



When basic tenets of energy collide

Editorial

As our broader region is ravaged by two parallel wars, the frozen conflict in Ukraine now in its second year following Russia's invasion in February 2022, and the latest battle zone in Gaza following Hamas's brutal attack on Israel on October 7, the energy sector is once more on the throngs of uncontrolled geopolitical moves. Although the prices of energy commodities appear, at least for the time being, unaffected, that apparent tranquility may not last if any of the above two conflicts spirals out of control. With the Middle East scene far more susceptible for such eruption, according to latest assessments.

In view of today's geopolitical instability and persisting strong global demand for oil and gas, in spite of rising input from renewables, which alas is directed almost exclusively to power generation, some governments and international organisations are finding it necessary to prioritise energy security over green transition. Ensuring ample oil and gas stocks ahead of winter, with some countries, such as Germany, even resorting to highly polluting coal, has emerged as a clear priority and earlier calls for lessening dependence on fossil fuels have been put quietly aside.

According to EI's Statistical Review of World Energy, fossil fuels were still responsible for 82% of global energy consumption in 2022, in spite of several trillion dollar investment in RES over the last few years. In this sense, it is not surprising that oil majors, such as BP and Shell, have revised earlier plans for curtailing oil and gas production, have redirected investments away from RES, while the UK government has abandoned its until recently ambivalent position and has signalled its clear intent to exploit further its still quite substantial North Sea deposits in order to limit oil and gas imports.

To the above, we have to add the latest round of mergers and acquisitions on the other side of the Atlantic, whereby ExxonMobil has acquired Pioneer Natural Resources and Chevron has bought Hess. As analysts note, such moves, and similarly smaller scale acquisitions by less prominent companies, clearly indicate a new phase in hydrocarbon exploration in North America, as rising demand obliges companies to obtain access to new deposits in order to ensure continuing production. Although in Europe such a wave of consolidation in the hydrocarbon sector is not in the radar, there is renewed interest for exploration, especially in the North Sea, the Black Sea and the East Mediterranean. The war now fought between Israel and Hamas is a clear reminder that more oil and gas deposits need to be found in the region in order to secure production from alternative sources and locations.

Where does all this leave the much touted energy transition? Is this to be abandoned with a shift to new priorities? This does not necessarily need to be the case for the simple reason that renewables and other clean energy sources, nuclear and natural gas included, have already won their place in both the regional and global energy mixes, having aptly displaced chunks of oil and coal over the last 20 years or so. In the case of electricity, renewables have managed to gain a firm footing in the fuel mix with some countries, such as Greece and Romania, reporting penetration to the tune of 40% and 44% respectively. Such a high rate was unthinkable only ten years ago. In this sense, the further rise of RES and that of other clean energy sources is destined not only to survive but to thrive. In short, at this critical stage of energy market transformation, clean energy and fossil fuel sources will by necessity co-exist for some time as the change of existing infrastructure will take much longer than originally anticipated.

■ AGM Elects New Executive Committee and Five New Partners to the Board of Governors

The **35th Annual General Meeting of the Institute**, with 34 of its partners (out of 42) in attendance in person or via teleconference, was held on **July 10, 2023**, at the offices of its partner Mr. Gus Papamichalopoulos at KG Law firm in Athens. The key issues in the Agenda included the approval of last year's Annual Report and Accounts, the election of new partners to the Board of Governors and the election of a new Executive Committee, since the term of the current one officially terminated at the end of June.

Following a proposal by the Chairman and Executive Director of the Institute, which was unanimously approved by the partners, the new Executive Committee for the period 2023-2025 is as follows:

Chairman (executive): Mr. Costis Stambolis,
Deputy President: Mr. Christos Dimas,
Secretary General: Mr. Kostas Theophylaktos,
Members: Dr. Konstantinos Karagiannakos (DEPA), Ms. Sofia Politopoulou (DEDDIE), Mr. Nikos Sofianos (Independent Energy Consultant), Mrs. Eugenia Tzanini (Tzanini Law Firm and Associates).

Following their election, the Chairman and the Deputy Chairman, Christos Dimas, expressed their gratitude and thanks to the partners for their trust. The newly elected members, Sofia Politopoulou, Nikos Sofianos, and Konstantinos Karagiannakos also extended their appreciation to the partners for their support. The Chairman emphasized that the new ExecCom is fully committed to pursuing the goals and objectives of the Institute by making significant contribution to the Institute's work, including enhancing scientific research, improving the quality of information, and expanding contacts and membership across the region with the ultimate aim of increasing the Institute's outreach and broadening its influence.

In this context, as the Chairman said that, the new ExecCom in its first meeting will discuss the creation of two new Scientific Committees:

- (a) The setting up of an International Advisory Board (IAB) which will enable the participation of all overseas partners of IENE and also include other internationally recognized authorities. The IAB will be chaired by IENE Partner Mr. Thomas Lamnidis.
- (b) A Committee for the Circular Economy and Water Resources has been deemed necessary in light of recent developments, particularly the expansion of the Regulator's remit to include water resources. The Committee is to be chaired by IENE Partner Mr. Dionysis Xenos.



Both Thomas Lamnidis and Dionysis Xenos served as members of the outgoing Exec Com. Also, following a proposal, by the outgoing ExecCom the General Assembly unanimously elected the entry of five (5) new partners, as follows:
Ms. Liana Gouta (HELLENiQ Energy),
Dr. Amit Mor (ECO Energy, Israel),
Prof. Ionut Purica (Romanian Academy of Sciences),
Mr. Theodoros Terzopoulos (DEDA),
and Dr. Halil Yurdakul Yigitgüden (former Secretary General of the Ministry of Energy, Turkey's Ambassadors of OSCE).

Following a brief presentation of the Institute's activities and of the financial statement for 2022 and a review of activities for the first half of 2023, the Board of Governors unanimously approved the Annual Report and Annual Accounts for 2022. Following that, the Chairman reiterated the Institute's strategic goals which can be summarised as follows:

- Consolidation and deepening of the Institute's membership and also of its corporate base, in all countries of Southeast Europe so as to enhance IENE's presence in the wider region.
- Upgrading, streamlining, and improving the flow of information provided to members on a regular basis.
- The further development of the Institute's research capabilities.
- Offer a range of Advisory Services to companies, organizations, and banks, such as the issuing of Green Bonds, in cooperation with UK's, Climate Bond Initiative (CBI)
- Organize conferences, workshops, and related events (e.g., training seminars, webinars) on current issues of the energy agenda.
- Strengthening of the Scientific Committees of the Institute.
- Reorganize the External Relations and publicity mechanism the Institute.

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■ Dr. Hans Hutta (1945-2023) – In Memoriam



It is with profound regret that the Institute of Energy for SE Europe announces the passing away, on **May 17, 2023**, of one of its most trusted friends and collaborators, **Dr. Hans Hutta**, who was also a **Distinguished Fellow of IENE**. Hans Hutta was considered one of the most experienced professionals of the upstream sector not only in Austria but in Europe, with a recognized international management career of almost 40 years in the Oil and Gas industry in areas ranging from Western Europe, Central and Eastern Europe to the Russian Far East and Central Asia. Hans had covered positions from Area Manager CEE (OMV) to Branch Manager (OMV Bulgaria) and Director of the Representative Office of PETROM/OMV in Kazakhstan, among others. He was also General Director of the International Center For Petroleum and Industrial Management (ICM) in Vienna, Austria.

For the past 20 years and more, Hans had lectured at the Geoscience Department of the renowned Austrian State Mining University at Leoben (Styria) in Petroleum Economics and Management. He was the author of the two-volume standard reference book 'Introduction to Exploration Economics'. Hans Hutta was a long-standing research associate of the IENE, having, on several occasions, contributed his valuable experience and know-how as a reviewer of the Institute's publications, or in the Institute's events, either as a speaker or moderator over the past 12 years. IENE will always remember Hans Hutta with affection, as a great friend of the Institute and a reliable partner with a decisive help in expanding the Institute's presence in SE and Central Europe.

■ IENE Participated in Closed BPIE Meeting in Brussels to Discuss the Building Stock Observatory (BSO)

Following an invitation by BPIE's management IENE participated in the **first EU Building Stock Observatory (BSO) meeting** organized by BPIE in **Brussels on May 24, 2023**. The Institute was represented by Mr. Costas Theofylaktos, Secretary General of IENE and Chairman of the Institute's "Energy Efficiency" Scientific Committee.

This meeting was held under the auspices of DG Energy of the European Commission and sought to bring together BSO end-users, such as policy makers, industry experts, researchers and representatives from civil society, to discuss in depth the selection, validation and prioritization of a core set of indicators to be used in the BSO to be published. Application of these indicators will be mandatory by each EU Member State, under the revised Directive on Energy Efficiency of Buildings.

The meeting started with an introductory presentation of the project by the Director of the "Guidehouse" company, which has undertaken the project while an intervention was made on the framework policy by Paula Rey-Garcia, Deputy Head of Unit, DG Energy, who referred to the "Fit-for-55" policy that puts into operation the target of reducing greenhouse gas emissions by 55% by 2030. This policy includes important updates on key legislation related to the building sector: the Energy Efficiency Directive (EED), the Renewable Energy Directive (RED), while she referred to the Energy Performance of Buildings Directive (EPBD) as of the utmost importance.

The revision of this Directive brings into play a number of new elements that need to be critically reflected in the BSO, such as:

- Zero-emission buildings (ZEB), successor to nearly zero energy buildings (NZEB), with the inclusion of explicit total primary energy limits for new buildings.
- the definition of "deep renovation".
- the introduction of minimum energy performance standards for buildings
- the new requirements for Energy Performance Certificates (EPCs)
- the requirement for Member States to create publicly accessible EPC databases.

These should be integrated into a broader requirement for the creation of national databases on the energy performance of buildings, which should be reviewed at least once a year. The BSO is based on criteria defined and based on the existing policy framework, but also taking into account the expected challenges in the future. The participants of the BPIE meeting commented on the preselected list of indicators the observed, data gaps and their possible bridging, while recommendations were submitted to those responsible on how to integrate them into the existing BSO. The BPIE pledged to coordinate with the participants on new data at a meeting to be held at the end of 2023.



■ Budapest Nuclear Power Conference Crowned With Success

On **Tuesday, June 20, 2023**, the **“Fueling the Energy Transition with Nuclear”** conference jointly convened by the New Nuclear Watch Institute (NNWI) and the Institute of Energy for SE Europe (IENE) took place in Budapest. With a relatively high delegate turnover and a select group of speakers from regional and international organizations and well known companies the conference proved a success. Sponsored by Deloitte and supported by E-Infra the conference attracted more than 90 participants from all over Europe.

As Tim Yeo, NNWI's chairman and conference chairman said out in his opening remarks, *“this is the first conference we have held in Budapest in partnership with IENE and we are grateful to Deloitte and E-Infra for their support”*. He then went on to point out that it is appropriate to hold a Forum on “Fuelling the Energy Transition with Nuclear” in Hungary, one of the European Union member states which is committed to making nuclear an important part of its energy mix. Since NNWI's last Forum in London in October

the revival of the nuclear energy industry, both in Europe and further afield, has gained momentum and is spreading to more countries.” Tim Yeo also underlined the concerns about security of energy supply which were aggravated by the invasion of Ukraine have remained, even though the mild winter in Europe meant that the worst fears about price rises have not materialized. By contrast, anxiety about climate change is growing in the face of stark scientific warnings about an imminent rise in global average surface temperature to above the 1.5C goal set by the Paris Accord in 2025.

Speaking in the same vein Costis Stambolis, Chairman and Executive Director of IENE, noted that the path towards decarbonisation in SE Europe is arduous, to say the least, given the region's high dependence on solid fuels which until now have covered the bulk of its electricity needs. *“It is true that over the last five years or so there have been consistent efforts by governments and investors to introduce renewable energy sources, notably solar photovoltaics*



and wind. Yet, with the exception of Greece, Romania and Turkey, their impact is still to be felt. But by augmenting existing infrastructure and introducing new nuclear capacity to the regional grid one could accelerate the decarbonisation drive and also provide much needed stability in the form of base load which nuclear is uniquely placed to deliver», he added.

 In order to see the conference programme, visit www.newnuclearwatchinstitute.org

■ IENE Actively Participated in the “Green Transition Conference” in Sofia, Bulgaria

Following an invitation by the organizers IENE attended the 3rd edition of the largest green forum in the SEE region, titled **“Green Transition CEE – Energy Connectivity, Green Financing and Innovations”**, which took place on June **20-22, 2023 at the Sofia Event Center in Bulgaria.**

More than 130 panelists from 10 countries, from Azerbaijan, Bulgaria, Croatia, France, Greece, Moldova, N. Macedonia, Poland, Romania and Portugal participated in this large-scale event. The event turned out to be more of a conversation about the transformation of the economy and industry of the future, the anticipated

innovations and the social expectations of European citizens. IENE was represented by Mr. Costas Theofylaktos, Secretary General of IENE and Chairman of the Energy Efficiency Committee of the Institute, who presented IENE's view on energy efficiency in the new era. The conference commenced with opening remarks by HE Mr. Rumen Radev, President of the Republic of Bulgaria, and by Mr. Robert Zhelyazkov, Speaker of the National Assembly. The conference was also addressed by Mr. Maroš Šefčovič, Vice-President of the European Commission, by Ms. Lilyana Pavlova, Vice-President of the EIB, Mr Virgil-Daniel Popescu, Minister of

Energy of Romania, Mr. L. Nikolovski, Minister of Agriculture, Forestry and Water Management of N. Macedonia and Ms. Elisa Ferreira, EU Commissioner for Cohesion and Reforms.



 More details [online](#)



■ Athenian Policy Forum Presented an Opportunity for Debate on Regional Energy Issues

Upon an invitation by the organisers the Chairman and Executive Director of IENE participated in this year's international conference organised by the **Athenian Policy Forum on June 30-July 1, 2023**. In a well attended event which was held in the leafy campus of Deree College just outside Athens, the Chairman of IENE, Costis Stambolis expanded on the theme of **"The Evolving Energy Scene in SE Europe"**.

In his presentation Stambolis stressed the challenges which are faced by the SEE region as it has to cope with two major issues at the same time. On the one hand there are increased energy security challenges, especially in the aftermath of Russia's invasion of Ukraine and the continuing war, now in its second year, and on the other the arduous path toward decarbonisation which most countries in the Balkans have more or less embarked upon.

"It is quite clear that there are no quick fix solutions, especially when it comes to decarbonisation and given the region's historic and great social reliance on coal/lignite for power generation", observed IENE's Chairman. He concluded by saying that, *"moving away from coal without endangering big scale social unrest, new jobs and new skills will have to be introduced in the thousands. This is no easy task but latest investment trends, as identified in a latest IENE study and clearly described in the presentation, towards gas and renewables, are giving hope that the region may eventually (over the next 15-20 years) be able to transform itself to cleaner and more efficient forms of energy"*.



 View the presentation **online**



■ Greece's High Energy Dependence Highlighted By IENE in Balkan and Black Sea Forum

Upon the invitation of the organizers the Chairman of IENE, Mr. Costis Stambolis took part in the annual **Balkan and Black Sea Energy Forum** which was held at the prestigious **Athens Club on July 5, 2023**. Participating in the first panel whose broad theme was on Energy, and was expertly moderated by well-respected journalist Mr. Lambros Kalarrtyis, he joined three other distinguished contributors which included Dr. Yiannis Maniatis, former Minister of Environment and Energy and professor at Piraeus University, HE Ms. Lajla Brandt Jakhelln, Ambassador of the Kingdom of Norway to Greece & Cyprus, and Dr. Michael Thomadakis, Chief Officer Strategy & Development at DESFA, Greece's Gas Transmission Operator.

In his intervention and in the discussion that followed IENE's chairman stressed the following points:

1. Greece has huge energy dependence, higher than most countries in the wider Balkan and Black Sea area, and this is reflected in the high cost of energy which Greek consumers and visitors have to pay. We are talking of 78% overall energy dependency, much higher than the EU average.
2. RES will not solve Greece's energy problem. Although in 2022 Greece managed to produce on average 40% of its electricity from renewables, these contributed less than 18% of final energy consumption. Consequently, the country is heavily dependent on hydrocarbon imports but also electricity cross border transfers.
3. In 2022 Greece paid some € 15,5 billion to import energy (oil, gas, electricity) which corresponds to 7,4 % of its GDP and 77,6 % of its balance of external payments account, which hit a record deficit of -€ 20 billion in 2022.
4. Greece has still a window of opportunity to utilize its hydrocarbon assets which far from being stranded can be used to revitalize its debt ridden economy (of more than € 356 bn public debt, with highest Debt to GDP ratio in Europe and one of the highest in the world)
5. Hydrocarbon development and use is not incompatible with Green Energy policies since gas can provide the main resource base with 50% less CO₂ emissions, a strong LNG export base and much improved energy security.
6. Latest geological analysis places Greece's total hydrocarbon potential between 2.0 to 4.0 billion of oil barrel equivalent, and with respect to gas the commercial exploitable potential is estimated between 70-90 tcf or 2.0 to 2.5 trillion cubic metres. These are significant numbers that cannot be dismissed easily.
7. The new government has reiterated its support for continuing the hydrocarbons exploration programme. In this effort Greece could be assisted by Norway's huge experience and technical and managerial expertise.

 View more details **online**

■ First Green Bond Issued in Cyprus Achieves Certification for Best Practice Standards

IENE Acted as Verifier

First Green Solar Bond to be issued in Cyprus has met the rigorous criteria for Certification by the Climate Bonds Standard Board. The issuance occurred on **July 18, 2023**, and is a pivotal moment for climate action and sustainable finance in Cyprus and the East Mediterranean.

S.S.H Solar Finance PLC, a Cyprus-based company active in the development of photovoltaic parks, is behind this historic issuance. A verification report was prepared by the Institute of Energy for SE Europe (IENE), an Approved Verifier, confirming that the bond meets the organisation's exacting standards. The proceeds of the SSH Green Bond, estimated at €5.0 million, will be channelled into the construction and operation of a cluster of photovoltaic plants with an installed capacity of approximately 6.7 MW. These plants will be situated in the Dali and Malounta locations in Cyprus and are expected to be operational between 2024 and 2025.



Sean Kidney, CEO of the Climate Bonds Initiative, commented, *"This marks a significant step forward in sustainable finance for the region. We view this not just as an investment in renewable energy infrastructure but a start of transitioning to sustainable energy sources."*

"The bond exemplifies what can be achieved when organisations work collaboratively to align financial mechanisms with climate goals. This is about building momentum—creating a scalable model for green investments that can be replicated and refined. We look forward to seeing the positive impacts unfold in Cyprus! and in the broader region".

Costis Stambolis, Chairman of IENE, commented, *"This is certainly a milestone for green financing in SE Europe. We look forward working closely with investors in the region interested in attracting financing through the issuance of green bonds. We are most appreciative of working together with CBI on this occasion and the highest issuance standards it represents".*

■ Issues Highlighted in 14th Hydra Shipping Conference



IENE actively participated in this year's **Hydra Shipping Conference** which took place on **September 16, 2023**, on the island of **Hydra in Greece** and brought together some top paragons of Greek shipping. The Institute was represented by its Chairman and Executive Director, Mr. Costis Stambolis who accepted an invitation by the chairman of the conference Mr. George Tsavlis. Other keynote speakers included Mr. George Pateras, the president of the Marine Chamber of Greece, Mr. John Platsidakis, former chairman of INTERCARGO, Prof. Dinos Arcoumanis, Panos Zachariadis, of Atlantic Bulk Carriers Management, Mr. Andreas Adrianopoulos a well-known energy and financial analyst and former Minister of Industry, Mr. Constantinos Petropoulos, head of Structured and Shipping Finance at Piraeus Bank, Mr. George Xiradakis, CEO of XRTC Business Consultants and others.

In his presentation the Chairman of IENE spoke on the "Outlook for Fossil Fuels and their Impact on Shipping" and drew comparisons between consumption patterns over the last 50 years or so. *"Over the last 20 years or so, since Climate Change started to determine energy policies, the IEA and other organizations speculated as to when peak oil could be achieved setting one target after the other. First it was 2020, then it was 2025, 2028, 2030 and so forth. Such arbitrary targets systematically underestimated the developing world's insatiable thirst for oil and gas as they are still (together with coal) the cheapest and most easily available forms of energy to satisfy rising energy needs. World Energy Outlook 2023, show that peak oil may not actually be reached before 2040 by which time production is expected to plateau. Efforts by governments and international organizations to fast-track energy transition by imposing emission inspired change of fuel in industries, transportation, buildings and shipping have not been successful in curtailing demand for oil, gas and coal. On the contrary, we see a rise in demand. Peak oil demand is now forecasted beyond 2040 while gas demand may not climax until a little later, and so we can take a breath."*

Hence, Greek shipowners are well placed, noted Stambolis in his concluding remarks, *"to take advantage of the new global energy and environmental order. By constantly modernising their fleets and showcasing responsible ship management Greek shipowners will continue to compete successfully in a most challenging global environment."*



View the full presentation **online**

■ IENE Delegation Visits Saudi Arabia

Upon the invitation of the embassy of the Kingdom of **Saudi Arabia** in Greece a delegation of senior IENE officers paid a two day visit to the Kingdom and held meetings with research establishments and government officials. More specifically the Institute's chairman Mr. Costis Stambolis, accompanied by the Secretary General, Mr. Costas Theofylaktos, visited the Kingdom's capital Riyadh on September **26-27, 2023**, on a fact finding mission. The purpose of this mission was to ascertain the degree of interest on the part of Saudi entities to engage in discussions and eventual cooperation with the Institute on areas of mutual interest in the broad energy sector.



In this context on Tuesday, September 26, the IENE delegation paid a visit to the King Abdullah Petroleum Studies and Research Center (KAPSARC) where they met with the President, Mr. Fahad Mohammed Alajlan, the Deputy President Mr. Axel Pierru and a number of senior research fellows. Following a presentation of KAPSARC's activities and research focus by the head of communications the floor was given to IENE's chairman where in a similar vein he presented the Institute's mission and vision, its four operational pillars (research and

studies, information dissemination, advisory services and events and education) and its current work.

In his presentation Costis Stambolis also referred to the Institute's background, its milestones, its organisational structure and its organic growth over the years. A joint presentation, with Costas Theofylaktos, then followed of IENE's flagship publication, the "SEE Energy Outlook 2022" where various facets, especially those related to energy security, electricity interconnections, energy efficiency, renewables, and energy technologies were highlighted. A lively discussion ensued where a number of areas of mutual interest and potential cooperation were examined. The Chairman of IENE then extended an invitation to the President of KAPSARC to participate and speak at IENE's forthcoming annual conference, the "Energy & Development 2023", to be held in Athens on November 14/15, 2023. The visit to KAPSARC was concluded with a tour of the Centre's impressive facilities and its extensive campus, including a 5 MW photovoltaic plant which covers the bulk of the buildings's electricity needs. On the second day of their stay in Riyadh the IENE delegation held discussions with a joint group of senior officials from the Ministry of Energy and Aramco. During this meeting the Chairman and Executive Director of the Institute, Costis Stambolis referred to the political context of IENE's visit to the Kingdom which in a sense is a follow up of Crown Prince Mohamed Bin Salman's visit to Greece in June 2022 and Saudi Arabia's sustained economic and diplomatic outreach to Europe and beyond. Seen from this perspective the issues which were examined focused on joint development projects between Saudi Arabia and the SEE region including electricity interconnections, hydrogen and CCUS applications. Consequently a number of opportunities for cooperation and joint action were identified by both parties.

■ IENE Participated in "Green Energy Investment Forum" Convened by Athens University

On Wednesday, **October 11, 2023**, the Institute participated in the annual "**Energy and Climate Change**" conference organised by the Energy Policy and Development Center of the National and Kapodistrian University of Athens (NKUA), following an invitation by Professor Dimitris Mavrakakis, the chairman of the Center. More specifically the IENE, through its Chairman and Executive Director, Costis Stambolis, contributed in the 10th Green Energy Investment Forum by presenting a paper on the "Green Energy Investment Challenges in SE Europe".

A key aspect of the above presentation concerned the difficulties which are now faced across SE Europe in adopting clean energy technologies in a sufficiently large scale to be able to have a sizeable impact in the electricity and energy mix of the region.

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The IENE presentation concluded by presenting an overview of the investment outlook (2022-2031) in the whole SEE region as it is stated in the Institute's flagship publication, the "SEE Energy Outlook 2022". Out of a total € 468 billion which covers the entire energy sector some €260 billion are earmarked for electricity and RES projects. If we add the anticipated investments in various energy efficiency programmes the total amount in clean technologies reaches €350 billion.



16th International Conference on Energy and Climate Change

11-13 October 2023
Athens, Greece

■ Keynote Address on Energy Prices at Athens Academy Colloquium delivered by IENE's Chairman



Following an invitation by the chairman of the prestigious **Athens Academy "Energy Committee"** Professor Loukas Christoforou, the Chairman and Executive Director of the IENE Costis Stambolis participated on **October 13, 2023**, in a special colloquium convened by the Academy to discuss energy prices and presented one of the keynote addresses. Other speakers included Professor Nicholas Vettas, the head of the Foundation of Economic and Industrial Research (IOBE), Professor Pantelis Capros, former minister and government advisor, Dr. Thomas Thomadakis, Strategy and Development Director at DESFA, Andreas Siamisis, CEO of Helleniq Energy, Professor Christos Zerefos, Prof. Athanasios Dagoumas, chairman of the Energy Regulatory Authority and other distinguished energy experts while the Minister of Environment and Energy, Mr. Theodore Skylakakis contributed opening remarks.

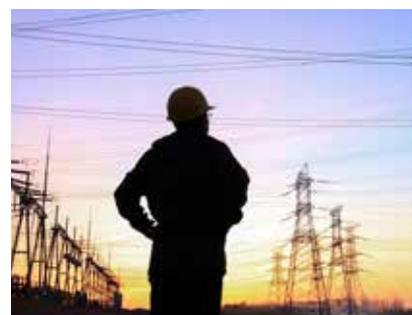
In his address (see here) Costis Stambolis discussed the development of energy prices over the years, mainly in Europe, and drew comparisons between oil, gas and electricity prices. He analysed the way that oil prices behaved over the last 50 years or so and recognised March 1983 as the turning point on how prices are formed following the introduction of oil futures at NYMEX in New York, using the WTI oil variety, and a year later at the Commodities Exchange in London where Brent oil was used as reference commodity.

Hence, noted IENE's chairman, oil prices stopped being determined on a bilateral and largely arbitrary basis, following agreements between the Gulf producers and major western importers, with prices now being set by the futures market and by Platts, which developed a worldwide system to track and report on spot oil prices.

In Europe in the 1990's major developments took place in the energy sector following EU's decision to move ahead with bold plans to unbundle the electricity and gas markets. This led to the creation of a pool type system which allowed the participation of several players, not just the incumbent companies, in wholesale electricity price formation. As the markets evolved and became fully liberalised by early 2000's the EU introduced the "target model" and encouraged the setting up of energy exchanges throughout Europe.



The positive experience of oil price formation through a well organised market was used to set up various energy exchanges through which wholesale electricity and gas prices were now determined using a merit order system for the participation of the different fuel sources. With the most expensive fuel responsible for the determination on a daily basis of the Marginal System Price.



Although a lot of criticism from all different quarters has been levelled against Energy Exchanges, and how their operation has contributed to the phenomenal rise of wholesale electricity and gas prices over the past few months, price formation has responded to legitimate market signals and adequately reflects risk factors, Stambolis underlined in his presentation.

Currently an EU backed electricity market reform process is under way in order to allow the RES prices to register somehow into the merit order system or even provide the basis for a parallel RES market. In a final remark the Chairman of IENE pointed out the huge differences prevailing between electricity and gas prices in the USA, China and Europe. The extremely high and artificially inflated CO₂ prices, the result of aggressive green policies, are largely to blame for the very high electricity prices in Europe which cannot possibly compete with much lower prices in China which relies more than 60% on coal for its power generation and does not impose any CO₂ related taxes, concluded Stambolis.



View IENE's Chairman address to the Athens Academy Colloquium **online**

■ “Energy Security and Sustainability in Europe” Was Key Theme of 7th Greek-British Symposium



A unique event which covered comprehensively the growing relations on energy security and sustainability between the UK and Greece was successfully held in **London** from **October 15 to 17, 2023**. The **Symposium** brought together some top speakers and commentators from government, industry, and stake holders from the two countries. The Symposium was hosted at the London premises of the Allan and Overy legal firm while events took place at the Greek Embassy and at the Foreign, Commonwealth and Development Office where the official dinner was hosted in the Locarno Suite.

The Symposium opened with welcome addresses by Costas Mitropoulos, Co-Chair of the Symposium, followed by HE Matthew Lodge, His Majesty’s Ambassador to Greece and by HE Yiannis Tsaousis, Ambassador of the Hellenic Republic to the UK. Symeon Tsomokos, chairman of the Delphi Economic Forum contributed the Introduction to the Symposium. The opening plenary included keynote speeches by Nikos Dendias, Greece’s Minister of National Defense and by the Rt.Hon.Graham Stuart, MP, UK’s Minister of State for Energy Security and Net Zero. The panel on the Changing Energy Landscape

which followed, was expertly moderated by John Roberts, Energy Security Specialist and panelists included Dev Sanyal, CEO of Varo Energy, Marianthi Stavrinou, Country He’d of BP in Greece, Rikard Scoufias, chairman of the Hellenic Hydrocarbon & EnergybReslirces Management Company and Rob Turner, Partner and Head of Energy at PWC in the UK.

The Energy Security and Geopolitics panel, which was moderated by journalist Alexia Tasouli, included statements by ex ambassador Konstantinos Bikas, from the Mytilineos group, Yiannis Maniatis, ex Minister of Energy and currently professor at the University of Piraeus, Sophie Westlake, Deputy Director and head of the international Energy Unit at the UK Department of Energy, Paddy Blewer, head of corporate communications at Energean while an intervention was made by George Katrouglos, professor of Public Law and former Minister of Foreign Affairs of Greece. Other panels covered the areas of sustainability and technology with speakers which included Maria Damanaki, independent energy advisor and former EU Commissioner for Maritime and Fisheries and Tim Yeo, former Minister of State for the Countryside and Environment and currently chairman of the World Nuclear Institute.

Another session focused on Cooperation Opportunities in Energy and the Environment which was moderated by Nikos Malkoutzis, editor and founder of MacroPolis. Costis Stambolis, the Chairman and Executive of the IENE actively participated in this last session and contributed a historical perspective on the UK- Greece cooperation in the energy sector in the post war period while he identified a number of areas where cooperation is currently developing between UK and Greece.

■ ENE Contributes to Greek-Swedish Business Forum

On **October 19, 2023**, the **8th Business Forum Greece-Sweden** took place in Athens jointly organised by the Hellenic Swedish Chamber of Commerce and the Embassy of Sweden in Athens. The key theme of the Forum was the emergence of the “New Business Environment”. Following an invitation by the organisers the IENE, from the start, assisted with the preparation of part the programme which dealt with the energy, sustainability and the climate agenda.



Welcome remarks were contributed by the President of the Hellenic-Swedish Chamber of Commerce, Ms.Rania Patsiopolou and by HE Johan Borgstam, Ambassador of Sweden in Greece. The Secretary General of the IENE, Costas Theofylactos was the Expert Panel Moderator of the Session on, “ Charging the Future” which dealt with sustainable energy solutions and electrification. Speakers included Lars Martensson, from Volvo Trucks, who spoke on “ Electrification in Europe as an Industry Transformation”, Michael Chatzigakis, CEO of Hexicon Power who talked on Floating Offshore Wind installations, and Dr.Costas Balaras, Research Director of the Institute for Environmental Reasearch & Sustainable Development at the National Observatory Athens (NOA), who discussed sustainable solutions for the built environment. Another session examined “ Geopolitics and Business - the Changing Geopolitical Scene and New Patterns in Supply Chains”. The Prime Minister’s energy advisor, Mr. Nick Tsafos and the Director General of the Foundation for Economic and Industrial Research (IOBE), Professor Nikos Vettas.The last session of this well attended event covered the impact of Artificial Intelligence (AI) in the workplace of the future.

■ The 14th SEE Energy Dialogue Highlighted the Crucial Role of SE Europe in Enhancing Europe's Energy Security

The two-day IENE conference, **14th SE Europe Energy Dialogue (14th SEEED)**, held in a hybrid format in Thessaloniki, on the **25th & 26th of May, 2023**, brought together speakers from 14 countries in SE Europe and the wider region, as well as influential international organizations and institutes like the IEA and the Oxford Institute of Energy Studies. The presence of regulatory bodies like RAE further underscores the significance of the conference. The conference focused on the vital role played by SE Europe in ensuring energy security for the entire European continent, particularly in light of recent geopolitical developments.

A large number of delegates coming from Greece, SE Europe, and the Eastern Mediterranean participated in the conference, both in-person and online. Among them were top executives of major energy companies, professionals, and experts from various energy sectors, senior government officials, and academics. The conference's reach extended to a wide range of individuals, reflecting the diverse and extensive interest in the event. A total of 64 speakers participated in this year's SE Europe Energy Dialogue, reaffirming its position as one of the leading energy events in the region. These speakers delved into recent developments spanning the entire spectrum of the energy sector.

The 14th SEEED explored the following themes in detail:

- Global and regional energy scene
- Geopolitics and energy security in SE Europe
- The strategic role of natural gas and LNG
- Exploration and production of hydrocarbons in SE Europe and the Eastern Mediterranean
- Regional electricity networks and energy trading
- Competition in the electricity and natural gas markets
- Power Exchanges in SE Europe
- Renewable energy sources (RES) and hydrogen
- Energy efficiency and co-generation
- Energy investments in SE Europe
- Transportation outlook: refining, green fuels, electric vehicles, LNG

The special features of this year's "SE Europe Energy Dialogue" and a group of distinguished keynote speakers, covering core energy areas, attracted wide attention at IENE's top annual event. The Ambassadors' Forum, the "Country Reports from SE Europe", as well as the sessions on Geopolitics and Energy Security in SE Europe, and the session on the Regional Power Exchanges, underscored the uniqueness of this year's SEEED. Another feature of the event was the participation of representatives from influential energy industry associations in Europe, such as Fuels Europe, EFET and AVERE.



More specifically, the Ambassadors' Forum, expertly moderated by John Roberts, the Conference Rapporteur, with the participation of HE Mr. Matthew Lodge, UK's Ambassador in Greece, Mr. Erik Holmgren, Economic Counselor at the US Embassy in Athens and HE Mr. Michael Christides, Ambassador (a.h.) and former Secretary General of PERMIS-BSEC, showcased the international interest in energy developments in SE Europe.

Additionally, the "Country Reports from SE Europe" contributed by acclaimed experts, offered a detailed look into each country's energy situation, providing essential context for comprehending the energy dynamics of SE Europe. The conference also underscored the geopolitical aspect of the current energy crisis, under the light of the ongoing war in Ukraine, with a dedicated session on Geopolitics and Energy Security in SE Europe. Dr. Katja Yafimava, Senior Research Fellow at the Oxford Institute for Energy Studies, UK, was the keynote speaker in the session on Energy Security and the Strategic Role of Gas, whereas as Mr. Efthimios Tartaras, the Head of Geoscience & Advisor to the CEO in HEREMA, Greece, was a speaker in the Oil & Gas Exploration session of the 14th SEEED. Professor Victor Mocanu, Dean of the Geology and Geophysics Department at the University of Bucharest, focused on hydrocarbon exploration and production in the Black Sea area while Prof. Ionut Purica, also from Romania, contributed to the "Energy and Geopolitics in SEE" session, which was expertly moderated by Mr. Slavtcho Neykov, chairman of the Board of EMI in Sofia, Bulgaria.



In its effort to enrich the content of the 14th SE Energy Dialogue, the Institute had prepared and circulated in advance an important Background Paper, entitled “Key Energy Issues in SE Europe: Current Challenges and Prospects”, which helped put in context the whole meeting. This comprehensive document provides an inclusive standpoint on the key energy issues in SE Europe focusing on current issues and the challenges ahead.

The Background Paper of the 14th SEED, prepared by IENE’s Research Team, describes “the big picture” of the energy sector in SE Europe, comprising the core 15 countries of the region as well as the peripheral ones, as defined by IENE in its flagship study, the “SEE Energy Outlook 2021/2022”.

Mr. George Spyrou, Executive Director at Terna Energy S.A., Greece, was the keynote speaker in the session on Key Issues in Regional Energy Transition, while Dr. Margarita Dareioti, Project Manager at DEPA, Greece, and Dr. Muhsin Mazman, Director Energy Storage Division at T-Dynamic, Turkey, were among the speakers in the same session. Mr. Konstantinos Chatzifotis, EU Affairs Manager at Motor Oil, Greece, was the keynote speaker in the session on Transportation Outlook, Hydrogen and CCUS, covering regional issues concerning refining, green guels, electric vehicles and LNG, while other significant speakers in the same session included Mr. Philippe Vangeel, Secretary General of AVERE, in Brussels, representing the European Association for Electromobility, and Ms. Marta Yugo, Policy Executive at Fuels Europe, Brussels. In the session on Electricity & Gas Market Dynamics, among the speakers were Ms. Efi Millionsi, Market Analysis & Back Office Department Manager at ELPEDISON S.A, Greece, Prof. Pantelis Biskas, Associate Professor in the Department of Electrical and Computer Engineering at the Aristotle University of Thessaloniki (AUTH), Greece, and Mr. Arben Klllokoqi, Director for Electricity Market Design of EFET (European Federation of Energy Traders) took the floor in this year’s “SE Europe Energy Dialogue” event.

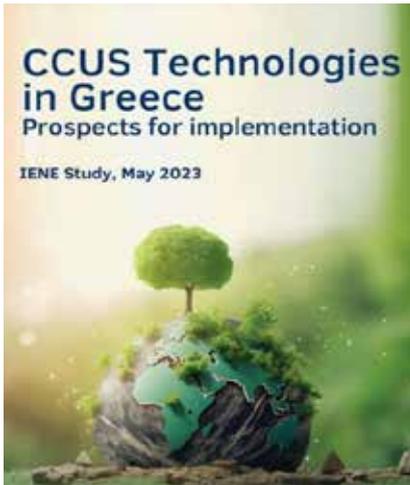


Finally, the vital role and tasks of the region’s Power Exchanges was discussed in a special session moderated by Mr. Aleksandar Mijuskovic, who is the Chairman of the Board of Directors of CGES in Montenegro. Other contributors to Session VII included Mr. Sokol Dishnica, CEO at ALPEX, the Albanian Power Exchange, Dr. Tamer Emre, Director of Market Operations at EXIST, the Energy Exchange of Istanbul, Mr. Antony Zhelyazkov, Head of Market Operations at IBEX, the Bulgarian Energy Exchange, Mr. Milos Mladenovic, Managing Director of SEEPEX, the SEE Power Exchange, located in Belgrade and Mr. Manolis Kalaitzakis, Director for Strategy and Business Development of the EnEx Group in Athens.

The Background Paper aspires to brief the participants of this major conference on the key issues which confront the region’s energy sector by summarizing latest developments. These include the relatively high dependence of most of SE European countries on solid fuels, mostly used for power generation, high dependence on imported oil and gas, lack of adequate gas supply routes and interconnections (especially relevant for the main Balkan block), slower than anticipated penetration of RES and slow progress on energy efficiency improvement. The 14th SEE Energy Dialogue was held under the auspices of the Ministry of Environment and Energy and the Regulatory Authority of Energy (RAE). Main sponsors of the 14th SEE Energy Dialogue included HELLENiQ ENERGY, the Hellenic Energy Exchange (EnEx), and the law firm KG Law. The supporters included the companies Elpedison, Energean, Exist, SEleNe CC, EnSCo, HEREMA, DEPA Commercial, TERNA Energy, and ADMIE. Media sponsors included the energy portal Energia.gr, the NE Global website, Energypress and SeeNews.

 The Background Paper is available **online**
 View **full details** on IENE’s 14th “SEE Energy Dialogue”

■ IENE Workshop Opens Debate on CCUS Applications in Greece & SEE - Presentation of a Special Study at the National Research Foundation



On the occasion of completing a pioneering study concerning the prospects for carbon capture, storage, and utilization technologies (CCUS) in Greece and Southeast Europe, IENE organized a special workshop on Tuesday, **October 10th, 2023**, at the **National Research Foundation, in Athens**. The workshop featured speakers from the IEA and DG Energy of the European Commission, as well as senior officials from major energy industrial and shipping companies in Greece including the authors of the study titled "Prospects for the Implementation of CCUS Technologies in Greece".

The event aimed to achieve two primary objectives: firstly, to present IENE's study to an invited audience, and secondly, to foster a broader discussion within Greece's energy and industry companies on the development prospects of CCUS technologies in Greece and the broader Southeast European region. Carbon capture, utilization, and storage (CCUS) comprise a diverse range of technologies that play a pivotal role in achieving worldwide and European climate change mitigation and energy transition goals. According to the IEA, there are currently around 35 commercial facilities globally employing CCUS for industrial processes, fuel conversion, and electricity generation.

The momentum behind CCUS has seen significant growth in recent years, with roughly 300 projects at various stages of development across the entire CCUS technology spectrum. This study encompasses various aspects and offers a practical roadmap for developing the necessary infrastructure in the form of clusters across different regions of the country.

This latest study conducted by the Institute of Energy for Southeast Europe, underscores the significant role of CCUS technologies, particularly in conjunction with hydrogen production. The study, was carried on a multi-client basis and was funded by some major energy firms, including DEPA Commercial, HELLENiQ ENERGY, The Independent Gas Transmission Operator (DESFA), the Hellenic Hydrocarbons and Energy Resources Management Company (HEREMA), and the shipping company Franco.

The first session of the workshop commenced with introductory remarks by the Chairman of IENE, Mr. Costis Stambolis, who explained the background of the study, the multi-client approach adopted by the Institute and the interaction with the partner companies, but also hinted on the outlook for CCUS project in Greece. This was followed by a detailed presentation of the study by the researchers who participated in its preparation, and in particular by Dr. Nikolaos Koukouzas (Director of Research and Technological Development - EKETA), Dr. Yiannis Basias (Energy Analyst, former President and CEO of Hellenic Hydrocarbons Management Company - EDEY) and Dr. Eugenia Tzannini (lawyer, E. Tzannini and Associates, IENE Partner).

The speakers of the second session, which was moderated by IENE's Deputy Chairman, Mr. Christos Dimas, discussed the findings of the IENE study. Executives from the partners companies participated in this session. More specifically, Mr. Georgios

Polychroniou (Coordinating Director of Strategy & Development Activities, DEPA Commercial), Dr. Aristophanes Stefatos (CEO, Hellenic Hydrocarbons and Energy Resources Management Company - EDEYEP) and Ioannis Stavrakopoulos (Energy Transition and Strategic Planning Specialist, DESFA) commented on the IENE study.

The third session, which was also moderated by Mr. Christos Dimas, covered the international experience of CCUS applications, with the participation of senior company executives and leading experts from international organizations, Mr. Vlassopoulos (CEO, HELLENiQ UPSTREAM S.A., HELLENiQ ENERGY Group), covered the industrial angle of global CCUS applications, while Stavroula Evangelopoulou (Analyst for Hydrogen Technologies and the International Energy Agency - IEA) and Krzysztof (Chris) Bolesta (CCUS Policy Lead, DG ENERGY, European Commission, EU, Brussels) discussed the international experience, EU's strategy and current CCUS and hydrogen programmes.

The fourth session featured discussions on the potential of CCUS in Greece and current projects. This session was moderated by Dr. Nikolaos Koukouzas principal author of the IENE study and offered insights into various aspects of the CCUS as applied in Greece. The speakers included Dr. Katerina Sardi (CEO and Country Manager, Energean, Greece), Dr. Panos Deligiannis (Head of Shipping, ECOLOG), Mr. Aris Tsikouras, (Director of Strategy for Decarbonization, TITAN Group), Mr. George Daskalakis (Strategy, Corporate Development, Motor Oil Group), and Ms. Cleopatra Avraam (Strategic Planning Senior Manager at DESFA). The event was wrapped up by Dr. Nikolaos Koukouzas, who summarized the workshop's conclusions and thanked all contributors and supporting companies.

 Read more details [online](#)

■ IENE Study Provides Comprehensive Overview on Energy and Employment in Greece



The Institute of Energy for South East Europe (IENE), on **May 2023**, published a new study titled **“Energy and Employment in Greece”**, with the objective of assessing employment in the broader energy sector, including energy production, transportation, and management. The study also examines the emerging employee profile and identifies potential opportunities for future employment growth in the energy sector in Greece by 2025 and 2030. The findings of the research were presented at a special Webinar organized by IENE on June 29, 2023.

With this new study, IENE aims to provide an updated analysis of the energy sector’s impact on employment in Greece, building upon the previous study conducted in 2013. The need for this update arises from the ongoing transformation changing dynamics, and mobility observed in the sector, which directly affects job opportunities and the quality of posts. The study focuses on significant structural changes anticipated in the Greek energy sector, including the further liberalization of electricity and natural gas markets, the rapid growth of renewable energy sources (RES) in line with international and European goals, the implementation of the decarbonization plan, the emergence of new energy retail businesses, digitization of operations, and the promotion of electric mobility. These factors contribute to a shifting landscape in terms of employment within the domestic energy sector.

The mapping of the workforce employed in the energy sector was conducted along two axes. The first axis focuses on jobs directly involved in the production and management of energy, encompassing areas such as refineries, power stations, oil and gas stations, photovoltaic and wind installations, among others. The second axis encompasses jobs that indirectly support energy needs, primarily related to the production of equipment used energy systems. Examples include oil and gas pipelines, electric cables, solar water heaters, electric batteries, and more.

According to the IENE Study, the total number of direct and indirect jobs in the broad energy sector in 2021 was 111,513. However, the study found that the total workforce directly employed in the energy sector was 72,822 people, which is lower compared to the previous study conducted in 2013, where the estimate was 77,690 people. The decrease in direct employment can be attributed to the increasing digitization of the sector and the scaling down of activity in specific sectors (e.g., lignite mining). Conversely, there has been an increase in employment in other sectors. The study also highlights the significance of indirect employment in the broader energy field, which reached 38,691 people in 2021. Additionally, it is noted that employment in energy sector companies is predominately full-time.

Moreover, a significant majority (nearly 100%) of companies in all four energy sectors (Oil, Natural Gas, Electricity, and Renewable Energy Sources) organize regular training programs for their executives throughout the year. These companies reported that the pandemic had minimal impact on their workforce, with teleworking being the prevailing mode of operation, accounting for 72% of work arrangements. Importantly, no employment contracts were suspended in any company as a result of the pandemic.

Lastly, the study puts forward recommendations for enhancing the skills of workers across all energy sectors and emphasizes the role of innovation and research in fostering employment in the energy industry. The study also sheds light on the emerging profile of the workforce, while providing estimates for employment opportunities in the evolving energy landscape.

The Study was conducted on a multiclient basis and was financially supported by the companies DEPA Commercial, TERNA Energy, EnEx Group, and KG Law. Also, ICAP CRIF participated by providing important information.

■ IENE's Annual Report on Greece's Energy Sector 2023 Successfully Presented in Special Event

IENE's annual report on **"The Greek Energy Sector 2023"** was successfully presented on **Wednesday, September 20, 2023**, at the National Research Foundation in Athens. The keynote speaker at this special event was the Deputy Minister of Environment and Energy at Greece, Ms. Alexandra Sdoukou, who spoke about the government's priorities, with an emphasis on the green transition. The event attracted a large number of energy professionals from the entire spectrum of the domestic energy sector, proving, once again, the impact and recognition of the work of IENE.

The detailed presentation of the report by the Chairman and Executive Director of IENE, Mr. Costis Stambolis followed. Then, the stage was given to some of the contributors of the report, who presented interesting findings as well as its main conclusions. In particular, various aspects of the Greek Energy Sector were thoroughly analyzed by Mr. Konstantinos Theophylaktos, Secretary-General and Chairman of the Scientific Committee for Energy Efficiency of IENE, Mr. Yannis Grigoriou, Vice-President of the Continental Europe Energy Council and Partner of IENE, and Ms. Eugenia Giannini, Lawyer, E. Giannini and Associates, and IENE Partner.

A second session followed, during which distinguished executives from all sectors of the Greek energy market commented on the developments concerning the Greek energy market, which was expertly moderated by the Deputy Chairman of IENE, Mr. Christos Dimas. The current status of the Greek energy landscape was examined, with insights provided by key figures including Mr. Andreas Petropouleas, Director of Energy Management at ELPEDISON and Chairman of the Electricity Committee of IENE; Mr. Theodoros Terzopoulos, Coordinator Director of Strategy & Distinguished Corporate Issues at DEPA Infrastructure; and

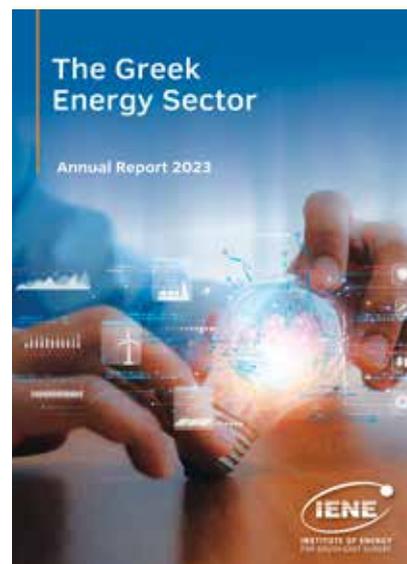
Chairman of IENE's Natural Gas Committee Dr. Stelios Loumakis, President of the Hellenic Association of Photovoltaic Energy Producers (SPEF); and Mr. Nikolas Sofianos, Board Member & Chairman of the RES Committee of IENE.

This latest (third) edition of IENE's Annual Report of the Greek Energy Sector is a milestone for the Institute, considering the fluid and changing conditions that have prevailed lately in the international and, especially, in the European energy market. This is particularly true following Russia's invasion of Ukraine in February, 2022. The subsequent rise in energy prices and the disruptions to supply chains, triggered by the invasion, make the mapping and analysis of the energy sector more timely and necessary than ever.

This year's 240 page Report covers all sub-sectors, including Oil and Gas, Electricity, Solid Fuels, Renewable Energy Sources, as well as Energy Efficiency and Cogeneration.

It also addresses the current energy policy, emphasizing sustainability and energy supply security, in alignment with European goals. Furthermore, it delves into the significant challenges associated with formulating a comprehensive energy strategy for the country. Additionally, this updated edition of IENE's report examines Greece's energy position in relation to developments and prospects in Southeastern Europe, presents developments in the legislative and regulatory framework, highlights energy technologies for the next decade, and provides well researched estimates for the investment potential in the energy sector for the period 2022-2031.

As emphasized by all speakers at the event, the IENE Annual Report titled "The Greek Energy Sector 2023" aims at enhancing our understanding of the structure and functioning of the energy sector in Greece.



"Undoubtedly, this sector serves as the "backbone" of the economy and a fundamental pillar for development", they noted. It is also noteworthy that the Report was prepared by the research staff of IENE and relied on data and analyses sourced from both the IENE's extensive database and official sources from Greece and the international arena. The funding for the IENE Report, titled "The Greek Energy Sector 2023," came exclusively from the Institute's annual budget.

Finally, the significant research efforts undertaken by the Institute in recent years, along with the ongoing and systematic monitoring of the Greek, regional, and international energy markets, provided the essential foundation upon which the project was built.

The event's sponsors included Helleniq Energy, the Renewable Energy Sources Operator & Guarantees of Origin (DAPEEP SA), and TERN Energy.

 IENE's annual report on "The Greek Energy Sector 2023" is available **online**

■ “Electromobility in SE Europe Starts to Gain Momentum”



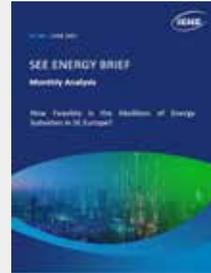
IENE’s latest Fact Sheet (No 9), on the trends of Electromobility in SEE Europe is available on the Institute’s website. Although electromobility is one of the fastest growing sectors in today’s economy, in SE Europe it is developing at a slower pace in comparison to other parts of the continent. However, as IENE stresses in this latest publication,

in recent years, there are many different projects and initiatives related to the expansion of the sector in the SEE countries.

Moreover, both local and foreign companies continue to invest in technical and physical infrastructure in the sector. In parallel, the EU legislation for electric vehicles has matured considerably over the last years, while there are many potential partner organizations for e-mobility development in the SEE countries and outside the region. IENE’s Fact Sheet provides data on the PEV fleet and the market share in selected countries of the region for 2021 and 2022, analyzing the specific characteristics of these features.

 Read Fact Sheet **online**

■ The Feasibility of Lifting Energy Subsidies in SE Europe Discussed in Topical Energy Analysis

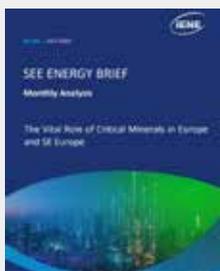


Energy subsidies and government interventions refer to specific initiatives to keep prices for consumers below market levels (e.g. reduced tax rates on road transport fuels) or for producers above market levels (e.g. feed-in tariffs), or to reduce costs for consumers or producers by granting specific benefits. Energy subsidies

may be made by means of direct cash transfers to producers or consumers, as well as indirect support mechanisms (e.g. tax exemptions and tax credits), or even market-based mechanisms providing cross-subsidies between economics actors (e.g. white certificate markets for energy efficiency, electricity capacity mechanisms). The Monthly Analysis of June 2023, entitled “How Feasible is the Abolition of Energy Subsidies in SE Europe?”, tries to shed light on the latest developments in terms of energy subsidies in both Europe and SE Europe, highlighting an overview of the different policies used by countries at national level to mitigate the effect of the price spike for consumers and how feasible is to abolish them shortly

 Read the Analysis **online**

■ The Role of Critical Minerals in the Energy Transition



Record deployment of clean energy technologies, such as solar PV and batteries, is propelling unprecedented growth in the critical minerals markets. According to the IEA, electric car sales increased by 60% in 2022, exceeding 10 million units worldwide. Energy storage systems experienced even more rapid growth, with capacity

additions doubling in 2022. Solar PV installations continue to shatter previous records, and wind power is set to resume its upward march after two subdued years. This has led to a significant increase in demand for critical minerals. The Monthly Analysis of July 2023 attempts to shed light on the vital role of critical minerals at European and SE European level, as numerous energy projects (e.g. EVs, RES, energy storage, etc.) are anticipated to be built in the wider region over the next years.

Continue reading here on IENE’s Analysis on “The Vital Role of Critical Minerals in Europe and SE Europe”

 Read the Analysis **online**

■ The Growing Role of PPAs in SEE Electricity Markets



The Monthly Analysis of May 2023 tries to shed light on the latest developments in PPA activity in SE Europe, highlighting both obstacles and challenges for their further deployment over the next years. Today, the PPA market is still in its infancy in SEE but could explode over a short period of time, once players familiarise

themselves with the available technical tools and financial engineering techniques and as costs from RES generated power continue to slide. Despite possibly the most turbulent year in recent history for the European energy markets, the number and volume of PPAs remained impressively stable. 2022 saw disclosed contracted volumes of 8.4 GW – a 21% decrease with respect to 10.7 GW in 2021, based on data provided by Pexapark, a Swiss-based advisory company, specialised in renewable energy. Deal count increased 4.5% year-on-year, with a total of at least 161 deals in lieu of 154 the year before.

 Read the Analysis **online**

■ IENE's Weekly "Electricity and Gas Analysis" Provides a Useful Insight on Energy Market Operation in SE Europe

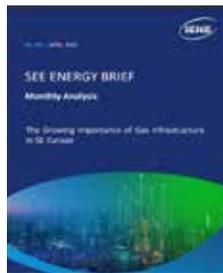


The Institute's weekly analysis on electricity and gas markets in SE Europe provides a comprehensive account of how the region's electricity and gas markets function week in week out. Based on information available from the various European energy exchanges and company sources the IENE report informs on market movements, prices swings and energy between the various countries in the region.

The Analysis also provides latest data on thermal power generation and nuclear output per country. The cross-border electricity trade and cross-country electricity flows is given due attention and complements our understanding of electricity market operation in the region. The reporting on electricity markets is supplemented by a series of graphs depicting the electricity mix and consumption for the different countries, net electricity exports, electricity demand and scheduled net electricity flows in SEE, weekly average prices, hourly average prices etc. The operation of the regional gas market forms a different section of the Analysis reporting on latest prices and trends but also providing latest data on pipeline operation, LNG imports and gas storage levels. The reporting on gas markets is complemented by a series of graphs depicting weekly gas volumes and entries and exits of gas for the different geographical zones.

In short the SEE Electricity and Gas Market Analysis published weekly by IENE is sent exclusively to its members and associates and is considered a key reference helping to navigate the regional energy landscape.

■ The Growing Importance of Gas Infrastructure in SE Europe



Even before the Russia-Ukraine war started in February 2022, most countries in SE Europe were transforming their gas supply arrangements, moving from being relatively isolated markets to becoming more interconnected, from being largely supplied by Russian imports to having a diverse supply portfolio. The war and the EU's decision in March 2022 to fully decouple from Russian oil and gas before 2030 has given this process more impetus, although much of the change we see today results from moves which started several years ago.

The Monthly Analysis of April 2023 aims to describe latest gas infrastructure developments and consequent changes to gas supply flows, but also to assess how flows might further change as planned infrastructure is built over the next few years.

The central question is whether, as a result of these improvements, the SEE region can eventually have a non-Russian gas supply future. The conclusion is that sufficient capacity is almost in place to import and distribute enough alternative volumes to replace Russian imports – assuming of course that this alternative supply is available and at competitive prices.



For more on IENE's Monthly Analysis [here](#)



■ Gas Price Volatility in Europe and the Key Role of LNG Discussed in IENE Analysis



In early August 2023, the price of natural gas in Europe spiked by as much as 40% on the news that gas platform workers in Australia were considering industrial action.

The strike could have affected a tenth of global LNG, which would send prices higher. Indeed, the very threat of a strike sent prices higher, and once again highlighted Europe's precarious energy security position.

More specifically, European natural gas jumped by the most since March 2022 and benchmark futures settled 28% higher on a day of extreme volatility that saw the contract top €40 for the first time since June 2023. Prices soared as much as 40% intraday. The daily increase was the biggest percentage gain since the early weeks of Russia's war in Ukraine. Traders are concerned about a long-lasting strike, with analysts at Citigroup Inc. predicting it could cause European gas and Asian LNG contracts for January to double

The Monthly Analysis of August-September 2023 attempts to shed light on the key factors that affect the fundamentals of European gas market, which in turn affect natural gas prices.



For more on IENE's Analysis [here](#)

■ IENE Webinar on "Energy and Employment in Greece" Was Attended by Large Number of Business Executives



IENE's special Webinar - attended by a large number of on-line viewers - on the "Energy and Employment in Greece" study commenced with introductory remarks by IENE's Executive Director, Mr. Costis Stambolis, who stressed that the objective of the study was to highlight the vitality of Greece's energy sector, in order to ensure the potential investors that the country possesses the specialized workforce which cannot only construct high-standard energy infrastructure but also operate them.

A detailed presentation of the findings and conclusions of the study followed, by Mr. Konstantinos Theofylaktos, Secretary General of IENE & Chairman of the Scientific Committee on Energy Efficiency of the Institute. One of the main findings of IENE's study on "Energy and Employment in Greece" was that the cumulative number of direct and indirect job positions in the country in 2021 approximately reached 110,000.

The Director of Economic Research & Sectorial Research Department of ICAP CRIF S. A., Ms. Stamatina Pantelaiou, and the General Manager at Energy Competence Centre P.C., Mr. Stelios Bikos, also provided their viewpoint on the current situation and the prospects of employment in Greece's energy sector. On behalf of the sponsors of the study, Ms. Ioanna Kyriazi, Head of KG Law Firm's Employment Practice, participated as a speaker.

This IENE Webinar concluded with a brief discussion on questions by the on-line audience.



Read the study [online](#)

■ IENE's Annual National Conference «Energy and Development» successfully held on November 14-15, 2023 in Athens

The interaction of energy security with geopolitics and the challenges involved in the transformation of the energy sector are two key aspects of IENE's 27th Annual National Conference "Energy and Development" which was successfully held on November 14 and 15 2023 at the Divani Caravel Hotel in Athens. Some 78 speakers panelists and moderators participated in the conference which for another year attracted a large number of senior executives and experts from the energy sector in Greece and from abroad with total participation rising above 500 delegates, both in person and online. As usual the conference was backed by major energy companies and organizations active in Greece and SE Europe.

Once again the "Energy and Development" conference which has been established as one of Greece's main events for energy policy and business covered a wide range of topics including oil and gas, electricity, RES, decarbonation, hydrogen etc. The IEA's World Energy Outlook 2023 was presented while the geopolitical economic and social implications of pursued policies were discussed in special sessions.

The Conference was organized under the auspices of the Hellenic Ministry of Environment and Energy, the Ministry of Development and Investment, the Energy Regulatory Authority for Energy Waste & Water (RAEWW) and the International Energy Agency (IEA).

As the war in Ukraine is now in its second year the EU's energy security for next winter remains a key area of concern. Furthermore the International Energy Agency (IEA) warned in a report in mid-July that if Russia decided to completely stop the flow of natural gas the situation could become most difficult for Europe during the winter period 2023-2024 - especially in low temperature conditions - even if its storages facilities were almost 100% full. Thus the surge in energy prices and the consequent overall burden on the budgets of member states once again brought to the fore issues related to inflation fiscal stability and social cohesion in Europe.

In this context the energy autonomy of the EU is becoming not only a matter of strategic choice but is also presents a great challenge. As it was extensively discussed in this year's "Energy and Development" conference this setting contrasted with the goals set by the policies for green transition as summarized in the ambitious REPower EU plan. In this context the conference debated if RES are sufficient for the EU's energy sufficiency or whether they should be supplemented by the maximum utilisation of the hydrocarbon deposits found in the continent.

Also, as Europe's energy efficiency policy is related to the EU's RES strategy this year the conference analyzed the policies for buildings, transport and industry and at the same time examined how much they contribute to the development of the European and especially of the Greek economy. Moreover in the light of increased demands on energy security issues related to energy infrastructure were examined at length both for electricity and also for oil and natural gas. Cutting-edge technologies such as hydrogen also received ample attention.



But also with regard to the domestic agenda the "Energy and Development 2023" discussed the significant challenges faced by RES as their high penetration in Greece's electricity grid brought to the table and rather urgently a number of issues. Although bilateral contracts (PPAs) are emerging as a useful tool for the further development of RES, without subsidies, while the legislative framework for net metering has also improved the need to expand and upgrade the country's electricity networks remains a top priority as it was underlined in a latest IENE study. Already during the summer the ERAEF tender for energy storage units was announced while the critical issue of the management of RES generated



electricity which is lately rejected by the system due to overload has also arisen. In this sense both energy storage and wasted RES production were hotly debated in this year's IENE conference. As far as Greece is concerned but also with implication at EU level, this year's conference discussed the new prospects that potentially open up for hydrocarbons. As the recent seismic findings south and southwest of Crete are auspicious and with the first exploratory drilling planned for the second half of 2024 Greece is likely to emerge as an important hydrocarbons producer before the end of this decade. Thus in combination with the discovered gas potential of Cyprus and Israel, the Eastern Mediterranean could soon emerge as a major producing area similar to the North Sea, a development that could upgrade Greece's geostrategic role and enhance its position as a pillar of European energy security.



At the same time the transformation of the energy sector was highlighted through latest developments in the electricity and natural gas markets in Greece and generally in Europe as these took shape during last winter but also through the emergence and promotion of new technologies. Consequently this year's IENE "Energy and Development" conference examined issues related to energy software used for energy production-demand management but also the use of hydrogen and biomethane as well as synthetic fuels and carbon capture storage and utilization (CCUS) applications which are already appearing on the energy agenda. Furthermore new issues such as digitalization and in particular artificial intelligence which aspire to drastically change every aspect of human activity were discussed in some depth at the conference.



The requirements posed by energy security and strategic autonomy as well as the issues raised by energy transformation are expected to impact energy investment decisions. Hence the approach that should be adopted by investors in the energy sector in Greece and the EU also discussed in some length. Finally, the conference covered the strategies that should be followed in relation to employment in the energy sector given its strategic role in the economy. For further information and the material presented at the conference visit <https://www.iene.eu/en/congress/60/27th-energy-development-2023?p=300>

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For more information about the Conference, the topic, the speakers, etc., see **online**

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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.

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3, Alex. Soutsou
106 71 Athens, Greece
T: +30 210 3628457
+30 210 3640278
F: +30 210 3646144
Email: admin@iene.gr
www.iene.eu

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