelios Kromlidis, Director of the Business Activities Department of SEleNe CC (Southeast Electricity Network Coordination Center) in Thessaloniki. The session featured presentations from the speakers followed by a discussion. Additionally, video messages from the Minister of Energy and Natural Resources of Turkey, Mr. Alparslan Bayraktar, and the Minister of Energy and Environment of Greece, Mr. Theodore Skylakakis, were shown, with both ministers commending IENE's initiative in organizing the first Greek-Turkish Energy Forum.

Natural gas markets were the focus of the third session of the 1st "Greek-Turkish Energy Forum", chaired by Mr. Christos Dimas, Deputy Chairman of IENE and Chair of the Scientific Committee on Geopolitics & Energy of IENE, and co-chaired by Mr. Gokhan Yardim. Speakers included Dr. Michalis Thomadakis, Director of Strategy and Development at DESFA, Mr. Serkan Hotoglu, Member of the Board and General Manager of OMV Türkiye, and Mr. Ahmet Polatkan, Head of the Trade Department at the Turkish SOCAR. Following their presentations, a discussion ensued, during which, the speakers addressed questions from the audience.>



Renewable energy sources (RES) were the focal point of the subsequent session, chaired by Dr. Mustafa Tiris, General Manager of TDinamik Energy and Vice President of DEİK Energy Council (Energy Business Council), and Partner of IENE. The session explored investment prospects for various forms of RES in Greece and Turkey.

Energy efficiency and hydrogen were the main topics of the fifth and final session of the event, chaired by Mr. Costas Theophylaktos, Secretary General and President of the Energy Efficiency Committee of IENE. Speakers included Dr. Oguz Can, President of the Energy Efficiency Association of Turkey and CEO of Teksan Company, Dr. Füsün Tut Hakkıdır, Director of Geothermal Research and Innovation Technologies at Zorlu Energy Group, Mr. Nikos Sofianos, Energy Consultant and Chairman of the RES Committee and Member of the Board of Directors of IENE and others.

The 1st “Greek-Turkish Energy Forum” concluded with an open discussion on fostering closer business ties in the energy sector between Greece and Turkey, Mr. Costis Stambolis, and Dr. Mustafa Tiris. A farewell reception followed, attended by the speakers and the audience. Sponsors of the 1st “Greek-Turkish Energy Forum”, convened by IENE, were the Istanbul Energy Exchange (EPIAŞ), the Hellenic Natural Gas System Operator (DESFA), and Enterprise Greece, while Supporters were the companies Maxxen and Tdinamik. Solis Hub was responsible for the on-site organization of the event. Communication sponsor was the energy portal Energia.Gr.



 Visit the event' microsite to read more

■ Türkiye, Greece Vow to Boost Energy Cooperation, Affirm the Two Countries' Energy Ministers

During the first “Greek-Turkish Energy Forum” in Istanbul organized by IENE, the Energy ministers of both Greece and Turkey pledged to strengthen bilateral cooperation. Turkish Energy and Natural Resources Minister Alparslan Bayraktar said that Türkiye is committed to increasing partnerships while welcoming intergovernmental cooperation as well as private sector collaboration.

“We are hopeful that this will be the beginning of a new era of opportunities between Türkiye and our neighbor Greece in the field of energy,” Bayraktar said in a video message. He highlighted the important role that Türkiye plays in Europe’s energy security, part of which is maintaining national and international cooperation. *“The most recent Memorandum of Understanding (MoU) between TEIAS (Turkish Electricity Transmission Corporation) and IPTO (Independent Power Transmission Operator) is an example of the kind of activity we hope to increase,”* he said. The MoU between Greece and Türkiye signed in December 2023 in Athens, for a power line connecting both countries’ power grids is scheduled for completion in 2029. *“We must continue to support the regional decarbonization efforts for the eventual electrification and digitalization of our energy systems”,* he added. For his part, Greek Environment and Energy Minister Theodoros Skylakakis touted the importance of regional cooperation at the national, European-wide and international levels.



He also welcomed the recent MoU between IPTO and TEIAS and said it would strengthen the provision of safe and sustainable electricity for its national infrastructure and increase the capacity for electricity and energy trade between Greece and Türkiye. *“Energy efficiency and savings offer a new avenue for collaboration that can support the broader objectives of secure energy supply and a competitive low-carbon economy”,* he added.

Over the last two decades, Greece and Türkiye have established major electricity and gas interconnections across the Greek-Turkish border and have developed active cross-border transmission and trading in electricity and gas. It has to be noted that Turkish President Recep Tayyip Erdogan paid a landmark visit to Greece on Dec. 7, 2023, following a turbulent period in relations in previous years. Greek Prime Minister Kyriakos Mitsotakis, in return, visited the Turkish capital, Ankara, on May 13, 2024, where he met the Turkish President.

■ IENE released Background Paper on the occasion of 1st Greek-Turkish Energy Forum

A useful Background Paper, entitled “Greece-Türkiye in the New Energy Era”, released by IENE, on the occasion of the 1st Greek-Turkish Energy Forum, covering all the main aspects in the overall energy relationship of the two countries.

In less than 18 pages, this IENE note presents and compares the energy mix of the two countries, presents the essentials involved in electricity infrastructure and trade, as well as in gas infrastructure and trading. Furthermore, the paper covers the oil trade between the two countries and then goes on to present detailed information on the almost parallel development of the two countries’ dynamic renewables sector. A discussion is also included on the role and functioning of the two major energy exchanges in each country, EPIAŞ in Turkey and ENEX in Greece.

As the Background Paper remarks, “at first glance Greece and Türkiye may appear antagonistic in terms of energy infrastructure and market development. However, there exist certain areas of mutual interest where both countries can benefit from closer cooperation. One can think of certain niche areas where the two countries could develop collaborative projects. Such niche spots include cyber security for electricity and gas transmission, electricity and gas trading through the existing platforms of EPIAs and ENEX and joint the development of some mega RES projects.” The Paper concludes by saying that, “overall, there appear to be good prospects and opportunities for further cooperation between Greece and Türkiye in the broad energy sector. In this Background Paper we only touched upon the surface of the energy landscape and a lot more work needs to be done towards this promising direction”.



■ Conclusions & Recommendations of 1st IENE “Greek - Turkish Energy Forum”

Following the 1st “Greek - Turkish Energy Forum”, which was convened by IENE and took place in Istanbul on April 25, 2024, the Institute released the event’s “Conclusions & Recommendations” document. This well-attended event, which is considered as a milestone in Greek-Turkish energy relations, is set to become the kick-off event of a more coherent exchange of views and expertise between the entrepreneurs, specialists and officials of the energy sector of the two countries. In the “Conclusions & Recommendations” document for the 1st “Greek - Turkish Energy Forum”, IENE provides a brief account of the proceedings of the conference and presents the main conclusions of this unique event. In addition, a number of recommendations are tabled for initiatives which can further promote the Greek-Turkish co-operation in the energy sector.



For the conclusions & recommendations visit the event’s microsite



■ IENE marks new season with a “Back to Business” event

The Covid pandemic and the ensuing busy autumn periods of the last two years prevented the Institute from organising its otherwise well attended social event.

So, for this season, IENE made a shy come back on 15 October, 2024, by inviting its partners, associates, members and its staff to an open cocktail reception held in the hospitable gardens of the SAKA (Athens College Alumni Association) club in Psychiko, Athens.

Judging by the turnover and the interest expressed by invitees, this “Back to Business” event proved a success as the ambiance of the premises and the hospitality provided by the organisers proved beyond expectations. Addressing the invitees, Mr. Costis Stambolis, IENE’s Chairman and Executive Director, presented some thoughts concerning the Institute’s future direction and the new lines of action which are opening up in the months ahead. With research and study projects topping the Institute’s agenda, the Chairman referred to a number of latest initiatives already approved by the board. These include a major action on Innovation In Energy, a Regional Security Programme and a revised Energy Poverty Programme, which will be undertaken in addition to the projects and work already conducted by the Institute.

In order to handle such an expansion of work load, the Institute plans to launch a fund drive in early 2025, Costis explained. According to the outline plan presented by the Chairman, the Institute has already secured help from a professional fund raiser and marketing expert who is to join its staff shortly.

Summing up his vision for IENE’s future development, Costis Stambolis said that he remained optimistic in achieving the set objectives in the coming months and in securing substantial new support from corporate members and donors. This optimism, said Stambolis, is routed on the excellent work already carried out by staff, associates and consultants and the wide recognition of the Institute in Greece and South East Europe. In a sense, concluded the Institute’s Chairman, “it is no exaggeration to state that IENE is now entering a new era of activity”.



■ 3rd IENE Tirana Energy Forum showcases Albania's energy potential

The 3rd Tirana Energy Forum, organized by the Institute of Energy for SE Europe (IENE) in collaboration with SEA Consulting, was successfully held on Thursday, May 30, 2024, in the capital of Albania.



The 3rd Tirana Energy Forum, organized by the Institute of Energy for SE Europe (IENE) in collaboration with SEA Consulting, was successfully held on Thursday, May 30, in the Albanian capital. This event focused on the energy market of one of SE Europe's emerging economies and attracted significant interest from key players and investors in Albania's energy sector.

The forum commenced with introductory remarks by the Chairman of IENE, Mr. Costis Stambolis, who emphasized the Institute's commitment to its regional role and noted that the continuous organization of the forum contributes significantly to this goal. Mr. Shkelqim Bozgo, Director of SEA-Consulting, also provided introductory comments on behalf of the co-organizer. Professor Stavri Dhima, an Independent Energy and Risk Assessment Consultant and Senior Partner of IENE in Albania, outlined the key challenges facing the country's energy sector. Additionally, Mr. Denald George Tafani, President of the Hellenic Business Association of Albania, offered remarks emphasizing the Greek business presence in the Albanian economy. HE the Ambassador of Greece in Tirana, Mrs. Konstantina Kamitsi, addressed the forum and praised the role of IENE in promoting bilateral relations in SE Europe in the field of energy. In a session related to Albania's electricity infrastructure, speakers included the Head of the Long-Term Planning Sector in the Directorate of Planning and Development of Transmission Networks of OST Sh. A., the Operator of the Transmission System of Albania, Mr. Fatjon




Zekaj, as well as the Head of the Directorate of Strategy & Planning of System Development of the Independent Power Transmission Operator (ADMIE), Mr. Konstantinos Tsirekis. A session dedicated to the regulation and operation of the Albanian electricity market, included the Head of the Electricity Market Monitoring Office at the Albanian Energy Regulatory Agency (ERE), Mr. Lorenc Kosta, the CEO of the Albanian Energy Exchange (ALPEX), Mr. Sokol Dishnica, the Managing Director of PPC - PPC Albania Sh.A., Mr. Georgios Lanza, and the Principal Consultant of SEA-Consulting, Mr. Abaz Aliko.



The exploration and production of hydrocarbons as well as the domestic oil and natural gas market were analysed, among others, by Dr. Ilia Gjermani, Director of Development Programs in the Hydrocarbon Sector at the Ministry of Infrastructure and Energy of Albania. Mr. Kostas Theophylaktos, Member of the Board and Secretary General of IENE, was among the Forum's speakers who focused on issues related to renewable energy sources, energy efficiency, and cogeneration in Albania. The 3rd Tirana Energy Forum also included a session on the growing role of renewable energy sources, photovoltaics in Albania's energy system.



The event was supported by major energy companies from Albania and Greece. The Strategic Partner for this event was the Association of Greek Businesses of Albania (HBAA), while the Independent Power Transmission Operator (ADMIE), KG Law Firm, and the energy company EnSCo participated as supporters.

 Visit Forum's microsite to read the full material, and watch the video on IENE's Youtube channel

12th Cyprus Energy Symposium: The government of Cyprus sent a strong message for ending the island's energy isolation



On November 15, 2024, all eyes were set on the annual Energy Symposium in Nicosia which once again was jointly organised by the IENE and its partner in Cyprus, FMW- Financial Media Way.

An annual event, now in its 12th edition, Cyprus Energy Symposium attracts wide media attention and high participation by energy professionals from Cyprus and Greece. This year, the Symposium attracted some 160 delegates, including 25 speakers, and covered a broad spectrum of subjects. These ranged from energy policy and regulation, hydrocarbon exploration and production, natural gas imports via LNG, the electricity interconnection with Greece and Israel, renewable energy sources and electricity market competition as well as energy efficiency improvement in buildings, businesses and industry.

In his opening speech the President of the Republic of Cyprus, HE Mr. Nikos Christodoulides left no room for doubt on the new turn of things as the island is stepping up its efforts in a number of fronts. The end scope being, as he stressed, to be able to diversify the soonest possible the island's energy mix through the addition of imported LNG -ultimately to come from Cyprus's own extensive



hydrocarbon resources- and the electricity interconnections with Greece, through Crete, and Israel. Such essential moves, underlined the President, will not only bolster the nation's energy security, which has the highest degree of energy dependency in the EU, but will also help lessen its high emissions while facilitating competition in the electricity market and the improvement in consumer prices.

As it became obvious from the follow up addresses by the chairperson of the Parliament Ms. Anitta Demetriou and the Minister of Energy and Industry Mr. George Papanastasiou and other senior government officials, a new sense of urgency has taken hold across the energy sector impacting decisions and setting strict timetables. A big burden falls upon the Transmission System Operator whose CEO, Stavros Stavrinou, is in charge of the international electricity interconnections programme and of the upgrading of the island's electricity transmission system.



On his part the Chairman & CEO of Greece's Independent Transmission Operator (IPTO), Mr. Manousos Manousakis, sent a strong message of confidence reporting on the solid achievements and accomplishments in the construction so far, of the Great Sea Interconnector (GSI) project, which will eventually link the electricity the European electricity system to those in Cyprus and Israel.

Several other addresses, interventions and presentations followed which covered hydrocarbon exploration and production, the internal electricity market operation, the rapid advance of renewables, especially solar photovoltaics, the problems with curtailments, plans for hydrogen applications and the constant efforts to improve energy efficiency in the various facets of Cyprus's energy system.

Visit www.cyprusenergysymposium.com to see the full conference programme



■ Energy security, green transition, and geopolitical priorities emphasized at IENE's 15th South East Europe Energy Dialogue

The 15th SE Europe Energy Dialogue, which took place at the MET Hotel, in Thessaloniki, on June 19/20, 2024, attracted strong interest from business, academia, governments and regional organizations. This annually organized conference by the Institute of Energy for SE Europe (IENE) featured, for 2024, prominent experts, executives, and diplomats among its speakers.

The agenda focused on energy security, geopolitical and diplomatic priorities, and the transition to clean energy in SE Europe and beyond. Some 46 speakers, panelists and moderators participated in the 15th SEE Energy Dialogue in addition to 100 delegates, who participated in person and online. The 15th SEE Energy Dialogue attracted extensive media attention with write ups and interviews published ahead of the event and afterwards.

The proceedings of the 15th SEEED began with an address by the Deputy Minister of Environment and Energy, Ms. Alexandra Sdoukou, who underlined the Ministry's role in strengthening cooperation and promoting common interests among SE European states in the energy sector. The Deputy Minister elaborated on the Ministry's and government's priorities, highlighting two regions of high geostrategic importance: the wider SE Europe and Black Sea region, and the Eastern Mediterranean.



The address by Mr. Artur Lorkowski, Director of the Energy Community, an EU organization based in Vienna that facilitates the integration of the Western Balkans and wider SE Europe into the European Acquis in the energy sector, was particularly significant. Mr. Lorkowski praised Greece's role in efforts to integrate the electricity markets of neighboring countries such as Albania, Kosovo, and North Macedonia.



A highlight of the 15th SEEED was the address by H.E. Mr. Xiao Junzheng, Ambassador of the People's Republic of China to Greece. Ambassador Junzheng emphasized the increasingly significant role of the region due to its key geographical position, making it a focal point of global interest in commercial, energy, and wider geo-economic contexts. He noted that, through the cooperation between State Grid and IPTO, China can assist Greece in building electrical connections with neighboring countries in SE Europe. In the Ambassadors Forum which followed, H.E. Mr. Matthew Lodge, Ambassador of the United Kingdom, and H.E. Mr. Arif Mammadov, Ambassador of Azerbaijan, under the moderation of Ambassador a.h. Michael Christides, highlighted the prospects for energy cooperation between countries in the region.

Additionally, the panel analyzed the impact of the current extremely tense geopolitical and diplomatic landscape, marked by the ongoing armed crises in Ukraine and the Middle East, on the region's energy sector, encompassing aspects such as production and interconnections. Furthermore, the critical importance of energy security in SE Europe and the Southern Mediterranean was emphasized by acclaimed experts from the region and beyond.

These included Mr. Slavtcho Neykov, Chairman of the Board of the Energy Management Institute of Bulgaria and Partner at IENE, Dr. William Gillett, Director of Energy Programs at the Scientific Advisory Council of the European Academies (EASAC) in Brussels, Ms. Eugenia Gusilov, Director of the Romania Energy Center (ROEC) and Partner at IENE, and Mr. John Roberts, Energy Security Specialist and Senior Research Fellow at the Institute.



Topics concerning the dynamics of electricity markets in SE Europe, as well as the development of related infrastructure, were analyzed by prominent figures such as Professor Pantelis Biskas from the Department of Electrical and Computer Engineering at AUTH, Mr. Aleksandar Mijušković, President of the Board of Directors of the Electricity Transmission System Operator of Montenegro (CGES), and Mr. Antonis Kontoleon, Chairman of the Union of Industrial Energy Consumers (UNICEN).

The trends and opportunities for the development of nuclear energy in power generation in the region, particularly in light of the EU's revised "green" policy (New Taxonomy), were discussed by key industry figures such as Mr. Tim Yeo, President of the New Nuclear Watch Institute, former UK MP, and former Environment Secretary, and Dr. Teodor Chirica, Chairman of the Board of Directors of Romanian Nuclearelectrica.

Additionally, the conference featured distinguished experts in hydrocarbon exploration, such as Dr. Amit Mor, CEO of Israeli ECO Energy Financial and Strategy Consulting and Partner of IENE and Dr. Efthimios Tartaras, Head of Geoscience & Management at HEREMA. Prominent executives from the natural gas market, including Dr. Gerasimos Avlonitis, Director of Market Development at DESFA and Board Member of the Energy Exchange, Mr. Kostis Sifnaios, Vice President and CEO of Gastrade, and Mr. Milan Zdravkovic, DSO Executive Director at JP SRBIJAGAS in Novi Sad, Serbia, analyzed relevant trends, challenges, and opportunities in SE Europe.

Critical issues related to the regional energy transition, such as decarbonization, renewable energy sources (RES), and energy efficiency, were the focus of a session coordinated by Mr. Gus Papamihalopoulos, Senior Partner at KG Law Firm and Partner at IENE. Participants included Mr. Spyros Kiartzis, Director of New Technologies and Alternative Energy Sources at HELLENiQ ENERGY, and Dr. Muhsin Mazman, Director of the Energy Storage Division at Turkey's T-Dynamic.

The session on alternative energy solutions, such as green fuels, biomethane, hydrogen, and carbon capture, utilization, and storage (CCUS), featured contributions from Ms. Liana Gouta, Director General of Fuels Europe, Mr. George Exarchou, Business Development Manager at French Hydrogène de France (HDF Energy) for Greece and Cyprus, and Professor Vassilios Veskoukis from the School of Agronomists at NTUA.

The 15th SE Europe Energy Dialogue, organized by the SE Europe Energy Institute and held under the auspices of the Greek Ministry of Energy and Environment, was supported by a group of leading and dynamic companies and entities in energy production and services. Sponsors and supporters of the conference included HELLENiQ ENERGY Group, Motor Oil, the Hellenic Natural Gas System Operator (DESFA), KG Law Firm, the energy company Elpedison, the Hellenic Hydrocarbons and Energy Management Company (EDEYEP) S.A., Gastrade, Zenith, the energy company EnSCo, the consulting firm Grant Thornton, and the Regional Electricity Control Center of SE Europe (SELeNe CC) based in Thessaloniki.

Supporting organizations included the International Hellenic University (IHU) in Thessaloniki, the Aristotle University of Thessaloniki (AUTH), and the British Hellenic Chamber of Commerce. Media sponsors for the event were the energy portal Energia.gr, NEGlobal.eu, SeeNews, allazorevma.gr, and the Policy Journal.



Visit 15th SEE Energy Dialogue microsite to read the full material

■ Annual “Energy & Development” conference attracts high participation and wide media attention

The Institute’s two-day (November 6&7, 2024) major annual conference, “Energy & Development 2024” took place at the OTE Academy premises in Athens to a packed audience.



Drawing more than 200 delegates which included highly placed government officials, senior company executives, distinguished academics and a large group of journalists, who attended mainly in person but also online, the first day of the conference covered energy policy, regulatory issues, investments in energy infrastructure, offshore wind and hydrocarbon exploration and production in the East Mediterranean.

Opening the conference, the Chairman of IENE underlined the importance of energy security which continues to be most relevant for Greece and SE Europe in view of the prolonged war in Ukraine and the brutal conflict between Israel and the Iran backed proxies. He further referred to the need of uninterrupted energy supplies, competitive fuel prices, smooth market operation and the avoidance of steep price volatility. He also explained the rationale behind the thematic selection for this year’s conference.

The conference started with a keynote address by the energy advisor of the Greek Minister Mr. Nikos Tsafos, followed by a presentation from Greece’s energy regulator Prof. Arhanasios Dagoumas. Other important contributions included introductory statements by Yiannis Yiarentis, the CEO of the Agency of Renewable Energy Sources and Guarantees of Origin (DAPEEP), by Dr. Vassilis Gkoutis, Director of Market Management at the Independent Power Transmission Operator (IPTO) and by Prof. Nikos Vettas, Director General of the Foundation for Economic & Industrial Research (IOBE). Two highly relevant interventions followed by two Greek Euro MP’s, namely by Prof. John Maniatis MEP

from PASOK and Vice President of the S&D Group - Foreign Affairs, Security & Defense, International Energy Security and Cooperation, and by Nikos Farantouris, MEP SIRIZA -PS and Chair Professor Jean Monnet at the University of Piraeus.

Opening statements and short presentations were contributed by Mr. George Stasinis, President of the Technical Chamber of Greece, by Dr. Aristofanis Stefatos, CEO of the Hellenic Hydrocarbon and Energy Management Company (HEREMA) SA, by Miltos Aslanoglou, General Manager of the Hellenic Association of Energy Suppliers (ESPEN), by George Stamtsis, General Manager of the Hellenic Association of Independent Power Producers (HAIPP), by Panagiotis Ladakakos, chairman of the Hellenic Wind Energy Association (EWEA), by Konstantinos Giatzitzoglou, President of the Association of Mining Enterprises (SME) and CEO of GEOHELLAS, and by Dr. Stelios Loumakis, President of the Association of Photovoltaic Energy Producers (SPEP).

One of the highlights of the contributions during the first day of the conference was the presentation of the recently published World Energy Outlook 2024 report by the IEA. The report was presented in person by Mr. Oskaras Alsaukas, analyst and energy modeller at the IEA in Paris. Following that a group of distinguished energy experts commented upon various aspects of the report and discussed issues related to energy security and energy efficiency. Mr. Costas Theofylaktos, Secretary General and Chairman of the Energy Efficiency Committee of IENE, Dr. Panagiotis Papastamatiou, General Manager of

the Hellenic Wind Energy Association, Dr. Charles Ellinas, Senior Fellow at the Atlantic Council and UK – based Visiting Research Fellow of IENE, as well as Dr. Leo Drollas, Independent Energy Consultant, UK (online), participated in the discussion.

Other topics covered during the 2-day “Energy & Development 2024” Conference included

- > Investments in Energy
- > Exploration and Production of Hydrocarbons
- > Artificial Intelligence (AI), Digitalization and Energy Transition
- > Natural Gas
- > Electricity Market
- > RES and Electricity Grids
- > Alternative Fuels, Hydrogen, Synthetic Fuels
- > CO₂ Management and CCUS Systems
- > Climate Change, Sustainability and COP29

Before the close of the conference by the Chairman of IENE Mr. Costis Stambolis, Mr. Nikos Sofianos, Member of the Institute’s Executive Committee and Head of the RES committee, presented the conclusions of the two-day conference. IENE’s annual Conference was sponsored by a number of major Greek and international companies active in the fields of energy, industry and services with HELLENiQ ENERGY as Lead Sponsor and the following companies as Sponsors: Motoroil, TERNA Energy, IPTO, DEPA Commercial and KG Law Firm. Event Supporters included: EnSCo, DESFA, enaon, HEREMA, Energean, DAPEEP, Elpedison, and the Copelouzou Group. Also, the conference communication sponsors included the following Media: Energia.gr, Naftemporiki newspaper, NE Global.eu, PolicyJournal.gr, Flash.gr, and Euro2day.gr.

Conference Background Paper

A Background Paper entitled “Key Energy Issues in Europe with Special Reference to SE Europe and Greece” was prepared by the Institute’s research team on the occasion of IENE’s 28th “Energy & Development Conference”. The Background Paper was jointly prepared by IENE’s studies coordinator Dimitris Mezartasoglou and Costis Stambolis, the Institute’s Chairman and Executive Director. The paper reviews the latest developments at European level and then focuses on SE Europe and Greece. Europe’s midterm and long-term energy demand prospects are examined in conjunction with economic developments and taking into consideration the targets set by EU’s green deal and the drive to strengthen the continent’s strategic autonomy in view of rising dependence from China. In this respect and taking also into consideration latest geopolitical developments (see war in Ukraine and the crisis in the Middle East) the issue of energy security has of late emerged as key issue in European and national policies.

This Background Paper also deals with latest developments in the electricity and gas markets and discusses the great price volatility which is has become evident over the last few months and has caused great anguish to households and businesses. The high penetration of Renewable Energy Sources in the electricity mix in SE Europe and the latest trends in gas supply and use in the region is discussed, especially after the substantial decrease of Russian gas imports over the last two years.

The addition of new FSRU gas terminals in combination with the establishment of the Vertical Corridor is helping bolster energy security in the region but also facilitate gas to gas competition.

Conference information

The microsite also includes the Conference Overview and Conclusions, prepared by the Conference Rapporteur Mr. Nikolas Sofianos. This is an important 15-page document which outlines the sessions of the conference and highlights the most important points raised and also summarizes some of the discussions held. It is certainly worth reading it. It is worth mentioning that the 2024 conference was very well attended with 75 plus speakers and moderators participating and more than 400 delegates attending in person and online. Some 25 organizations and companies in all from Greece and other European countries actively sponsored and supported the event which is considered as being Greece’s largest energy event.



Visit the conference microsite

■ Participation of IENE at COP29 with keynote presentation by its Chairman on SE Europe’s decarbonization policies



IENE participated in COP 29 in Baku, Azerbaijan, in an event organized by the Institute and hosted at the Greek Pavilion on Tuesday, November 19, 2024. In a presentation entitled “Lessons learned and experiences gained from decarbonizing policies in SE Europe”, the Chairman of IENE, Mr. Costis Stambolis, outlined the Institute’s findings, based on many years of research, on the decarbonization process in the whole of SE Europe. The emphasis of the presentation, was to showcase the tiny changes that have taken place so far in the region’s energy mix, the persistence of fossil fuels, the energy policy failures and the reasons responsible for this setback.

Although the electricity mix has differentiated markedly with higher input of RES in several countries, (notably Türkiye, Greece, Romania, Bulgaria), the overall energy balance has not been affected much. Following billions of euros in investments in RES over the last 10 years, the impact in terms of lowering CO₂ emissions has been disappointing while electricity costs have skyrocketed in a number of countries in the region. The reasons are to be found in misguided energy policies, lack of appropriate regulation, lack of coordination and the adoption of ill-suited market models, especially in electricity. At the same time, there are policy reservations towards greater use of natural gas and nuclear power from certain EU quarters, which, in combination with RES, could actually lead to much lower emissions.



Following the presentation by Costis Stambolis, a lively discussion took place among attendees which was expertly moderated by Dr. Charles Ellinas, Senior Fellow at the Atlantic Council and Visiting Research Fellow at IENE. From his part, Dr. Ellinas outlined the need for the further exploration and ultimate utilization of natural gas deposits which have been identified in Cyprus, Greece and other countries in the region and which could greatly help EU countries lower costs, constrain imports and, at the same time, strengthen their energy security.

COP29 pledges \$300 billion a year for support for developing countries

At COP29, it was finally agreed that rich countries will pay developing countries some \$300 billion a year by 2035 to help them cope with the effects of the climate crisis. Earlier in the climate talks, held in Azerbaijan, it had been agreed that the most vulnerable countries need \$1.3 trillion a year to adapt to and combat the consequences of climate change. So, the final figure has been criticised by many. The question though remains as to who and how will actually pay this money. India accused the COP presidency of agreeing the “paltry sum” without hearing the country’s opposition to it. Nigeria called the figure a “joke”. And Malawi said that for the least developed countries it was “not ambitious”. Others say that any deal is better than no deal, considering it had looked like negotiations could collapse after developing countries walked out of the room when \$300bn was proposed, saying their “needs are known” and “they are being ignored”.



Read the analysis: www.iene.eu

IENE holds topical webinar on Energy Security in SE Europe

Judging from the number of participants and the many inquiries which the Institute received after the event, the Webinar on “Energy Security in SE Europe in View of Great Geopolitical Tensions”, which the organised on the afternoon of December 9, 2024, proved most opportune and highly relevant in view of latest developments.



In fact the event was convened a day after the rather abrupt fall of the Asad regime in Syria and the coming into power of the Islamist Hayat Tahrir al-Sham group backed by elements of the Syrian National Army. Following introductory remarks by the Chairman of the Institute, Costis Stambolis and by the moderator of the first panel and well-known energy specialist John Roberts, a presentation was made by Dr. William Gillett who is the EASAC Energy Programme Director, with EASAC standing for European Academies Science Advisory Council. Since the start of 2024, EASAC has been working on Energy Security having assembled an impressive number of European experts who are contributing to a very comprehensive report which the Council is preparing. Once published and presented, the report is likely to have an important impact on European thinking on the matter. Professor Ionut Purica, member of the PM's Advisory Council for Sustainable Development, Member of the Romanian Academy and an IENE Partner, followed with an exposition on the costs of energy system security in Romania and identified the contradictions of the currently pursued policies.

Dr. Yurdakul Yigiguden, independent Energy Advisor, former Coordinator of OSCE's economic and environment activities and an IENE partner in Turkiye, commented on the subject of energy security both from a Turkish perspective but also at European level. Ms. Alexia Tasouli, an Athens based journalist and Diplomatic Correspondent commented on all previous presentations while stressing the diplomatic angle in the whole energy security debate, and how energy considerations are at the heart of national and regional energy security policies. The second part of the Webinar was moderated by Mr. Christos Dimas, the Deputy Chairman of IENE and head of the Institute's Energy and Geopolitics committee. Dr. Amit Mor, CEO of Eco Energy Financial & Strategic Consulting and Senior Lecturer at Reichman University in Israel. Dr. Mor, who is also IENE's partner in Israel, provided a detailed briefing on the fast moving situation in the Middle East, Israel's role and the changing energy security scene in the broader region. A presentation by Dr. Phillip-Mark Spanides followed, where he focused on the reshaping of global geopolitics and the energy landscape after the US elections.

The Webinar concluded with an intervention by Dr. Stavri Dhima, a Tirana based independent Energy and Risk Assessment Consultant and the IENE Partner in Albania. Prof. Dhima addressed the issue of the main challenges facing Albania's Energy Security in relation to energy source diversification and regional integration. A wide-ranging discussion followed between the panelists but also taking questions from Webinar participants.

 The Webinar's microsite includes all the papers and presentations. Watch the full video via the Institute's Youtube channel.

Vertical Gas Corridor Initiative Colloquium attracts strong support

On May 22, 2024, a highly focused event convened by Greece's Independent Gas Transmission Operator, DESFA, was held in Vouliagmeni, Athens, in order to discuss latest gas market developments but also host the region's TSO's as they strive to deepen collaboration in order to launch the Vertical Gas Corridor.

Entitled “Vertical Corridor Initiative: The binding phase for the implementation of the pivotal expansion projects”, the meeting attracted representatives from almost all of SE Europe's Gas Transmission Operators. The meeting started with opening remarks by the CEO of DESFA Ms. Maria Rita Galli and opening addresses by Greece's Deputy Minister of Environment and Energy Ms. Alexandra Sdoukou and also by Csaba Marosvari, Hungary's Deputy State Secretary for Energy Security. General presentations were contributed by: Mr. Kostis Sifnaios, CEO of Gastrade which operated the FSRU in Alexandroupolis, Ms. Teodora Georgieva, Executive Director of ICGB in Sofia, Mr. Kuril Ravnachki, executive director of Director of Bukgartransgaz, Mr. Ion Sterian, Director General of Transgaz, Mr. Szabolcs Ferenz, CEO of FGSZ and Mr. Dmytro Lyppa, General Director of GTSOU.

A series of technical briefings followed by senior executives from the various TSO's but also from pipeline and LNG operators concerning market tests and booking of capacities in related infrastructures. It should be noted that in 2015 IENE carried out the first pre-feasibility study for the organisation and operation of the Vertical Corridor.



■ East Mediterranean Gas Forum (EMGF) Athens meeting focused on CCUS and hydrogen



With Greece having the rotating chair of the latest East Mediterranean Gas Forum (EMGF), it organized the group's annual get together in Athens on May 27/28, 2024. A select group of senior government officials and company executives had been invited to attend this highly focused gathering and exchange views on latest developments in natural gas exploration and production prospects but also discuss related issues such as CCUS and hydrogen


Following an invitation by the Hellenic Ministry of Environment and Energy, IENE actively participated at the EMGF meeting through its Chairman Mr. Costis Stambolis and Research Fellow Mr. Kostis Oikonomopoulos. This intensive two-day EMGF colloquium covered a wide range of topics which among others included an examination of Carbon Capture and Utilisation Systems (CCUS) and their role in decarbonising industrial activities in SE Europe and how East Mediterranean existing and planned gas infrastructure can be deployed to help in this direction. Another important area activity which attracted considerable attention on the part of EMGF participants was hydrogen. The whole hydrogen value chain was examined including the legal framework, investor potential, review of current projects and investment potential in the East Mediterranean area. Finally, latest gas exploration and production developments in the East Mediterranean region were reviewed with special reference to Greece.

 Further information on EMGF and its activities can be found in the official website of the organisation - www.emgf.org

■ IENE's Chairman stressed the arduous path towards decarbonisation in Kozani Balkan Energy Forum

Speaking at the Balkan Energy Forum on May 24, 2024, which was successfully organised in Greece's northern energy centre in Kozani, Macedonia (balkan-energy-forum.gr), the chairman of the Institute Costis Stambolis had the opportunity to address some of the pressing energy issues affecting the region. Which are none other than the significant energy import dependence and the still high use of coal and lignite. *"Decarbonising SE Europe remains an important challenge as inspite of significant investments in renewables over the last 10 years or so and billions of euros spent on clean energy sources, the region's reliance on solid fuels remains high"*, noted Stambolis. In his short presentation he highlighted these issues and provided some useful background data. In his intervention the Chairman of IENE also stressed the need to employ a cascade of clean technologies such as nuclear power (Bulgaria, Romania, Hungary, Croatia/ Slovenia and soon Turkey are already using nuclear) geothermal energy and natural gas. Especially LNG since it emits a lot less GHGE's compared to other fuels. In addition, the SEE and the East Med region has discovered considerable n.gas deposits and could over the years exploit them to the advantage of local economies but also to supply the rest of Europe. Other panelists in the first session of the conference in which the chairman of IENE participated, included the Deputy Minister of Foreign Affairs Mr. Costas Fragoyiannis, Ms. Alexandra Sdoukou, Deputy Minister for Energy and Ms. Maria Spiraki, a Euro MP. The panel was expertly moderated by Mr. Dimitris Diamantidis, a well-respected journalist from Thessaloniki.




 "The Difficult Decarbonisation Path in the Balkans" is available :www.iene.eu

■ IENE Chairman was Keynote Speaker and Moderator of Energy Panel at Belgrade Economic Forum

Following an invitation by the organisers, TGI Group International and the Delphi Economic Forum, Mr. Costis Stambolis, the Chairman of IENE, moderated the panel on energy at the Belgrade Economic Forum XXIV which took place in Serbia's capital on October 29-30, 2024. The panel covered the "Energy Outlook in Southeast Europe with a Focus on Serbia" and included a keynote presentation followed by a roundtable discussion with the participation of four distinguished energy experts.

After an introductory presentation by Costis Stambolis, which set the stage by describing the latest state of affairs in the energy sector in SE Europe (and can be seen [here](#)) the floor was given to the panel participants. They included Professor Dr. Nikola Rajakovic, President of the Association of Energy Specialists, Faculty of Engineering at the University of Belgrade, Luka Jovanovic, Development Project Director for Serbia at CWP, Ms. Jasmina Trhulj, Head of Electricity Unit, Energy Community and Dr. Plinio Nastari, President and CEO of Datagro Consultoria in Brazil. A number of important issues were raised related to regulatory, licensing and engineering aspects. The panel agreed that urgent steps needed to be taken by the government for improved coordination between the various state entities involved in the licensing process as well as the need for greater transparency.

 Visit www.iene.eu to read the presentation "Belgrade Economic Forum XXIV"

Professor Pandelis Biskas appointed as the new Chairman of the Institute's Scientific Council

Following the departure, due to heavy outside work commitments, of Professor Pantelis Kapros who for many years headed the Scientific Council of the Institute, the Executive Committee of IENE unanimously approved the appointment of Professor Pandelis Biskas as the Council's new chairman.



Dr Pandelis Biskas, the new chairman of IENE's Scientific Council, is Professor in Power Systems Operation and Energy Markets at the School of Electrical and Computer Engineering in Aristotle University of Thessaloniki. He worked for 4.5 years as a Power Systems and Electricity Market Expert in the Hellenic Transmission System Operator (HTSO), Day-Ahead Market Department. In this context, he was the HTSO delegate in the large project for the development of the wholesale electricity market platform in cooperation with AREVA T&D, in year 2007. He participated in several working groups for the harmonization of HTSO with the provisions of the "Greek Grid and Exchange Code and in groups for the harmonization of the market rules in the Central-South European (CSE) Region.

Professor Biskas has a very wide and extensive experience in a variety of applications related to Power Systems operations and electricity markets. His deep knowledge of the electrical power system and market restructuring, market operations and design, coupled with his advanced technical and analytical skills, makes him uniquely qualified to support electric industry restructuring

projects. He is widely recognized as expert in Energy Market Design, Scheduling and Unit Commitment applications. In addition, Prof. Biskas has been principal investigator in 80 funded research projects for energy studies, risk management analysis in the production, trading and retail sector, forecasting of the System Marginal Prices in short-term and mid-term horizon, consulting services on wholesale and retail electricity markets, etc and also participated as a senior researcher in another 35 research projects. As an electrical engineer he has undertaken and implemented more than 350 projects for energy studies, risk management analysis in the production, trading and retail sector, price forecasting, consulting services on wholesale and retail electricity markets with emphasis on market design, market regulation and ancillary services.

Professor Biskas is currently a permanent technical consultant to many European electricity production and trading companies for both regulatory and daily operation issues. It should be further noted that, with his IT development team, Prof. Biskas has developed Market Management Systems for the market operation and settlement in several non-interconnected islands in Greece (involving co-optimization of energy and ancillary services). A notable achievement of Prof. Biskas is the development and management of the ATLAS Energy Trading & Risk Management (ATLAS ETRM) system, which has been licensed and is currently used by leading energy companies in Greece in Cyprus. ATLAS ETRM is a fully functional system for aiding energy companies in managing their portfolio in the forward, spot and balancing markets.

The 3rd Turkiye & Black Sea Oil and Gas Conference held in Istanbul

Following an invitation by the organisers, Vostock Capital, IENE participated in the 3rd Turkiye and Black Sea Oil and Gas Conference, held in Istanbul on December 11-12, 2024. This annual event serves as a vital platform for gathering executives and experts from the oil and gas sector across the region to address emerging challenges and opportunities. Representing IENE, petroleum geoscientist and Research Fellow **Kostis Oikonomopoulos** delivered a presentation on the cost-benefit analysis (CBA) of CCUS hubs implementation in Greece, a follow-up to IENE's 2023 study on CCUS hubs.

The presentation highlighted the development of CCUS hub clusters as a forward-looking solution, with each hub designed to serve groups of industries in specific locations through a decentralised system. The study explores the transportation of liquefied CO₂ via ships and its geological storage, either in the Prinos field or alternative locations in Greece and abroad. Preliminary findings indicate

that substantial grant-type funding is necessary for the development and construction of CCUS hubs, as CCUS implementation remains financially unfeasible without subsidies. Currently, four CCUS projects are underway in Greece, all funded by EU facilities. These initiatives underline the critical role of CCUS in advancing the energy transition and mitigating environmental challenges.



Visit www.iene.eu to read the full presentation

■ IENE's Chairman was Keynote Speaker in the UK-ISES 50-year celebration of advances in solar energy utilisation



The Chairman and Executive Director of the Institute, Mr. Costis Stambolis participated as an invited keynote speaker in the celebratory event which was organized by the UK section of the International Solar Energy Society (ISES) which took place at the Royal Institution, in London, on September 19, 2024.

This special event was organized by some of the founders and board members of the UK section of ISES on the occasion of 50 years since its inception. Dame Mary Archer, Founding Hon. Secretary and Patron of UK-ISES and well-known researcher in the energy field (thermal methods of solar and energy conversion to power) and founder chair of UK's National Energy Foundation, welcomed the invited speakers and guests and recalled how in January 1974 together with the late Professor John Page, and under the patronage of RI chairman Dr. George Porter, she co-founded the UK section of ISES.

Other speakers included Dr. William Gillet, currently Director of EASAC's Energy Programme with a long career in solar energy research, Prof. Bernard Mc Nellis, another long standing solar researcher and former board member of ISES-UK, Prof. Nicola Pearsall, Emerita Professor of Renewable Energy at Northumbria University, Prof. Paul Ruysevelt, Professor of Energy and Building Performance

at the Bartlett School of Environment, Energy and Resources, University College, London, Prof. Paul Monks, Chief Scientific Adviser, UK's Department of Energy Security and Net Zero, Dr. Wolfgang Palz, former head of Renewable Energy R&D, European Commission and others.

In his opening remarks, Costis Stambolis recalled the vital role that the UK-ISES had played in introducing solar energy not only in the UK but also in Europe where Britain, as a new member of the European Community (UK entered the EC in January 1973), was eager to play a leading role, and his own involvement as a young researcher in solar building applications at the North East London Polytechnic (NELP), later at the Architectural Association and then in private practice. He further mentioned as how, from the very start, he was an active member of the UK-ISES and recalled with appreciation his cooperation, on different occasions and under various capacities, with the late Professors John Page, Brian Brinkworth, Peter Dunn, Dr. Michael Hutchins, the architect Dominic Michaelis and many others.

For his contribution to this special celebratory event, Costis Stambolis chose to present the solar picture in Greece and South East Europe where, as he underlined, developments have greatly accelerated over the last 5 years.



Visit www.iene.eu to read the full presentation

■ Greek Mining Enterprises Association Centenary Event in Thessaloniki



The Greek Mining Enterprises Association (SME) convened, on Wednesday, October 2, 2024, at the Porto Palace Hotel, in Thessaloniki, a festive event celebrating 100 years since its founding, entitled "Minerals, Green Transition, Climate Change". The Chairman and Executive Director of IENE, Mr. Costis Stambolis, was the invited keynote speaker for this special event.

In his address, SME's Chairman, Mr. Constantinos Yazitzoglou, stressed the criticality and vital importance of mineral raw materials, not only in terms of their rareness and cost of extraction, but also in view of their key role in industry and the economy. As Mr. Yazitzoglou underlined, *"even minerals which are not in scarcity and can be relatively easily substituted, can affect essentially the production or supply chains. Thus, mining must be considered as one of the most crucial activities for the national economy"*. From his part, Mr. Athanasios Kefalas, past Chairman of SME and currently Chairman of the Centennial Celebration Committee, stated that the Greek Mining Enterprises Association, as part of the events for the 100th anniversary since its founding, has dedicated the Year 2024 to Mineral Resources and projects, organizing 7+1 events in selected cities of the country. The Chairman of IENE, Mr. Costis Stambolis, contributed a special presentation on "Energy Transition and Mineral Resources".



Visit www.iene.eu for the presentation by the Chairman of IENE at the centenary event of the Greek Mining Enterprises Association

■ The emerging global and regional energy landscape explored in 2024 Greek-British Symposium



Once again, the annual Greek-British Symposium, now in its 8th edition, was held, this time in Thessaloniki on **October 10-12, 2024**. This year's Symposium examined the global supply chains in an age of geo-political uncertainty from a South-Eastern European perspective. The Symposium, which was organized by the British Embassy in Athens in cooperation with the Greek Embassy in London and backed by the Delphi Economic Forum and the British Council, attracted a select number of senior executives and top experts from Greece and the UK. Prevailing themes which were covered in the Symposium included the strategic and geopolitical supply challenges and the issues which confront industry in this respect, securing ample energy, moving things about and the role of Greece in SE Europe. A thought-provoking address on Serbia's "lithium treasure -solution or problem" was contributed by Journalist and Author Misha Glenny at the official dinner.

The panel on energy most appropriately titled, "securing ample energy" was chaired by Costis Stambolis, Chairman and Executive Director of the Institute of Energy for SE Europe (IENE). Panelists included the following well known executives and academics: George Alexopoulos, Deputy CEO of Helleniq Energy, Pantelis Biskas, Professor of electrical and computer engineering at the Aristotle University of Thessaloniki, Nick Butler, Visiting Professor & Chair at King's Policy Institute, King's College London, Apostolos Gkoutzinis, Partner, Millbank LLP and Glen Suarez, Chairman, Knight Vince Asset Management. Mr. Vassilis Apostolopoulos, CEO of the Athens Medical Group contributed a video message stressing the importance of clean energy in today's fast-moving technology- oriented society.

The panel discussion covered a diverse range of issues including the role of oil companies and refiners in particular in the energy transition, the new generation of e fuels and CO2 sequestration (George Alexopoulos), the ever rising global energy demand and its causes and the ongoing strife in promoting appropriate solutions (Nick Butler), the conundrum with highly volatile electricity prices in Greece and SE Europe (Pantelis Biskas), the hugely important legal and financing issues involved in energy transition without resolution of which progress towards viable solutions is really hampered (Apostolos Gkoutzinis) and the great promise of renewable energy in covering a substantial part of energy demand provided that adequate energy storage is foreseen (Glen Suarez).



■ Cooperation between Greece and Turkiye in the energy sector was raised in Atlantic Council's regional energy conference in Istanbul with IENE participation

Atlantic Council's major regional conference on Clean and Secure Energy was successfully held in Istanbul on October 9-10, 2024. Following an invitation by the organisers the Chairman and Executive Director of IENE, Mr. Costis Stambolis, participated and contributed in the panel which dealt with "Enhancing Turkiye-Greece relations and energy cooperation". The invitation came on the heels of the well-attended "Greek-Turkish Energy Forum" which the Institute convened in Istanbul on April 25, 2024.

The panel which was expertly moderated by Grady Wilson, Deputy Director, Turkey Programme, Atlantic Council, hosted a number of distinguished panels including Prof Tsarouhas, Head EU Projects & Partnerships and Turkey Research Program Director at Virginia Tech, Ms. Gurlu Gezer, Program Director, Foreign Policy Programme, The Economic Policy Research Foundation of Turkiye (TEPAV) and Mehmet Ogutcu, President of the London Energy Club and well-known energy expert. The discussion focused on areas of existing and potential cooperation in the energy sector between Greece and Turkiye and considerable part of the discussion was devoted on Turkiye's plans and strategy in joining the EU. Most panelists agreed that Turkiye 's path towards integration with the EU, if this was to be pursued more strongly, could help smooth a number of currently contentious issues such as the delineation of sea zones. In this respect Costis Stambolis noted that Greece since the early 2000's has lifted all reservations and is a strong supporter of Turkiye's EU candidature.

Gas is another area of common interest as Greece has been importing gas from Turkiye since the Greek-Turkish Interconnector was completed in 2007. Greece is also importing Russia and Azeri gas trough pipelines which cross Turkiye. As LNG imports are gradually growing in both Greece and Turkiye with new FSRU facilities being acquired by both countries, the Chairman of IENE observed that there could be ground for closer cooperation. In the panel discussion there seemed to be consensus that the friendship and cooperation agreement that was signed between President Tayyip Erdogan and Prime Minister Mitsotakis in December 2024, known as the Athens Declaration, has helped pave the way for political rapprochement.

 Visit the microsite of the "Greek-Turkish Energy Forum" for more information

■ Nuclear power workshop in Athens attracts high interest

Although Greece is a country where successive governments over the last 50 years or so have firmly stood against nuclear power, and public polls indicate that the large majority of the population is negatively inclined, the subject has somehow resurfaced over the last 18 months largely propelled by concerns arising from the government's decarbonisation programme and climate change anxieties. **A well timed and well organized the initiative to broach the discussion on nuclear power options for Greece was taken by the Athlos Energy start-up in a workshop organized in downtown Athens on October 21, 2024.**

The Workshop covered the latest developments and advances in nuclear power at global and EU level and started with a keynote address delivered by Fanny Tonos Paniagua from the IAEA. This was followed by a series of interventions by well-known experts including Alex Borovskis, of Helixos, Kalev Kallemets, the CEO of Fermi Energia, Berta Picamal Vicente, Legal and International Relations Director of Nucleareurope, and Barton's Sosnik, Chief Nuclear Officer of PEJ.

A host of other experts and energy professionals took part in a well-managed Panel Discussion while the second keynote address was contributed by Mr. Nikos Tsafos, who is the chief energy advisor to the Greek Prime Minister. This was followed by a panel discussion which was moderated by Mr. Thomas Lamnidis, chair of Lamnidis Law Office and a long-standing Partner of IENE. The panel included Prof. Athanasios Dagoumas, President of the Regulatory Energy Authority of Greece, Prof. Marios Anagnostakis of the National Technical University of Athens, Dr. Christos Housiadis, Chairman of the Greek Atomic Energy Authority and Prof. Manolis Kakaras, of NTUA and also a Partner of IENE.

From the address of Nikos Tsafos and the panel discussion which followed it transpires that neither the government nor the various institutions involved in the country's energy sector are ready yet to discuss the possibility of introducing nuclear power as an option in order to provide much needed clean electricity base load to meet Greece's expanding energy needs.



The high cost and perennial construction costs overruns involved in building conventional nuclear reactors and the uncertainty surrounding the development of Small Nuclear Modular Reactors (SMR's), were cited as strong disincentives for enabling a serious examination for the introduction of nuclear power to Greece to move ahead.



Visit www.athlos.energy for more info

■ Annual Hydra Shipping Conference focused on artificial intelligence and energy markets



Following an invitation by the organizers the Chairman and Executive Director of the Institute, Mr. Costis Stambolis, participated in the 15th **Hydra Shipping Conference which took place on September 13/14, 2024, on the picturesque island of Hydra.** Convened by the Fraternity of Decedents of Hydra's historic families and backed by major Greek shipping companies the event has emerged over the past years as an informal forum for shipping policy, forward thinking and relevant action.

Participants include representatives from some of Greece's leading shipping families and companies. The event attracted more than 100 delegates from Greece, UK, Switzerland, USA, UAE and from several other countries. This year the main theme was devoted on Artificial Intelligence (AI) and its impact on shipping. Following an invitation by the conference chairman, Mr. George Tsavlis, the Chairman of IENE moderated Panel II which was devoted on energy and geopolitics. In his introductory presentation Costis Stambolis focused on "Energy Commodities and Shipping".

As he underlined in his opening remarks, "as energy transition gathers pace, backed with religious zeal by the EU and some other countries, the cardinal question faced by several shipowners and ship operators is whether in few years from now, there

will be enough oil, gas and coal to ship around, or should shipowners start making plans to sell their fleets and look towards other business options".

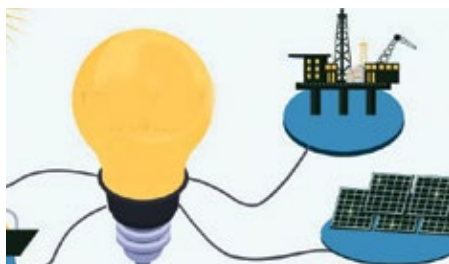
Following the presentation of a series of so-called hard facts, abstracted from the IEA, the OPEC, BP and IENE's own data base, the conclusion reached by IENE's chairman was that at least over the next 20 years world oil, gas and coal producers will pump and produce more than enough to keep the market in balance. "Pressure by governments and international organisations to fast-track energy transition by imposing arbitrary emission inspired changes on fuel consumed in industries, transportation, buildings and shipping have not been successful in curtailing demand for fossil fuels as latest figures show. On the contrary, we see a rise in demand", concluded Stambolis.



Visit www.aya.com.gr and www.iene.eu

■ IENE participation in 21st Israel International Energy & Business Convention

Invited by Dr. Amit Mor, the organizer of Israel's foremost energy summit and CEO of ECO Energy, the Chairman of IENE, Costis Stambolis, participated online as keynote speaker at the opening of the **21th Israel International Energy & Business Convention, that was held on December 2-3, 2024, in Kfar Maccabia Hotel, Ramat Gan.**



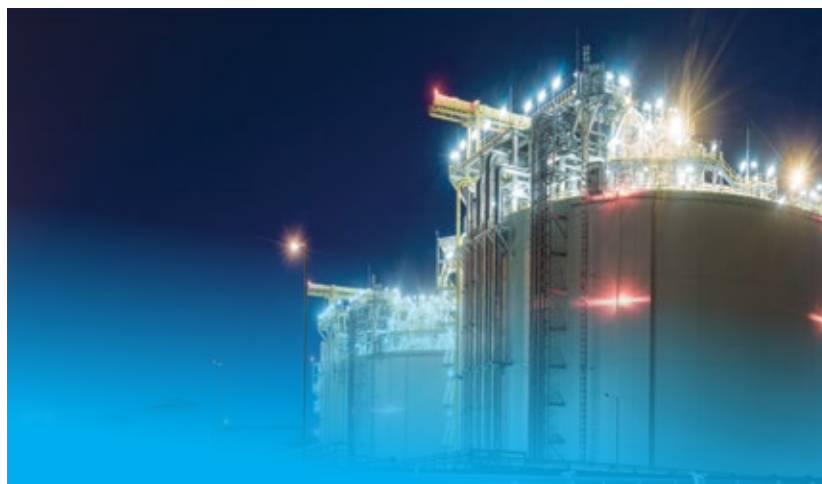
After thanking Amit Mor, who is IENE's partner in Israel, for his invitation and his cordial introduction, Costis proceeded with his presentation on **"Forging closer energy links in the East Mediterranean against regional geopolitical turmoil"**. As he pointed out in his opening remarks, today, the broader region of SE Europe and the East Mediterranean is rocked by two major military conflicts, a situation unseen since the end of the Second WW. The impact on energy markets has lately eased as can be seen in the behaviour of oil prices with Brent, the international benchmark, on a downward trend. Whereas in the case of gas, European markets are getting much tighter as supply worries mount. The countries in the East Mediterranean region, including Greece, Israel and Cyprus are on high alert with energy security topping their agenda.

As IENE's Chairman stressed, *"the negative impact on energy prices (oil, gas, electricity) and commodity market uncertainty so far has not deterred the countries in the region from their quest in forging closer energy ties between them"*. He then went on to describe a number of ongoing and potential cross border projects in the East Med region. He concluded by pointing out that, *"as the geostrategic priorities in the region change in response to the new reality in the field, so does the energy map of the East Mediterranean"*.



Read the keynote address on www.iene.eu

■ IENE actively participated in 1st CEEC London Roadshow



Following an invitation by the organisers the Chairman and Executive Director, of the Institute participated as keynote speaker in the **1st CEEC London Roadshow which took place in London on December 11, 2024.** CEEC, which stands for Continental Europe Energy Council, (www.ceecsg.org) was set up in 1994 and has been active in the oil and gas upstream sector, mainly in continental Europe, bringing together investors and energy companies.

Costis Stambolis, the current Chairman of the IENE, presented to the CEEC meeting a similar paper to the one he contributed for COP29, but he augmented this by adding an extensive reference concerning the opportunities for the oil and gas sector in connection to decarbonisation. Entitled *"Lessons learned and experiences gained from decarbonisation policies in SE Europe and Opportunities for the Oil and Gas Sector"*. He stressed the region's huge importance for European Energy Security given its proximity to major oil and gas producers and the role that SEE is playing in diversifying supplies and transmission routes. In this respect he pointed out the expanded role of the South Corridor in view of its multifaceted use by combining pipelines (gas and hydrogen), LNG terminals and FSRU's as well as CCUS facilities.



As the South Corridor gains prominence, explained IENE's chairman, *"we observe a growing interest for gas related infrastructure investment along its routes and on its fringes. A number of FSRU and CCUS facilities are at an advanced stage of planning with new installations slated to materialize in the period of 2026/2028. In a similar vein, we observe renewed interest for a regional gas corridor between Israel, Cyprus, Greece and Italy as more gas deposits are discovered in the East Mediterranean"*.

Mr Stambolis' presentation at the 1st CEEC London present and actively involved in various group discussions was Mr. **John Grigoriou**, a **IENE Partner** and **Vice President of CEEC**.



Mr Stambolis' presentation is available on www.iene.eu at the "Presentations" subcategory of the "Publications" menu



■ IENE welcomes four new corporate members

IENE wishes to welcome four distinguished companies and institutions that have recently joined the Institute as corporate members during 2024. These entities include Serbia's Clarion Partners Owner's Engineer, the Independent Bulgarian Energy Exchange (IBEX), the France-based Mirova Hellas SAS, as well as Germany's STARVERT Energy GmbH.



The Independent Bulgarian Energy Exchange was established in January 2014, as a fully-owned subsidiary of the Bulgarian Energy Holding EAD. IBEX holds a 10-year license for organizing a Power Exchange in Bulgaria. In April 2024, the license was extended for another 10-year period and is now valid until 31.03.2034. IBEX is a full member of the Single Day-ahead Coupling (SDAC) and the Single Intraday Coupling (SIDC). Since January 2016, IBEX EAD has been a full member of the association of European energy exchanges EUROPEX. As of 15 February 2018, Bulgarian stock exchange AD is the sole owner of the shareholder's capital of IBEX EAD.

• www.ibex.bg



Clarion Partners Owner's Engineer is an Engineering Services company providing owners engineer expert services in energy projects, which has recently developed a branch in Serbia. Clarion Partners provides results-oriented planning and strategic management so that owners and developers can make the best decisions for their projects and operations. The company has been supporting clients' capital projects for decades through its team of experts who serve as an extension of its client's management and technical teams, providing independent third-party engineering and consulting services.

• www.clarionpartners.rs



Mirova Hellas SAS is based in Paris, France, and is a part of Mirova, a global asset management company dedicated to sustainable investment and an affiliate of Natixis Investment Managers. The corporate purpose of Mirova Hellas SAS is the acquisition of any direct or indirect interests in any commercial, industrial, financial or other companies, French or foreign, created or to be created, whatever the legal nature or purpose of these companies, by any means, and in particular by way of creation, contribution, subscription, exchange or purchase of shares, securities or company shares, merger, partnership or grouping, or otherwise.

• www.mirova.com

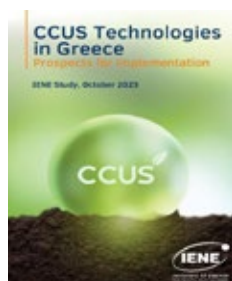


The German-based **STARVERT Energy GmbH** is a manufacturer of photovoltaic products intended to cater to the solar energy sector. The company offers services such as development, planning and approval, building, distribution and sale, operational management, and more.

• www.starvert-energy.com

A number of research projects completed by the end of 2024

As 2024 was coming to an end IENE research staff and associates raced to complete a number of important studies. A total of four research-oriented projects were actually completed in the fourth quarter of the year. The first in the above batch of projects was the one dealing with the **"Green Aegean Interconnector"** which was undertaken by the Institute last August under assignment by Grant Thornton. In this instance the IENE analysed the various regulatory and governance issues involved for a major electricity link which is planned to run from Greece to Southern Germany and when completed by 2030 it will have some 9.0 GW transmission capacity. The principal and potential operator of the project is Greece's Independent Power Transmission Operator (IPTO) who entrusted Grant Thornton with the feasibility study of the whole project. In turn the IENE, as part of its Advisory Services, carried out some of the assigned work as subcontractor to GT. In its work the in-house IENE staff was supported by two of the Institute's partners, namely by Aleksandar Mijuskovic, who examined all the technical regulatory aspects of the interconnection, and Mrs. Evgenia Tzaninni, who carried out most the legal regulatory work.



A second project was the follow up study on the original CCUS project which the Institute carried out last year. This research project which commenced last July is entitled **"Implementing CCUS Hubs in Greece: A Cost Benefit Analysis"**.

Building upon the road map established in the first study the IENE team carried out a thorough

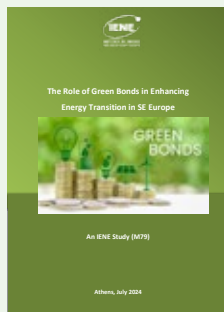
examination of the economics involved in building and operating a proper CCUS hub to serve primarily the needs of the Attica industrial area. The IENE team also included Dr. Nikos Koukoulas, a Research Associate of IENE and Mr. Theodore Terzopoulos, IENE Partner and chairman of the Institute's Natural Gas, Hydrogen and Biomethane committee. All engineering related work, including site survey and CCUS location characteristics, was undertaken by Asprofos Engineering.

The third study involved a survey of **East Mediterranean's Energy Options** in the context of the current energy transition and taking into consideration the fast-changing geopolitical situation in the region. Although the study is completed in pre final draft form it was decided to extend it by few weeks in order to include latest developments in Syria. The study will be released at the end of January and its results will be announced during the forthcoming Athens Energy Summit which will take place on February 5 in Athens.

Last but not least is IENE's annual report on **Greece's Energy Sector for 2024** which was completed early in December and presented on December 16 in a special event organised in association with the Technical Chamber of Greece (TEE).

All studies available on www.iene.gr at the subcategory of the "Publications" menu

Study explains the role of green bonds in enhancing energy transition in SE Europe



The IENE Research Team has just completed a timely study concerning **"The Role of Green Bonds in financing renewables and low carbon projects in SE Europe"**

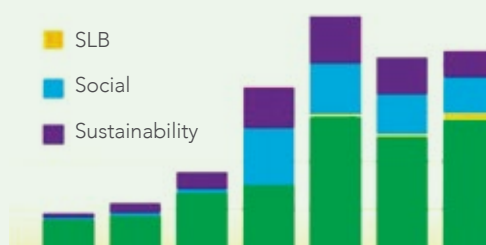
The study points out that the use of ESG criteria is becoming more and more relevant for project investment worldwide, highlighting the role of green bonds. According to this IENE study in 2023, Climate Bonds

captured aligned volume of USD870bn, 3% more than the 2022 figure of USD842.8bn. Two thirds of this (67.5%) were from the green bonds which added USD587.6bn reflecting a 15% year-on-year increase. Conversely, there was a year-on-year decline in the volume of social and sustainability bonds by 7% and 30% respectively. The smallest segment, sustainability-linked bonds (SLBs) experienced a remarkable 83% increase in aligned volume, reaching USD21.4bn compared to USD11.7bn in 2022, and Climate Bonds expects the aligned SLB market to grow rapidly in 2024.

In addition, the IENE study focusses on the important role of green finance in enhancing green energy solutions, especially in the countries of SE Europe, while it attempts to predict the outlook and challenges of green finance in volatile economic conditions. Moreover, the role of exchanges in accelerating the growth of the green bond market is also emphasized. In SE Europe, an issuance market for green bonds does not actually exist, with only a small number of private sector companies and financial institutions having issued green bonds, but there are great prospects as the region is moving towards decarbonization and RES and energy efficiency projects are constantly increasing.

As of January 2021, IENE became the first organisation in Greece and SE Europe to be granted Approved Verifier status under the Climate Bond Standard. This is a significant milestone in the development of green bond markets in SE Europe. Over the years, IENE has built a regional network of energy experts with considerable experience on RES and energy efficiency projects, including advisory and assurance professionals, with solid experience and hence capable in supporting clients on green bond issuance across SE Europe.

Aligned GSS+ issuance increased to USD870bn in 2023



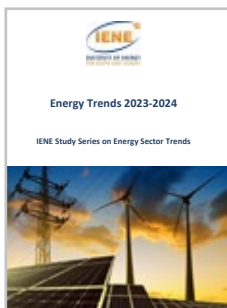
Source: Climate Bond Initiative

Visit www.iene.eu to read the study

IENTE expands its Research and Studies Programme

With a number of major studies due for completion within 2025, most important of which is the **"East Mediterranean Energy Options"**, which was presented in summary in the 15th SE Europe Energy Dialogue, the Institute is embarking on a number of new research-oriented projects. The objective being the coverage of specific areas of work which merit attention within the broader regional energy agenda.

The most advanced of the above projects is the second phase of the pioneering **CCUS applications in Greece study** which the Institute completed last year. The study can be accessed on the Institute's website (at the "Studies" subcategory of the "Publications" menu). Now, IENE's research team is looking into the economics of capturing and storing CO₂ as applied in one of the so called CCUS Hubs which, according to the completed study, are going to be needed in different parts of the country for processing and storing CO₂ emissions. IENE is now developing a mathematical model for the operation of the hub in which all economic parameters will be fed. The model should be in a position to study various operational scenarios so as to determine the cost of liquifying CO₂ and shipping it for permanent storage. A number of major energy companies are supporting IENE in this project as partners including DESFA, HEREMA, Helleniq Energy and Asprofos.



Another important project is the **"Energy Trends" study** which has been prepared for the Greek energy market and covers developments in 2023 and the first five months of 2024. The study identifies clear trends in electricity, gas and oil during this 17-month period but also discusses market operation problems (e.g. increased trend of RES electricity load offloading from the grid in view of balancing problems). The idea is for this study which covers the Greek market to be published twice yearly (May and

October), while a similar one but covering most countries in SEE to be published annually in November.

The financing of green energy transition in SE Europe is another area of work in which the Institute is paying particular attention. Being an approved verifier for the issuing of green debt by UK's Climate Bond Initiative, IENE keeps track of developments in the broader SEE and East Mediterranean region. In a new study, accessible on www.iene.eu, the Institute provides an all-round picture of the current situation and the prospects which lie ahead for the issuing of **Green Bonds in the SEE region**.

Last but not least the Institute is pressing ahead with the preparation of the next edition of its flagship publication, the **"SE Europe Energy Outlook"**. Due for publication in summer of 2025 this report is crammed with useful data, not easily found elsewhere, but also includes energy demand scenarios and investment outlook. Preparation is at an advanced with more than 25 contributing authors having already been commissioned specific segments of work and tasks. Additional projects on which the IENE research team is currently working on include an assessment and outlook of the Vertical Gas Corridor in view of renewed interest by the region's gas transmission operators, and a study on the development of major electricity interconnections in the East Mediterranean and the Adriatic and their ability and outlook in transmitting sizeable amounts of so called "green" electricity by the end of this decade but also by 2040.

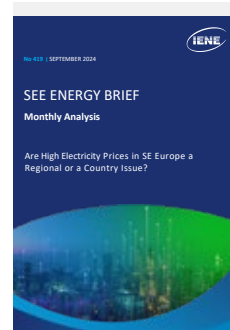


All studies available on www.iene.gr at the subcategory of the "Publications" menu

High electricity prices in SE Europe become endemic

Last September, Greek Prime Minister Kyriakos Mitsotakis sent a strongly-worded letter to the European Commission. SE Europe was struggling to keep the lights on, he said, and the EU had to do something about it. The approach that Mitsotakis adopted focused on creating a centralised energy market regulator and greater integration of national grids. According to market analysts, a key reason for the electricity crisis in SE Europe was the disappearance of Ukrainian imports as Russian methodically destroyed the country's grid. It's too easy to blame it all on Putin but this is neither productive nor constructive. The fact is Ukrainian electricity exports are over and we must find new ways to secure and augment electricity supply in Central and SE Europe. Not only this, but exports of electricity from Europe to the Ukraine have risen substantially, too, to make up for lost local generation, which means substantial additional demand that apparently needs to be satisfied, reducing the amount of available electricity for internal markets.

Mitsotakis's suggestion for greater grid integration essentially comes down to facilitating more exports of electricity between neighbouring countries in the region. This, he argued, would help secure supply and bring prices down - a big problem for governments in the region, which is not the wealthiest in the EU, to put it mildly. More interconnectors would indeed help regional exports. The problem is that they could jeopardise local supply of electricity. We know this because it has happened before. More specifically, it happened to Norway in 2022, when the country raised its electricity exports to Europe sharply to help plug the gap left by the cutoff of Russian gas supply. Exports of electricity rose by close to 50%... and



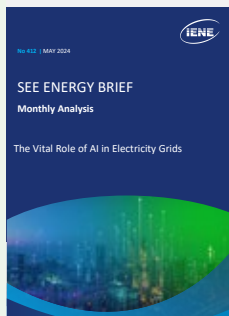
Norwegians' electricity bills rose in sync. According to **IENTE's September 2024 Monthly Analysis** when countries commit to exporting certain amounts of electricity to their neighbours they are bound by contracts to do so. The bind stands regardless of how much

electricity local generators produce, although stipulations about minimum guaranteed supply for the local market are always sensible. However, electricity output can vary, especially with weather-dependent generators such as hydro, wind, and solar. This could result in shortages for the local or the regional grid.



Read the analysis: www.iene.eu

■ The vital role of AI in electricity grids




In the current public debate concerning sustainable energy solutions, few topics dominate the agenda quite like artificial intelligence (AI), whether the focus is on unprecedented demand for electricity or the tools that could revolutionize the generation, management, and distribution of power.

AI will be a critical piece of the clean energy economy, according to a new report by the US Department of Energy and its six national laboratories. In 2023, President Joe Biden issued an executive order calling for the agency to produce a public report *“describing the potential for AI to improve planning, permitting, investment, and operations for electric grid infrastructure and to enable the provision of clean, affordable, reliable, resilient, and secure electric power to all Americans”*.

The rise of AI data centres, with their insatiable hunger for electricity, is asking an awful lot of the world’s utilities and grid operators. On the bright side, AI can also give a fair bit back, by helping transform ancient, overloaded and dumb electricity networks into something fit for the digital and decarbonised age.

America’s Department of Energy reckons that AI and other improvements to the country’s existing grid could liberate as much as 100 GW in transmission and distribution capacity over the next 3-5 years without the need to build new lines. That is about 13% of current peak demand of around 740 GW. **IENE’s May 2024 Monthly Analysis**, attempted to shed light on the emerging topic of AI in conjunction with the operation of electricity grids and how AI can transform them in the energy demanding future. As AI workloads soar, the International Energy Agency says that demand could double in the next two years. Many utilities in the US are scrambling to procure more power to meet growing load from new manufacturing plants, electrification, and data centers – often by proposing new gas plants.

This trend is worrying environmentalists and clean power advocates, who say AI could make decarbonization harder on an already-constrained grid. But many experts see it as an opportunity to get creative about expanding grid capacity and designing more energy efficient data centers – and hence the benefits of AI in the power sector may far outweigh the increase in power demand.

 All studies available on www.iene.gr at the subcategory of the “Publications” menu

■ The new challenges facing the SE the European Gas Market




In 2023, the EU gas system consolidated the notable changes initiated in 2022 to reduce reliance on Russian supply through increased LNG imports and demand reduction. This supply shift led to an important reshuffling of gas transit flows within the EU network moving away from the historical East-West transmission corridor. These reshuffled flows continued in 2023 and 2024 so far. In 2023, the EU gas system consolidated the notable changes initiated in 2022 to reduce reliance on Russian supply through increased LNG imports and demand reduction. This supply shift led to an important reshuffling of gas transit flows within the EU network moving away from the historical East-West transmission corridor. These reshuffled flows continued in 2023 and 2024 so far.



According to the ACER, the gas supply to Europe remained below the range observed before the Russian aggression in Ukraine. A combination of factors played a role and led to wholesale prices decreasing. On the one hand, with consumption substantially lower, storage levels stayed at historic highs. On the other hand, the expansion of the LNG import infrastructure capacity by over 50 billion cubic meters (bcm) in 2023 played a crucial role in facilitating an increase in LNG imports and helped to reduce supply bottlenecks as well as gas network congestions. With European countries turning to Algeria for gas supplies amid the disruption caused by the Russian invasion of Ukraine, the North Africa country has become Europe’s second-largest pipeline gas supplier after Norway. The EU and Algeria have maintained a long-standing strategic partnership on energy, aiming for a stable and reliable flow of gas. EU’s integrated gas market has proven resilient to the crisis, facilitating the reconfiguration of supply and demand and ensuring that gas flows where it is most needed. A combination of enhanced LNG supply, new gas infrastructure investments (in LNG regasification) and sharply reduced gas consumption has brought a new supply-demand balance equilibrium to EU gas markets, enabling the shift away from (the majority) of Russian gas pipeline supply. However, this equilibrium remains fragile in the short term, with the market navigating within a narrower comfort zone, expected to loosen as global LNG production ambitiously expands.

IENE’s June 2024 Monthly Analysis shed light on the latest gas developments at European and SE European level, highlighting the challenges that now emerge in the wider region, amid geopolitical risks, as the war in Ukraine and Hamas-Israel conflict are still in progress.

 All studies available on www.iene.gr at the subcategory of the “Publications” menu

Electricity interconnections in SE Europe in the forefront of market interest

The energy sector constitutes a major economic activity for most countries in SE Europe with a significant contribution to infrastructure investment and market activity. Even more important is the geopolitical role often associated with energy issues as they normally involve bilateral or even trilateral cooperation. A number of major cross-border energy projects are currently under development in the region, including gas and electricity interconnections, but also some very large projects on renewable energy (e.g. wind farms, photovoltaic plants, geothermal plants, biomass units, etc.) and large-scale energy efficiency interventions, especially in the building sector. As renewable electricity production is growing, it is becoming increasingly clear that the SE European region is in need of more and better electricity interconnections, something that is especially visible in island regions, such as Greece and Cyprus.



IENE's July-August 2024 Analysis focuses on the latest developments concerning the ongoing and planned electricity interconnections in the wider SE European region, highlighting their importance, in parallel with the increasing RES penetration, for achieving the goal of an integrated regional market.

As electricity interconnections increase in SE Europe, it is estimated that RES penetration and hence energy storage needs will rise. Combining interconnections with other technological innovations, such as creating an electricity highway and linking them to energy storage projects, such as pumped hydro and batteries and further investment in RES in the region, would allow for optimal trade in energy across the European system, given the time differences between countries. Completing the integration of electricity networks in SE Europe will require both sufficient long-term electricity storage projects and adequate cross-border and internal electricity interconnections. Of great significance are the developments regarding the electricity interconnections of the islands with the mainland grid, such as in Greece, and improved cross-border interconnections that will enable the national electricity transmission system to cover the requirements of the new targets for RES penetration and the incorporation of energy storage systems by 2030.



Read the analysis: www.iene.eu

EPIAŞ – Company Profile



In its series of Company Profiles, IENE reported on EPIAŞ, a leader in the energy sector - in Türkiye and in the wider Eastern Mediterranean region. More specifically, Enerji Piyasaları İşletme A.Ş. by its Turkish name, is an energy exchange company that was established on March 18, 2015. EPIAŞ legally incorporated under the Türkiye Electricity Market Law and enforced by the Energy Markets Operation License granted by the Energy Markets Regulatory Authority (EMRA) of Türkiye. EPIAŞ is responsible for managing and operating energy markets, including power, gas and environmental commodities. EPIAŞ ensures transparent, reliable and trustworthy market conditions as well as equal access for all market participants by providing a counterparty guarantee of transactions.

EPIAŞ provides market environments where Exchange members send their orders to buy or sell energy in determined delivery platforms. EPIAŞ operates Day-Ahead and Intraday Spot Power Market, Spot Natural Gas Market, Power Futures Market, Natural Gas Futures Market and Renewable Energy Guarantees of Origin System & Organized YEK-G Market. EPIAŞ also performs financial transactions such as settlement, collateral and invoicing in these markets, settlement activities regarding the Balancing Power Market (BPM) and Ancillary Services Market, imbalance settlement activities in natural gas market, the operation of the Renewable Energy Resources Support Mechanism and carries out eligible customer transactions. Besides all these, EPIAŞ develops all of the markets and services software in-house. EPIAŞ has a longstanding association with IENE and has supported the Institute on several of its activities, the latest one being the 1st Greek-Turkish Energy Forum of IENE.

IENE Advisory Services

Taking stock of its vast experience and considerable expertise in the study and analysis of geopolitical conditions and market behaviour as well as energy infrastructure development and related investments, the Institute is quietly branching out to include a range of Advisory Services among its activities. These services are provided to clients with quite a diverse portfolio of interests spanning such areas as electricity grids and international Interconnectors, cross-border gas transmission, renewable energy projects and energy efficiency improvement schemes. The list is completed with regulatory, governance and licensing issues.

A typical example of IENE's activity in the context of Advisory Services is the assignment recently completed for Grant Thornton in Athens. The IENE team examined a range of legal and regulatory issues related to the Green Aegean Interconnector project which is being promoted by Greece's Independent Power Transmission Operator (IPTO). With Grant Thornton having been awarded the project's overall feasibility study, the company sought IENE's expertise in order to examine in detail a series of specialist areas including the legal and regulatory framework for crossing third countries exclusive economic zones (EEZ), the regulatory framework governing international interconnectors, and governance issues together with barriers and mitigation measures.

IENE is offering Advisory Services is that concerning the certification and issuance of green debt. Already the IENE has been successful in organizing the issuing of a Green Bond in Cyprus for photovoltaic plant expansion on behalf of a Swedish renewables company, and helps the group's finance expansion in RES projects including renewable installations the region.

Understanding the power of energy

IENE's primary mission is to promote a broader understanding of the key energy and environmental issues in the SE European region and provide a suitable platform for the exchange of views and information, open to professionals, companies, stakeholders and others who are actively involved in the energy sector.

IENE's vision is to establish itself as the leading energy think tank in the region and at the same time develop a highly credible and worthwhile range of services covering research, assessment studies, sectorial surveys, educational activities, event organisation and networking. These services to be offered primarily to its members, but also to government and industry and other stakeholders.

Join us!



Learn more
about our work
and become
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