

A Bumper Year for IENE

Editorial

As we have now entered the new year and the Institute is finalizing its plans of activities for the months ahead I cannot stop thinking that last year was remarkable by all counts. Apart from organising a diverse programme of conferences and workshops in Greece and in several other European countries (14 events in all) the Institute managed to broaden its activities further by conducting a series of high level educational courses addressed to business executives and professionals while it strengthened its research and study capabilities. At the same time the IENE strived to upgrade and enrich its regular and ad hoc information output, mainly addressed to its members, and which consists of well researched and highly topical newsletters and monographs. In short 2019 proved to be a bumper year!

On the event side one of the most interesting gatherings was undoubtedly the Vienna Energy Transition Forum which took place in the Austrian capital (June 6/7) and brought together some of the foremost thinkers from across Europe for two intense days of presentations, discussions and deliberations. Conceived as a unique and an all-inclusive forum for addressing the complex issues involved in Energy Transition, the VETF left no stone untouched when it came to examining the role of all different forms of energy in the energy transition process. In this context the Forum, apart from debating the role of Renewables and Energy Efficiency in our effort to achieve carbon neutrality by 2050, also examined the role of nuclear energy, the oil and gas industry, clean coal and of course the emergence of entirely new technologies such as hydrogen and electric vehicles.

The other major IENE event was its annual conference, now in its 24th edition, which was held in Athens on November 21/22 and focused on the "Pivotal Role of Energy in Economic Growth".

A highlight of this major and well attended event (more than 250 registered participants) was the presentation of IEA's World Energy Outlook 2019 report which had been published just a week ago. Very successful IENE events were also held in London, Bucharest and Nicosia during the last quarter of 2019 which were organised in cooperation with local entities including the Energy Institute in London(7/10), the Romanian Energy Centre in Bucharest (16/10) and FMW- Financial Media Way in Nicosia(5/12), details of which are to be found in the following pages.

Central to IENE's operation is its Research and Studies Unit which carries out studies and analysis on an going basis. With the Unit's output being highly visible through the Institute's regular weekly and monthly publications.

In addition the Unit is increasingly becoming involved with strategy oriented studies which the Institute is conducting on a multi-client basis or on behalf of institutional clients. Latest example includes the study on "Gas Trading Hubs in SE Europe" which was completed last November and was backed by Austria's Central European Gas Hub (CEGH), the Hellenic Energy Exchange (EnEx), the Independent Gas Transmission Operator of Greece (DESFA) and the Motoroil company, a major refining and power company. With a number of other important studies completed last year such as the Energy Self Sufficiency Study for Kastellorizo island, the research and studies team of IENE is now fully engaged with the preparation of the Institute's flagship publication, the "SEE Energy Outlook 2020" which is to be released in the Fall of 2020.

Costis Stambolis
Chairman & Executive Director, IENE
Athens, March 2, 2020

AGM elects New Chairman and Executive Committee

On June 20, 2019 during the Institute's 30th General Assembly, which was held at the offices of the Institute's Deputy Chairman Gus Papamichalopoulos (at KG Law Firm), a new Executive Committee was elected following the decision by IENE's chairman John Chatzivassiliadis to step down following three consecutive terms as Chairman.

Costis Stambolis, was unanimously elected as Chairman while he retains the position of Executive Director. Constantinos Papamichalopoulos was elected as Deputy Chairman and Constantinos Theofylaktos was reappointed as Secretary General. The following partners were also elected as members of the Executive Committee: Mr. Dionysios Xenos, Mr. Christos Dimas, Mr. Thomas Lamnidis and Mr. Anastassios Tossios.

Four new Partners join IENE

In another important development the General Assembly approved a proposal tabled by the outgoing Executive Committee to accept four new partners who will also join the Institute's Board. The four partners elected to the BoD are the following:

- Ms Sophia Politopoulou, Senior Executive at HEDNO (Greece's Electricity Distributor)
- Dr. Eugenia Giannini, Lawyer at E. Giannini and Partners Law Firm
- Dr. Konstantinos Karagiannakos, Senior Executive at DEPA (Greece's Public Gas Corporation)
- Mr. Giannis Grigoriou, CEO of Hellenic Petroleum Upstream

After welcoming the new partners, John Chatzivassiliadis expressed his satisfaction regarding the decision taken by the Board and further wished that the new partners will help improve and expand the institute's work and will also collaborate smoothly and effectively with the rest of the partners and with the Executive Committee.

Upon his election Costis Stambolis, expressed his gratitude and praise not only for the constructive and harmonious collaboration that he had over the last six years with the outgoing president of IENE, John Chatzivassiliadis -which evolved under difficult and sometimes challenging circumstances due to the ongoing economic crisis in Greece but also for his unwavering dedication, substantial scientific and administrative input and voluntary contribution to IENE's work.

Following that, Costis Stambolis addressed the partners and referred to the serious challenges that lay ahead during his two-year mandate. More specifically Costis Stambolis emphasized: the need to focus on the core areas of the institute's work and activities including research and studies, the further improvement of content and information flow to both partners and members, continuation and upgrading of the institute's educational activities and the organization of well targeted events dealing with contemporary issues at home and abroad.

The need to develop a more outward looking profile for the institute, not only through the invitation, introduction and inclusion of new members, be it physical persons or legal entities, but also through the joint organization with regional or international organisations of conferences and other relevant events. In order to achieve that, it would be necessary to aim for the further enlargement of the group of partners, especially from South East European countries together with the need to participate more actively in the public dialogue in SE Europe and at EU level, through focused and fully documented proposals and interventions.

IENE's Annual Report for 2018 released

On December 24, 2019 IENE uploaded its Annual Report for 2018 on the iene.eu site. The report presents a detailed account of its activities for the past year and also includes its financial statement. IENE's Annual Report for 2018 aims to provide accurate information about the Institute and its activities and is mainly addressed to its members, to institutional stake holders, to non-profit organizations and other institutions as well as to government agencies and state supervised organizations including Regions, Municipalities and Development Companies.

The report commences with a brief presentation of the Institute's goals, organization and funding sources while introducing the Board of Directors, the Executive Committee, the personnel, the Scientific Committees as well as the International Advisory Board. One of the main pillars of IENE's work is the regular briefing provided to members and consists of several newsletters and other publications. An equally important part of the Institute's work is research and studies with several new projects completed in 2018.

IENE is also quite active in organizing events by itself or in cooperation with other organizations. Fourteen such events were organized during 2018 with details presented in the report. The annual report also includes the financial statement for 2018 followed by a detailed breakdown of income and expenses. Furthermore, the IENE Annual report for 2018 contains a wealth of information on the Institute's various publications, events, educational activities (seminars and courses), personnel and associates. The report also includes a list of IENE's corporate members, its sponsors and supporters and a list of completed and in progress studies.

Major Gas Trading Hubs study completed



Early in November IENE's study team completed a major study, worked out on multi-client basis, on the role and prospects of Gas Trading Hubs in SE Europe. The final version of the study was presented on November 15 at the headquarters of the Central European Gas Hub (CEGH) in Vienna, with the participation of representatives from the energy companies and organizations, which sponsored the study. The study was presented by IENE's study team, which included IENE's Chairman and Executive Director Mr. Costis Stambolis and IENE's Head of Research Mr. Dimitris Mezartasoglou.

At the above special meeting, the IENE team highlighted the latest developments regarding the conditions and prospects for establishing regional gas trading hub(s) in SE Europe. More specifically, there is now a number of nascent gas trading hubs in the region, which include those in Greece, Turkey, Bulgaria, Romania, Croatia, Slovenia and Ukraine. According to the

EFET's Annual Scorecard 2019, Greece is the frontrunner in SE Europe in its attempt to establish a regional gas trading hub, which is known as Hellenic Trading Point (HTP). It is also worth noting that currently there is not a single proper gas trading hub east and south east of Vienna, whose CEGH could act as a pivot for organizing gas trading in this region. This IENE study project was sponsored by a number of energy companies and organizations, which included the CEGH, Greece's Gas Transmission System Operator (DESFA), the Hellenic Energy Exchange (HEnEx) and Motor Oil Hellas, a major oil refining and marketing group. An executive summary of the study in the form of Working Paper will be published by IENE in the first quarter of 2020.

IENE presented its pioneering study on the "Energy Transition of the island of Kastellorizo"



The presentation of IENE's latest study on "Energy Transition of the Island of Kastellorizo", which took place on October 24 in the Armed Forces Officers' Club in Athens, to a packed audience, proved to be a major success.

The study was presented by IENE's study team, which included IENE's Chairman and Executive Director Costis Stambolis, the past Chairman of the Institute John Chatzivassiliadis and IENE's Senior Researcher Alexandros Perellis. At the event, which included an introductory statement by Professor Konstantinos Aravossis, Secretary General for Natural Environment and Water in Greece's Energy Ministry, the IENE study was presented with several technical and economic details, envisaging the installation of solar photovoltaics and wind turbines, combined with an energy storage battery system to fully meet the island's electricity needs.

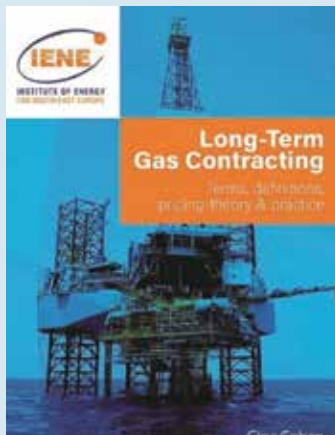
The study is available at: [articlefiles/kastellorizo%20executive%20final%20eng.pdf](#)

In his introduction, Costis Stambolis stressed that IENE's study aims to create an autonomous electricity system in Kastellorizo based on the use of Renewable Energy Sources (RES) and energy storage with the main purpose of achieving self-sufficiency.

"The geographical location of Kastellorizo and the islands that surround it is of paramount importance for the delimitation of the Greek Exclusive Economic Zone (EEZ), which with the inclusion of Kastellorizo is extended southwest to the northwestern part of the Cypriot EEZ", he added. IENE's past Chairman John Chatzivassiliadis mentioned, among others, that "electricity is becoming the main energy carrier with new applications and increasing demand towards full electrification, while the high penetration of RES in electricity mix is directly linked to the transformation and development of transmission and distribution grids with new architecture and innovative technologies and the introduction of digitalization." He further emphasized that the IENE study aims to the transformation of the island's energy system towards clean energy, covering almost all of the energy needs of Kastellorizo and long-term energy demand for desalination by RES at a stable and low cost.

The detailed presentation of the study was made by Alexandros Perellis, IENE's Senior Researcher, who analysed very thoroughly all the technical, economic and regulatory aspects. A major conclusion of the study is that thanks to the proposed RES-Battery Storage system the island may attain 94% electricity self sufficiency on economic competitive taxis and with just €5,5 mill capex.

Study by Gina Cohen Deals with “Long-Term Gas Contracting”



An important and timely study, authored by Dr. Gina Cohen, a well-known Israeli lecturer and consultant on natural gas, was published by IENE last summer and is freely available in the “Reports” section

of iene.eu. The study focuses on the main characteristics of long-term gas contracts based on the author’s experience regarding the general rules and negotiating tactics.

Dr. Gina Cohen analyses the Gas Sales and Purchasing Agreements (GSPAs) which serve as a main tool for the division of market risks by means of tying natural gas Sellers and Buyers for a considerable period.

Because of the high capital intensiveness and market orientation of gas development, GSPAs have been one of the fundamental tools enabling Sellers to invest in exploration, production and development of gas fields, transporters to promote essential gas transportation infrastructure whether pipelines or liquefaction facilities, and Buyers to invest in consumer facilities, secure in the knowledge that they will have the gas supplies needed for their project’s life-span.

The aim of the study is to present an overview on gas sales and purchasing contracts but also empirically analyse them. The intention, as the author underlines, is not to consider all gas contracting issues, but only the GSPA fundamentals. Access to this study is free and can be downloaded from www.iene.eu.

Dr. Cohen has been working as a consultant in Israel and Palestine’s gas markets since offshore exploration started there exactly 20 years ago. She is a lecturer at the Technion University’s M.Sc. Program for Petroleum Engineers, is a consultant to international oil and gas companies operating in the Eastern Mediterranean, is the author of the Hebrew English energy lexicon (www.hebrewenergy.com) used by all professionals in oil and gas sector and regularly publishes articles in professional oil and gas journals. Dr. Cohen participates regularly in regional and international conferences and is also a Senior Research Associate of IENE.

Green Bonds and the Need for Greater Transparency was highlighted in letter by IENE’ Chairman published in the Financial Times

Under the title “Green finance needs to be more open”, a letter which was sent to the Financial Times by IENE’s chairman Costis Stambolis was published on August 9.

Stambolis was responding to an article on Green Bonds by Joshua Kendall which was published in the FT on July 31. In his article entitled “Clearer metrics are needed to assess green bond authenticity”, Kendall was calling for the urgent need to introduce some kind of standard so that financial institutions and issuers could avoid pitfalls when making decisions to invest in green financial instruments. As renewable energy and related projects are taking off with billions of dollars invested every year at a growing rate the role of genuine Green Bonds is becoming crucial. Green Bonds have an important role to play in raising much needed finance for sustainable energy projects in SE and Central Europe over the coming years.

The following is the letter by Costis Stambolis as published in the Financial Times:

“Dear Sir, Joshua Kendall’s article on Green Bonds (Funds must red-flag the green bonds that are as black as coal- FTfm, August,5) raises a very salient point regarding the need to authenticate Green Bonds. As the Green Bond market is developing at a fast rate some issuers are clearly taking advantage to raise debt and label it irrespectively as ‘green’.

Such attitudes are of course detrimental to the further development of the Green Bond market and their use as genuine and effective tools in supporting much needed investment in clean energy.

Mr. Kendall alludes to the need of a gold standard for green issuance and indicates that European Commission’s green bond standard could offer a solution. But the EC has a misplaced tendency to want to standardize everything that moves and therefore should abstain from efforts to regulate the market. Green Bonds have a great future as sustainable energy fund raising instruments and global financial markets are mature enough to be able to discern between a fake and a real Green Bond. What is needed is a lot more transparency which in the day and age of digitalization is not difficult to achieve.



Cutting Fossil Fuel funding in order to meet Climate Change challenges is not a viable option, Says IENE's Chairman in letter published in the Financial Times

Slashing bank lending and reducing funding by regional and global financing institutions to fossil fuel companies, i.e oil, gas and coal, is not a viable option in our effort to satisfy the Paris agreement goals for mitigating Climate Change. Bankrupting fossil fuel companies, as some radical environmentalists seem to suggest, is not a constructive way to address Climate Change challenges. In his latest letter to the Financial Times, published on October 2, (see full text below) the chairman of IENE, Mr. Costis Stambolis makes a passionate plea for a return to logic and moderation in the current debate, which tends to indiscriminately demonise all types of fossil fuels forgetting though that we have very few options left in our Energy Transition path. With the large majority of companies, the EU and the IEA agreeing that natural gas is the 'fuel of choice' for industry, commerce and the domestic sector in the years ahead, the call for suspending now all funding to oil and gas companies appears suspicious to say the least.

The following is the letter by Costis Stambolis as published in the Financial Times.



Bankrupting fossil fuel companies is no solution to tackling Climate Change

Dear Sir,

In his op-ed "Banks must cut the flow of financing for fossil fuels" (September 23) Patrick McCully seems to suggest that it would be constructive to bankrupt fossil fuel companies in order to comply with the Paris Agreement's goals of controlling average global temperature rise. He therefore proposes that banks start slashing indiscriminately their funding to coal, oil and gas companies.

But Climate Change challenges cannot be solved simply by interfering so bluntly with market operation. The banks have primarily obligations towards their shareholders and clients and they will manage their affairs as they see fit in order to operate on a profitable basis and not conform to some vague dictum of environmental correctness. Central banks which they can afford to take the long view, and they have the resources to back it, are rightly worried about the impact to the global financial system from a foreseeable rise of global temperatures and hence they strive to find ways to improve environmental climate and risk management in finance.

Lessening financial support to the fossil fuel sector, which is responsible for 81 % of the global energy mix today and 74 % by 2040, according to IEA estimates, via bank lending or through bond placement, is clearly a misplaced option. The ongoing Energy Transition towards a world of clean fuels will accelerate only through the adoption of relevant policies at national, regional and global level. It is through the implementation of such policies that market forces will change direction including banks. A forced course by banks now to withhold funding to the fossil fuel sector will only cause havoc to the energy markets, result in millions of job losses and lead nowhere.

Costis Stambolis



IENE seeks advisory role in the issuance of Green Bonds

Over the years, IENE has built a regional network of advisory and assurance professionals with solid experience in supporting clients on green bond issuance across SE Europe. They have worked on some of the leading green bond issuances to date. With the cooperation of those professions IENE will very shortly start providing a range of services to support primarily its member companies, but also outside investors during the lifecycle of green bond issuance.

More specifically, IENE intends to offer green bond related services, ranging from review of financing options, recommendations on the presentation of green credentials to potential investors and the issuance process of the debt and liaise with stakeholders, including credit rating agencies, third-party independent assurance as well as the development of key performance indicators and project evaluation metrics to monitor and report on the financial and environmental outcomes of projects.



IENE's latest "Electric Mobility Update" Report provides unique market intelligence

The Institute's latest "Electric Mobility Update" (Issue No. 4) which was sent to members and associates on August 5, is packed with latest information and analysis concerning the development of the global electric vehicle market and the various sub-sectors involved in this latest chapter of motor vehicle advancement. With the global fleet of electric cars having reached 5.1 million (end 2018), exhibiting an increase of 68% in comparison to 2017, the growth rate of the global EV fleet increased by 19.3% since the end of 2017. Currently, 45% of total EVs in circulation, which exceeds 2.3 million EVs, are placed in China, while Europe and US follow with 1.2 and 1.1 million registered EVs which accounts for 23.5% and 21.5% of the global EV fleet respectively.

Last year was marked by continuous technological developments in the field of EVs and significant improvements and adjustments in the regulatory framework for EV support and adoption worldwide. However, despite the EV sales growth during the current decade, EV penetration on the global vehicle fleet doesn't exceed 1% (Jan. 2019). The current EV market growth is aligned with IEA's scenario SDS (Sustainable Development Scenario), which aims at the achievement of the environmental goals of the Paris Agreement for Climate, which predicts annual growth of EV fleet by 30% for the period 2018 – 2030. The global EV market also, according to the IEA, is characterized by a stabilization of the share of hybrid plug-in (PHEV) at around 60% in 2012-2018, with a slight increase in 2018 to 64%. Purely electric cars (BEVs) dominate the Chinese and US EV markets with a share of 75% and 57% respectively.

Furthermore, a useful analysis is included in this latest newsletter on how major setback for EVs could delay peak oil demand. Meanwhile the increasingly important role of strategic minerals such as cobalt, nickel and copper is outlined together with the threats posed by the wars involving rare earth elements. Impressive advances in Electric Buses is also reported and the huge role they play in cleaning up congested and polluted urban areas.

A review is also made of electric vehicle technology including latest models and accessories such as ZF's, electric two speed drive, VW's Modular Electric Toolkit, and BMW's Mini Cooper SEEV.

An inside report on EV Battery Technology reveals that scientists at PNNL (Pacific Northwest National Laboratory) have managed to increase the working temperature range of lithium-ion batteries, which now work well from -40 °C to 60 °C (-40 °F to 140 °F) by putting multiple additives to the electrolyte. What the researchers from PNNL achieved was to combine multiple additives that allow the batteries to work well in temperatures in which they normally wouldn't. What the additive combination accomplished was an "enhanced discharging performance at -40 °C (-40 °F). It is also reported that Imec, the world-leading research and innovation hub in nanoelectronics, energy and digital technologies and partner in Energy Ville, has fabricated an innovative type of solid-state Li-ion battery achieving an energy density of 200 Wh/liter at a charging speed of 0.5C (2 hours).

In the case of Tesla, other than the battery technological advantage that the company gained by the acquisition of Maxwell on May 2019, it also gained a manufacturing technology advantage, as Maxwell's solvent-free electrode coating technology should work to drive down battery cell costs and allow for higher battery production rates and decreased equipment costs. That new process should result in as much as 16X the production rate and an immediate 300 Wh/kg energy density because of a thicker electrode coating using today's NCA chemistry.

Finally, a whole section of this latest IENE newsletter is devoted to Electric Vehicle Charging Technology. Some highlights include reports on VW which plans to install 140 fast chargers at Berlin supermarkets, on Fiat which will partner with EVBOX for charging stations, on Dutch EV-charging start-up, Fastned which plans to expand its business, and on Tritium which is to become sole supplier of rapid chargers for UK's DRIVE ENERGI.



■ The role of Nuclear Energy in decarbonising SE Europe was highlighted by IENE in ground-breaking London Conference



Following an invitation by Tim Yeo, chairman of the London based New Nuclear Watch Institute (www.newnuclearwatchinstitute.org), the Executive Director of IENE Costis Stambolis participated in what proved to be a high powered gathering convened by the NNWI in order to examine the role of nuclear energy as part of Europe's energy mix. This one day Forum, which took place in the superb offices of legal firm Norton Rose Fulbright overlooking the Thames, attracted some of Europe's top forward looking industry executives and analysts who presented their findings and views on the key role that nuclear energy can play as fears mount on climate change mitigation efforts.

As Tim Yeo, former parliamentarian and minister, and past chairman of the House of Commons Energy and Climate Change Select Committee, said in his opening remarks "the New Nuclear Watch Institute believes that Europe needs both nuclear and renewable energy to meet its challenging targets. Cuts of 90% in greenhouse gas emissions cannot be achieved by 2050 without significant contribution from nuclear, as global concern about climate change will intensify in the next few years. "The London Forum addressed these issues directly focusing on the high costs involved in nuclear plant development and how modern technology and practice can help reduce them. Furthermore it explored the economic benefits of developing new capacity.

A key observation from the Forum's proceedings was that today the prospects for nuclear energy in Europe are uncertain. Despite the EU 2050 Energy Strategy's ambitious greenhouse gas reduction targets the European Commission is ambivalent about the nuclear industry. Apart from France, Britain and Finland the only member states planning new plants are in Central and Eastern Europe.

Hence, the presentation by IENE's chairman on the "Role of Nuclear Power in Decarbonising SE Europe" threw much needed light on latest developments in the SEE region and examined the prospects that nuclear power could hold in enhancing further renewables applications and RES grid penetration.

As Costis Stambolis observed in his presentation, today, the existing three nuclear plants in the region (i.e. Kozloduy in Bulgaria, Cernavoda in Romania and Krško in Croatia/Slovenia) provide constant and sizeable electricity volumes which according to IENE's latest estimates cover some 12% of the region's annual electricity demand (excluding Turkey). If we were to add Hungary's Paks nuclear power plant, the number could reach 16%. In view of the above, nuclear energy has a vital role to play in helping reduce GHGs provided that a plan can soon be put in place to expand existing capacity through the construction of new nuclear plants but also through the upgrade and refurbishment of existing units. Looking ahead to 2030, and in the case of sustainable energy scenario, whereby new nuclear capacity of some 1.2 GW will be added, nuclear's role could expand further and contribute more than 20% of electricity needs by providing much needed base load.

Concluding his presentation Costis Stambolis noted that if the EC is serious in its quest of achieving much lower emission targets and eventually aim for carbon neutrality by 2050, they have to revise their policies with respect to nuclear power generation and hence include it as one of the main pillars of their long-term energy strategy. This is particularly relevant for SE Europe which at present shows little signs of its will to decarbonize by retiring old and highly polluting lignite plants or stop building new ones as is the case today for a number of countries.



See link for Costis Stambolis presentation:
[www.iene.eu/articlefiles/costis%20stambolis%20\(nnwi\).pdf](http://www.iene.eu/articlefiles/costis%20stambolis%20(nnwi).pdf)

Events Review

2019



■ "ENERGY & DEVELOPMENT 2019" offered a panorama of new policies, market trends and projects

The Institute's annual "Energy & Development" conference helped underline the rapid changes now taking place with regard to the repositioning of energy policies and the re-alignment of the energy mix at national, regional and global level.

With more than 250 delegates, 70 moderators, speakers and panelists from Greece and abroad IENE's annual conference proved once again an invaluable source of information and networking. Spread between two days, on November 21-22, 2019 and with 12 sessions, some of them parallel, the conference offered a panorama in terms of policy formulation, analysis and project advances.

In this opening the conference the chairman of IENE Mr. Costis Stambolis observed that the event is taking place at a time of major changes in the global and regional energy scene, especially as decarbonisation efforts are now accelerating in Europe but also in other parts of the world. However, as global energy demand continues to grow so do emissions, which were up by 2,0% last year, and hence the fight to mitigate the negative effects of Climate Change is global, rather than national or regional. In Greece's case which has seen its emissions lowered every year, a huge effort is now in progress to increase the contribution of renewable energy which currently correspond to 16% of the final energy consumption and cover some 23 % of the electricity mix.

The conference was opened with a keynote speech by Greece's Deputy Minister of Environment and Energy Gerasimos Thomas, who is in charge of the energy sector. Mr. Thomas stressed the government's commitment to implement major changes by 2030 in order to decarbonise as much as possible the country's energy system, promote RES and energy efficiency and also improve energy security.

As in the past lignite proved to be the national treasure which helped develop its economy in the post war period, likewise today we can use Renewable Energy Sources to boost the economy and aim towards a clean environment", underlined Greece's energy minister.

2 DAYS
12 SESSIONS
70 MODERATORS
250 DELEGATES



Mr. Kieran McNamara, Senior Analyst, International Energy Agency (IEA)



Mr. Tim Yeo, chairman of the New Nuclear Watch Institute

The minister also confirmed the government's ambitious targets with regard to the contribution of RES to more than 60% in the electricity mix and 35 % in the final energy consumption by 2030. Undoubtedly one of the highlights of the conference was the presentation by Kieran McNamara of IEA's World Energy Outlook 2019 which had been published only the previous week. A key finding of this year's Outlook was that the Energy world is marked by a series of deep disparities as almost one billion people remain without access to electricity. The IEA has worked out a number of scenarios, which were presented at the conference, showing how energy supply and use will feature over the next 20 to 30 years. Of great interest was also the presentation by Irene Nikolaou, policy officer at DG Climate in Brussels, as she outlined the Commission's roadmap for carbon neutrality by 2050 and all the intermediate steps that need to be made and specific actions to be undertaken by member countries.

For the first time an Ambassador's Forum was included in this year's conference proceedings which proved a huge success judging from the large number of delegates who attended and the lively discussion which ensued. Honoured guests included HE the ambassador of the People's Republic of China Ms. Zhang Qiyue and HE the ambassador of the Republic of Cyprus Mr. Kyriakos Kenevezos.

Mr. Tim Yeo, chairman of the New Nuclear Watch Institute, ex parliamentarian and former minister for environment and energy, presented UK's experience with coal and how it eclipsed few years ago as the national fuel giving ground to natural gas. The transformation of the old mining towns and regions into modern centres for manufacturing and technology development helped revive economically many impoverished areas, Tim Yeo noted among others.

Prof. Andrey Konoplyanik, adviser to the director general of Gazprom Export and professor at the State Gubkin Oil & Gas University provided a well documented analysis on the role of gas in modern day energy use and discussed gas's future role in the context of EC's new green policies. Prof. Pantelis Capros, chair of energy economics at NTUA and head of the E3M Lab, presented his latest analysis on European goals and targets and how the adoption of new technologies is expected to play a vital role in the achievement of these goals.

The session on investment in energy infrastructure also

proved to be one of the most popular in the conference and included a presentations by Aristotle Chantavas , from ENEL Green Power, on its latest 160 MW wind project in Greece, the progress on the IGB gas interconnector presented by George Polychroniou of DEPA and the latest gas development project at the Karish and Tanin fields in Israel as reported by Dimitris Gontikas from Energean. Mr. John Papathanassiou, chairman of Hellenic Petroleum, Greece's largest integrated energy company, presented his views on the fuels of the future and the work that HELPE is currently engaged in towards this direction.

The conference's full proceedings with the majority of keynote speeches and presentations included is now available through a special microsite which prepared by IENE. This year's conference helped underline the rapid changes now taking place with regard to the repositioning of energy policies and the re-alignment of the energy mix at national, regional and global level.

With more than 250 delegates, 70 moderators, speakers and panelists from Greece and abroad IENE's annual conference proved once again an invaluable source of information and networking. Spread between two days, on November 21-22, and with 12 sessions, some of them parallel, the conference offered a panorama in terms of policy formulation, analysis and project advances.



IENE's Deputy Chairman Mr. Gus Papamichalopoulos and the ambassador of the People's Republic of China Ms. Zhang Qiyue



C. Stambolis, G. Thomas & Prof P. Capros

See link for details:
www.iene.eu/en/congress/19/energy-and-development-2019?p=98

■ WIND Mission Greece - IENE outlines its role in RES development

On October 14-15, 2019 IENE responding to an invitation by Mr. Derek Michalski, Editor of the "Voice of Renewables" and organizer of the WIND Mission Greece conference, IENE, through its Chairman and Executive Director participated in this timely event.



The conference brought together some of Greece's top experts in wind energy and Renewable Energy Sources (RES) who presented latest aspects of their work and debated the hot subjects relevant to the Greek RES scene, such as the licensing and regulatory issues involved in the development and implementation of RES projects and wind farms in particular.

In his presentation on the "Role of IENE in RES development in Greece's" the Institute's Chairman Costis Stambolis described IENE's contribution over the last 15 years or so in the development of the RES sector and the impact of the Institute in raising public awareness and promoting the necessary legal and regulatory changes. He then went on to present one of IENE's latest projects which concerned a major study on the "Energy Transition of the island of Kastellorizo" which aims at full energy autonomy of the island, based on solar and wind power generation backed by adequate battery storage.

Summing up his presentation IENE's chairman observed that it is no exaggeration to state that:

- (a) IENE by promoting constantly and consistently the need for increased RES applications, and wind in particular, has to a large extent influenced development at policy level in Greece over the last 15 years.
- (b) IENE through its various pro RES activities has been a catalyst for greater RES penetration in the country's energy mix.

The full presentation is available:
www.iene.eu/the-role-of-iene-in-res-development-in-greece-windmission-deree-the-american-college-of-greece-october-14-15-2019-p5322.html

■ IENE participated in the "3rd European Forum on Clean Energy for Islands"

Following an invitation from Greece's Regulatory Authority for Energy (RAE), IENE through its Senior Researcher Alexandros Perellis participated actively in "3rd European Forum on Clean Energy for Islands", held on October 3-4, at Rodos Palace Hotel in Rhodes with a presentation on "Islands energy needs and how to guarantee project success".

The forum was jointly organized by the Regulatory Authority for Energy of Greece and the Commission De Regulation De L'energie of France.

In his presentation, Mr. Perellis highlighted the problem of high dependence on oil for Greek non-interconnected islands and therefore the very expensive electricity generation costs and large CO₂ emissions of the autonomous island systems. He then presented the case of Kastellorizo island, which was examined in a most recent study undertaken by IENE, entitled, "Energy Transition of the Island of Kastellorizo". The above study presents the preliminary design of a large-scale stand-alone microgrid system powered by Solar PV, wind turbines and li-ion battery-based electricity storage systems aiming to substitute the current oil-based energy system. The design is tailor made for both the RES potential of the area and the annual energy needs of the island of Kastellorizo, as forecasted for 2025. The presentation included the RES and storage system design methodology and performance assessment, while system optimization techniques, technical recommendations and topology suggestions for the installation of the system were also presented. The presentation followed with the economic assessment of the investment, which was estimated to be very attractive, reducing significantly the full annual local electricity system's costs and concluded with a summary of the main points of the study.

The Forum hosted numerous prominent professionals from Greece, France, Spain and Portugal, who presented their work, associated with Island projects, in four workshops. More specifically, the Forum's content spanned from regulatory aspects, infrastructure development and innovation to island energy needs and financing of energy transition in European Islands.



Ms. Alexandra Sdoukou, Secretary General for Energy & Mineral Resources of Ministry of Environment & Energy addressing the Forum



■ IENE participated in World Bank Decarbonization Workshop in Athens

On October 30, 2019 the World Bank organized in Athens a technical meeting to discuss the concept of an alternative energy and energy storage hub for Western Macedonia in Greece

The meeting was convened by the World Bank at expert level as part of its remit of technical assistance to Greece to plan a managed transition out of lignite, financed through the Structural Reform Support Services (SRSS) of the European Commission. As it became known during the workshop, the World Bank's technical assistance will assist the regional authorities of Western Macedonia and Government of Greece in their transition to a low carbon economy. The Road Map is organized around 3 pillars: (i) government systems; (ii) people and communities; and (iii) repurposing land and assets. Critical to the Road Map is a list of priority economic transition and revitalization projects to absorb labor and spur economic development.

As part of the preliminary work to date, the World Bank is developing the outline of a regional economic transition strategy which will suggest at least two pathways for future regional development. One of the pathways under consideration is that of creating an Alternative Energy and Energy Storage Hub in Western Macedonia.

The reasoning being that the current assets, infrastructure and community identity built around lignite could well be harnessed and transitioned towards a new energy identity and economy in the region. In September 2019, the World Bank presented to the Ministry of Environment and Energy (MoEE) a preliminary concept on an Alternative Energy and Energy Storage Hub. The purpose of introducing the concept was to seek approval from the government as to whether the concept, in its embryonic form, was noteworthy enough to pursue further technical studies. In October 2019, the World Bank presented the same embryonic concept to the regional authorities of Western Macedonia. Based on consent provided by both the MoEE and the regional authorities of Western Macedonia, the World Bank is now pursuing further technical analysis on the concept. A critical set of stakeholders to consult during this technical analysis period are the private operators and regulatory authorities operating and governing the power sector in Greece.

The objective of the workshop was to determine whether the alternative energy and energy storage hub concept, as one of the proposed pathways for the regional economic transition strategy, merits consideration and therefore whether further in-depth quantified cost-benefit analysis of the concept is merited. A sub-objective is, on the basis of feedback received, to discuss the broad outline of a TOR for a full system feasibility study, should the concept find merit with the stakeholders. More than 30 of Greece's top energy experts participated in this highly topical meeting to review progress to date and also exchange views on the most optimal ways to move forward with specific decarbonisation plans. IENE's Chairman and Executive Director, Mr. Costis Stambolis, actively participated in the workshop contributing comments and discussing alternative strategies.

■ IENE-ROEC Conference debated the Burning Energy Issues of SE Europe

With more than 70 participants and a well-chosen group of 12 high-caliber speakers and panelists, a half-day conference on "Energy Transition in South East Europe - Policy and Investment Challenges", co-organized by IENE and the Romania Energy Center (ROEC) in Bucharest on October 16, proved to be a big success.

The speakers covered the burning energy issues of the region, focusing on Romania, Bulgaria, Greece, the West Balkans and with useful input from the European Commission and from Denmark. The topics covered in this highly-focused colloquium included policy and regulatory issues, Renewable Energy Sources, district heating, the role of nuclear energy in the current and future regional energy mix, small-scale LNG applications in Romania and the broader Danube region, improving energy efficiency across SE Europe and the socio-economic impact from pursued Energy Transition policies in Romania, Greece and the SE European region. An assessment of anticipated medium- and long-term energy investments for both Greece and Romania was also contributed.

From IENE's side, apart from Chairman and Executive Director Mr. Costis Stambolis, Mr. Dimitris Mezartasoglou, Head of Research, and IENE's partner and Chairman of

the Institute's Energy Efficiency Committee Mr. Costas Theofylaktos, participated as speakers, while IENE's founding partner and ex-chairman Dr. John Desypris chaired the first session of the conference.

Ms. Eugenia Gusilov, ROEC's director, and the driving force of the conference chaired the second session and contributed one of the keynote presentations. Furthermore, the following speakers actively participated in the conference: Mr. Jan Christoph Nill (European Commission, DG Klima), Mr. Teodor Chirica (President FORATOM Europe), Mr. Lars Gullev (CEO, VEKS & vice chairman of IEA Executive Committee for District Heating and Cooling, IEA ExCo DHC), Ms. Otilia Nutu (Energy expert, Expert Forum), Mr. Emil Negut (COO, LNG Romania) and Mr. Andrei Covatariu (Institutional Affairs, Enel).



Ms. Eugenia Gusilov, Director of Romania Energy Center (ROEC) addressing the conference

■ Energy Institute/IENE London Conference on “East Mediterranean Gas” crowned with success

With more than 80 participants and 14 eminent speakers the joint Energy Institute - IENE conference, which was held in London, at EI's premises at New Cavendish Street on October 7, attracted industry wide support and helped focus attention on East Mediterranean's upcoming role as a major gas exploration and production area. The excellent presentations and high quality of discussions that took place contributed to the event's success.



As IENE's Chairman, Costis Stambolis, pointed out in his opening remarks, “Exploration and production activity in the area has grown almost exponentially over the last 10 years since the discovery of the Leviathan gas field in Israel, Aphrodite in Cyprus and more recently of the Zohr and Noor fields in Egypt. Proven gas reserves have grown impressively, beyond early expectations, while production is steadily expanding. Satisfaction of the region's gas demand remains a priority for both Israel and Egypt and the question of exporting surplus to world markets is now getting increasingly more attention”.

A general remark from the chair had to do with the great similarities now clearly visible between present day exploration activity in the East Mediterranean and those of the North Sea 40-50 years ago. “Several years of early inactivity, then a series of important discoveries, followed by high concentration of interest by international and local companies, then delays in moving to the next phase and eventually a big production boom”, noted Stambolis. IENE's Chairman further added, “I must also point out that over the last 5 years or so a lot of misplaced optimism has been expressed by various quarters of the region's ability to become a major supplier and meet substantial part of European gas demand in the coming years”. Indeed, one of the key questions that the EI/IENE event addressed was the very issue concerning the most advantageous export options. These and a host of other interesting points were thoroughly discussed and analyzed at the conference”.

The conference opened with a keynote address by the CEO of Energean PLC Mathios Rigas who spoke on the “Building the leading independent E&P Company in a region of strategic importance”. Dr. Charles Ellinas, a well-known gas expert of the region, then elaborated on “East Med gas export options: LNG, pipelines and prices”.

Mona Sukkarieh, Political Risk Consultant, Middle East Strategic Perspectives, “Lebanon as the next exploration frontier in the Eastern Mediterranean”, explained Lebanon's exploration plans and activities and country's role as the next exploration frontier in the East Mediterranean. Then Demetris Fessas, Acting General Manager of Cyprus Hydrocarbon Company discussed “The outlook for Cyprus's exploration and production opportunities”.

Following that a panel discussion drew attention on “Exploration and production activities in Greece: Its current outlook and future prospect as a new frontier” with the contribution of George Zafiropoulos, Senior Advisor, HELPE Upstream SA and Dr Yannis Bassias, President & CEO, Hellenic Hydrocarbon Resources Management S.A. (HHRM S.A.). Then Libor Krkoska, Deputy Director, Country Strategy, EBRD in London discussed the restrictions posed to banks by Climate Change policies in investing in hydrocarbon and exploration and production projects.

An interesting discussion ensued on “Fostering a new era of economic and political stability for the region” with the participation of Dr Nicholas Ioannides, Adjunct Lecturer of International Law, University of Nicosia (Cyprus) and Dr Harry Tzimitras, Director, Peace Research Institute Oslo-PRIO Cyprus Centre.

The region's complex geology was explained in a first-class presentation by Dr Mark Hamilton, Senior Geoscientist, at PGS. Then Dr. Gina Cohen, a well-known expert and lecturer at Technion University of Israel, in her well documented presentation, focused on “Israel and Egypt's natural gas export deal: The EMG pipeline”.

The conference concluded with two excellent presentations by Max Vauthier, Managing Director, LNG Value and Boyana Ačovski, Secretary General, Gas Infrastructure Europe. Max Vauthier discussed LNG production and trade in the region as increasing volumes of LNG are being traded every year, while Boyana Ačovski expanded on “The Role of Energy Infrastructure in the European Long-Term Vision for a Climate-Neutral Economy - the role of gas infrastructure and the flexibility of the system for a climate-neutral economy”. Summing up the conference proceedings, Costis Stambolis observed that this proved to be a unique event since in the course of a single day it threw light on almost all aspects of gas exploration, production and trade in the region. He promised that the IENE will soon have ready a detailed microsite with all presentations and relevant material.

■ IENE's Chairman participated in Annual Symi Symposium

Following an invitation by George Papandreou, Greece's former Prime Minister and founder of the Symi Symposium, the Chairman and Executive Director of IENE Mr. Costis Stambolis participated in this year's event which took place at Milatos, on the island of Crete from 7-11 of July.



The theme of this year's Symi Symposium was "Democracy and Power, from Hybris to Nemesis" wishing to draw attention to the dangers emulating from the concentration of power and the subsequent growing of inequalities. Today, democracies are being challenged by power concentration, which is aided by the evolution of technology, which in turn creates the illusion that we acquire godlike attributes and hence there is an urgent need to repent-imagine the way our societies address their future. As the Symi Symposium introductory notes points out "Greeks have thoroughly described the dangers of Hybris- misuse of power, followed by Nemesis-retribution".

In the same note author Yuval Harari suggests, "if current trends continue, algorithms may become the nemesis of an increasingly unequal world. The new longevity and super-human qualities are likely to be the preserve of the techno super-rich, the masters of the data universe. Meanwhile, the redundancy of labour, supplanted by efficient machines, will create an enormous "useless class". In which way, this not so distant future can be addressed? It is crucial to build substantive democracies, fighting inequalities, re-designing the future of work, regulating scientific progress and new technologies, implement a new green economic and social deal, promote peace and stability through cultivating a planetary consciousness". These are some of the topics that were discussed at length in the annual international Symi Symposium.

As the prevailing theme of the 2019 Symi Symposium was the search of a new paradigm for shared societies, the energy sector and the current Energy Transition process, emerged as an area of great interest which can provide a basis for shared action and cooperation, even between adversaries.

Hence, a whole session of the Symi Symposium was dedicated to the "Energy puzzle in the Eastern Mediterranean: a blessing or a curse". Costis Stambolis contributed his thinking on the current energy dilemmas as the Energy Transition is taking hold with the goal of full decarbonisation and zero emissions dominating the agenda. A realistic view of the present situation, where carbon's participation in the global energy mix has slid by only 1,0% over the last 18 years, is that a lot more effort will be required in the next 20 to 30 years to achieve the partial removal of fossil fuels from the plane's energy balance. In this respect all different forms of energy, including natural gas, oil, nuclear, renewables and energy efficiency, have a significant role to play.

The new found gas resources in the East Mediterranean could prove pivotal in enhancing regional energy cooperation which is already happening among countries such as Egypt, Israel, Cyprus and Greece. The East Med Gas Forum is a case in point and efforts should be made to include more partners in this unique initiative. Turkey's role though remains ambivalent, to put it lightly, as she appears ready to chart its own path disregarding the existence, the rights and operational realities of the other countries in the region.

Hence the role of East Med gas both in terms of providing a valuable energy resource but also presenting an opportunity for building bridges and cooperation among the countries of the region, was hotly debated in a special session which was moderated by Costis Filis, head of the Institute of International Relations of Pantion University.

Participants in this session included Gallia Lindenstrass, from the Institute of National Security of Israel, Mona Makram, former Senator of the Egyptian Parliament and distinguished Lecturer of Political Science at the American University in Cairo, Prof. Soli Ozer, Professor of International Relations at Kadir Has University and Costis Stambolis, chairman and executive director of IENE.

As usual, the Symi Symposium attracted some top level thinkers from across the world and provided once again the opportunity for a frank exchange and views and ideas. As the organizers note "Sympi is meant to initiate and nurture spirited deliberation in a discreet setting, while giving participants the opportunity to learn from each other in a more personal and substantive way than is usually possible.

The overarching ambition of "Sympi" is to foster ideas that help make our societies more equitable, closer to needs of citizens, and better equipped to overcome global challenges. Our Symposia carry a legacy of deliberations and friendships that have borne fruit in the form of significant policy initiatives, ventures, and public service".

In this context this year's Symposium proved most enlightening especially as it included the "energy dimension" in its broader quest for substantive democracies and the fight against inequalities.

■ IENE actively participated in 4th Annual Iraqi-European Business and Investment Forum

With 25 high-level speakers and more than 200 delegates participating from Iraq, Greece and other European and Middle East countries, this year's Iraqi-European Business and Investment Forum was convened by the Arab-Hellenic Chamber of Commerce and Development.



Given the effort now being undertaken by the Iraqi government and with the support of international organizations and donor agencies for the reconstruction of the country, this annual Forum was not only timely but highly relevant in view of its subject content but also on account of the great diversity of the companies which it managed to attract. Following an invitation by Mr. Rashad Mabger, Secretary General of the Arab-Hellenic Chamber of Commerce and Development, IENE actively supported in this unique event through the participation of its Head of Research, Mr. Dimitris Mezartasoglou.

In his presentation, Mr. Mezartasoglou outlined Greece's energy expertise and investment prospects and how Greek energy companies could assist Iraq in rebuilding, upgrading and expanding power generation and distribution facilities. The areas covered in his presentation included, among others, refining and distribution of petroleum products, since Greece has developed considerable expertise over the years as it operates four modern refineries with substantial exporting activity mostly in the East Mediterranean and Balkan regions.

Another area, which was highlighted in Mr. Mezartasoglou's presentation, included the EPC contracting capabilities of Greek companies involved in power generation, using both conventional and renewable energy sources, solar water heating installations for both commercial and household applications, solar PV plants and wind farms, electricity transmission cables and distribution systems, smart meters, pipelines for both oil and gas applications as well as desalination plants. Greece possesses considerable expertise on the aforementioned areas as they are highly relevant in the context of the various projects now considered, planned or under development in Iraq as part of the country's reconstruction programme.

■ IENE participated in IEA's Global Conference on Energy Efficiency in Dublin

The International Energy Agency's fourth annual Global Conference on Energy Efficiency took place in Dublin, Ireland, on June 24/25, 2019. Following an invitation by IEA's Executive Director, Dr Fatih Birol, IENE actively participated through Mr Costas Theofylaktos, Chairman of the Institute's Energy Efficiency Committee.



Energy efficiency is a continuous key focus area for the IEA, and over the past years this conference has become part of a range of activities on energy efficiency, promoted by the IEA, including in-depth analysis, best practice sharing with governments across the globe and capacity building with policy makers in emerging economies. The Conference drew an audience of 400 participants from more than 50 countries and brought together dignitaries and senior leaders to advance global progress on energy efficiency.

This year's conference focused on the impact of digitalisation on energy efficiency, and lessons learned, the role of financing, business and policy innovations and the multiple benefits of energy efficiency. The IEA is currently working on its Energy Efficiency 2019 annual report which is expected to be published later this year.



Costas Theofylaktos, IENE's Secretary General and Chairman of the Institute's Energy Efficiency Committee.

■ Greece's hydrocarbon exploration progress reviewed in a joint event with the Technical Chamber of Greece and IENE

On June 18 the Technical Chamber of Greece, known as TEE, which is the professional body representing all engineering professions, in a one day seminar which took place in its premises and was fully backed by IENE, provided a first class opportunity for reviewing Greece's latest efforts to develop its hydrocarbon resources.

The seminar, which was well attended with more than 100 participants, was opened with a keynote address by TEE's Chairman, Mr. George Stasinou who stressed the importance of the hydrocarbon sector both in terms of economic development but also from a research and technical know how point of view. From IENE's part Mr. Costis Stambolis, the Institute's Executive Director, emphasized the need for Greece to step up its efforts as an unprecedented number of concession areas all over the country have now been let out with several major oil companies involved.

The seminar consisted of two parts with some 10 speakers participating in all who between them covered all aspects of exploration and research work. Speakers in the first session of this groundbreaking meeting included some of Greece's top oil and gas executives while in the second part representatives from academia provided a vivid account of the research and teaching work now being carried out by the country's leading technical universities.

Dr. Yiannis Bassias, Chairman and CEO of the HHRM, the country's state hydrocarbon agency, opened the proceedings contributing a detailed account of the various concession areas, progress made so far and the associated geological considerations and priorities.

Yiannis Grigoriou, CEO of Hellenic Petroleum Upstream company, subsidiary, informed of his company's ongoing research and exploration work in the Patraikos Gulf but also in other areas in north Ionian, south Peloponnisos and south of Crete where HELPE participates in two consortia along with ExxonMobil and Total. Then Dr. Dinos Nikolaou, senior technical adviser of Energean Oil&Gas and well known reservoir engineer reviewed progress in the Prinos offshore concession where Energean has been operating for over ten years now producing some 5,000 barrels of oil daily, in the Ioannina inland concession where Energean works along with Repsol, and in Israel where Energean is now developing the Karish and Tanin fields with first gas expected early in 2021.

A presentation by Prof. Angelos Syrigos on the current geopolitical issues confronting Greece and the East Mediterranean concluded the first session. Chairing the second session was Mrs. Teresa Fokianou, who heads IENE's Upstream Committee. In her opening remarks Fokianou made special reference to the unique challenges posed by exploration in big depths, beyond 3,000 meters, which is the case of the areas south and south west of Crete. Presentations then followed by Prof. Sofia Stamataki, a well known petroleum geologist and former head of HHRM, from the Athens Technical University, by Prof. Nicholas Varotsis from the Technical University of Crete and by Prof. Avraam Zelilidis, from the Technical University of Patras. Between them the three senior academics provided an all round picture of current research work in Greece's academic establishments, the challenges faced and the excellent prospects of expanding their educational work as demand is rising fast for trained and competent professionals in oil and gas.



The full presentation and more information:

portal.tee.gr/portal/page/portal/SCIENTIFIC_WORK/EKDILOSEIS_P/ekdiloseis_2019/hydrogonanthrakes/eishghseis



■ Vienna Energy Transition Forum Helped Broaden the current Debate by Inviting Actors From All Different Energy Branches

The Vienna Energy Transition Forum, which was organized by IENE in the Austrian capital on June 6-7, attracted a diverse number of speakers and panelists from all different branches of the European energy sector and engaged them in two days of intense discussions in an effort to broaden the debate of the Energy Transition agenda.



Opening remarks by Costis Stambolis

The Vienna Energy Transition Forum, brought together some of the most progressive energy thinkers from across Europe in order to discuss the critical energy and environmental issues and how these can be tackled as the region enters a decarbonisation phase in line with EU goals and international commitments.

As IENE's Executive Director, Mr. Costis Stambolis noted in his opening remarks "Our Institute through this Forum aspires to broaden the debate on Energy Transition by giving equal weight to energy branches hitherto considered anathema in discussing the contribution of energy in mitigating climate change. In this context we believe that the role of natural gas, nuclear power and that of the oil and gas must be fully reconsidered in view of the serious merits that each one of them brings in the overall effort for decarbonisation."

A number of prominent authorities from international energy companies, government bodies and academia addressed this two day high level meeting.



From left to right: Dr Hans Hutta (ICM), Mr. Pierre Tardieu (WindEurope), Ms. Claudia Brandus (ENEL) and Mr. Gerd Pollhammer (Siemens)

A representative cross section of speakers included Tom Van Ierland from the European Commission, Janez Kopac, Energy Community, Dr. Abderrezak Benyoucef from OPEC, Tim Yeo of The New Nuclear Watch Institute (NNWI), Daniel Kroos from the Energy Security Organization for Security and Cooperation in Europe (OSCE), Dr. Michael Losch, Director General of Energy and Mining Austrian Federal Ministry for Sustainability and Tourism, Mr. George Zazias from the E3Modelling and advisor to the European Commission,

Dr. Aliko Van Heek from International Atomic Energy Agency (IAEA), Dr Bas van Ruijven from IIASA, Michael Woltran of OMV, Prof. Andrey Konoplyanik from Gazprom Export and Russian State Gubkin Oil & Gas University, Chris Walters of Gas Strategies, Gerd Pollhammer, SIEMENS, Claudia Brânduș from ENEL, DI Gottfried Steiner from Central European Gas Hub, Dr. Yurdakul Yigitguden, Independent Energy Consultant and Former Co-ordinator of OSCE Economic and Environment Activities, Nick Butler, Chair at King's Policy Institute, King's College, London, Ms. Liana Gouta from Hellenic Petroleum, Dr. Charles Ellinas, Atlantic Council, Prof. Reinhard Haas, Technical University of Vienna, Eugenia Gusilov from ROEC, Kaloyan Staykov from the Institute for Market Economics, John Roberts, Energy Security Specialist and many others.

Issues such as the need to decarbonise power generation and yet maintain reliable base load, the role of gas as a fuel of choice and the need for further renewables penetration, under economically competitive terms, were hotly debated in the Vienna Energy Transition Forum. EU 's decarbonisation agenda and Energy Transition roadmap came under scrutiny as a bundle of factors ranging from electricity market integration and grid performance to the slow pace of implementing vital gas interconnections and the role of nuclear power as a realistic alternative capable of delivering emission free base load power generation, were addressed. Another important topic which is often sidelined in Energy Transition fora but which was extensively discussed at the Vienna meeting, is the constructive role that the Oil & Gas industry can play during Energy Transition. What clearly emerged from this top level two day meeting in Vienna was the need for charting a new energy agenda for CE and SEE.



Prof. Andrey Konoplyanik from Gazprom Export and Russian State Gubkin Oil & Gas University

■ IENE's Executive Director Was Invited Speaker in Caspian Oil & Gas

In late May the Executive Director of IENE travelled to Baku, Azerbaijan to participate and speak at the 26th International Caspian Oil & Gas conference upon the invitation of the organizers, the ITE group. The conference which took place at the Bilgah Beach Hotel on May 30/31 was convened under the auspices of the Ministry of Energy of Azerbaijan and with the support of Socar, the State Oil Company.

The Caspian Oil & Gas annual conference and the accompanying exhibition provides a unique opportunity to review latest activity in one of the world's most demanding hydrocarbon exploration areas. An area which appears to have an almost inexhaustible potential and over the years has become the focus of exploration, production and transmission activity attracting interest from some of the world's largest oil and gas companies.



Costis Stambolis, IENE's Executive Director participated in a special session chaired by Socar's Deputy Vice President Mr. Vitaliy Baylarbayov, part of the Gas Dialogue, which focused on the new export and investment opportunities. The other participants of the panel included Mr. Afgan Isayev, general director of the Southern Gas Corridor (SGC) company, Dr. Danila Bochkarev, senior fellow for Energy at the East-West Institute and Ms. Gulmira Rzayeva, senior research fellow at the Oxford Institute for Energy Studies. Following presentations by Afgan Isayev and Costis Stambolis a lively discussion followed with the participation of all four panelists. In his presentation entitled "South Corridor Opens Up New Energy Markets in SE Europe" Costis Stambolis discussed how the entire South Corridor, slated to become fully functional in 2020 with the operation of its last leg, the TAP pipeline, will help generate a whole new series of gas related businesses along its 3,420 kms route.

"Opening up the South Corridor will bring for the first time after more than 15 years new overland gas supplies to the main European gas markets thus helping to diversify gas supply sources and thus help strengthen European energy security", noted IENE's Executive Director in his opening remarks. "There is a new architecture to be considered in how the South Corridor is shaping up with multiple pipelines, new interconnectors, LNG terminals, additional underground storage facilities and several entry points providing access to more than one suppliers", stressed Stambolis in his short but comprehensive presentation.

 The full power presentation is available through IENE's web site www.iene.eu

■ IENE's Executive Director Was Speaker in annual "Flame" Conference




Europe's most influential natural gas event, the annual "Flame" conference was once again held at the Okura Hotel in Amsterdam from 13-15th of May.

The rebound of European gas demand, the increasingly important role that Europe is playing in global LNG trade and Russia's continuing relevance in European gas supply were dominant themes in this year's conference which brought together more than 600 senior energy executives and high level government and international organisation officials who participated in some 120 different sessions.

Adapting to the demands of a new energy world and the key role of natural gas in the future energy mix as we move towards Energy Transition was another key theme which played strongly this year in Amsterdam. The quest for new supply sources as Europe's own gas production is dwindling, something which became painfully apparent with the latest news concerning the Groningen field's planned premature closure by 2025, has acquired a new urgency especially as policy makers are coming under increased pressure to lessen country exposure to Russian gas imports.

To help understand the complex situation now developing in the East Mediterranean but also assess the new opportunities now arising from the imminent operation of the first leg of the Southern Gas Corridor, which is the TANAP-TAP pipeline, "Flame" organizers invited IENE's Executive Director, Costis Stambolis, and Dr. Charles Ellinas, Managing Director of eCNHC, and the Senior Research Associate of IENE to speak in a special session on "Cyprus, Greece and Interconnectors" which was moderated by the well known Israeli gas market expert Dr. Gina Cohen.

IENE's Executive Director focused his presentation on the "the expanded south gas corridor" and how this will become the driver for considerable new infrastructure investment in the broader SE European and East Med area in the years to come. As Stambolis pointed out "the impact from the anticipated start of operation of the fully extended TANAP-TAP pipeline next year is much broader than the new gas volumes that this new route will bring and has to do with the host of new projects that are being developed ranging from new interconnectors to land based FSRU terminals and the emergence of gas trading hubs".

 Presentations available through IENE's web site www.iene.eu



■ “INNOPATHS” Workshop held in Athens in partnership with IENE

“INNOPATHS”, which stands for Innovation Pathways, Strategies and Policies for the low carbon transition in Europe is an EU funded programme, which focuses on carbon neutrality from an investor’s perspective. On Wednesday, May 15 INNOPATHS organized its first workshop in Athens through its Greek partner E3 Modelling Ltd, with IENE promoting the event through its members’ network, while some of the Institute’s partners actively participated in its proceedings.

INNOPATHS is a research project that aims to work with key economic and societal actors to generate new, state-of-the-art low-carbon pathways for the European Union (see <https://innopath.eu/>).

The project’s objectives are the realization of the challenges of decarbonization and the innovation needed to address them, to present a detailed assessment of low carbon technologies, their uncertainties, assess future prospects and system characteristics, and propose policies and innovation system reforms that will help EU meet its greenhouse gas emission reduction targets. The project also aims in creating new, co-designed deep decarbonization pathways with novel policy and innovation processes for low-carbon technology development. The INNOPATHS project also puts emphasis on the societal, economic and environmental dimensions of the low-carbon transition and how they can be managed.

The project was presented by Laura Diaz Anadon (Professor of Climate Change Policy, University of Cambridge), Elena Verdolini (Senior Scientist, CMCC) and Professor Paul Ekins (University College London, HLP member – INNOPATHS coordinator). INNOPATHS is proposing two technological and financial tools, which are in the development process and are tailored for the project to meet its objectives. The first one, the “Technology Matrix”, presents historic and projected characteristics, and associated uncertainty, of key low-carbon technologies and can be utilized to calculate the future costs of low carbon transition and the “Policy assessment framework”, which presents key evidence-based characteristics of policy instruments and mixes to encourage the low-carbon transition and can be utilized for offering information about the impact of policy instrument on several outcomes of societal interest (environmental effectiveness, cost effectiveness etc.). Professor Ekins, pointed out the major innovative approaches of INNOPATHS project, which are notably that it approaches all sectors of economic activity including agriculture, while also proposes priority research for each sector and finally proposes decarbonization as a tool for European competitiveness.

From E3 Modeling’s part, which is participating as partner in the INNOPATHS project, Professor Pantelis Capros (NTUA), presented the parameters, indicators and variables of the PRIMES model, used in INNOPATHS’s analysis, most notably energy efficiency, RES share indicator (building grids, integrate EU markets, etc.), structure of power generation, RES and Storage, gaseous fuels, transport fleet, fuel mix in transport, total electricity system costs, electricity prices investment costs etc.

Professor Capros gave emphasis on the major role of electricity for the energy mix of the future, which foresees an increase in power generation from RES, while stating that nuclear energy could play a minor role in the transition. Prof. Capros also argued that the improvement of energy efficiency should be approached by a no regret option, while the major uncertainties for the future energy system could be the cost of hydrogen and e-fuels. Finally, he stated that the generalization of the standards in all sectors will be the instrument of the future and needs to be explored further. In the second session of the conference, chaired by IENE’s head of Energy Efficiency committee, Costas Theofylaktos, a number of Greek energy market experts and company executives participated in a round table discussion on the current and future challenges of the energy sector.

There, Mr. Polymenopoulos representing “HELESCO energy efficiency” highlighted the role of ESCOs in the improvement of energy efficiency. Mr. Polychroniou representing “DEPA, gas industry and renewable gas” analyzed the prospects of future technologies of gas production highlighting that high utilization of chemical energy storage using renewable gas could lead to 138 billion € for EU in 2050 in comparison to an electrification scenario, based on PRIMES model results. Mr. Papastamatiou representing “ENTEKA wind energy”, one of Greece’s pioneering wind companies, addressed the licensing boundaries in RES projects noting the low success rate of wind projects, which affects indirectly electricity prices for consumers.

Furthermore, he referred to the most important market requirements for the acceleration of energy transition, most notably the development of coherent specification policies, the implementation of large-scale RES projects, the capacity increase of local and international interconnections and development of large-scale central storage systems including pump-storages. Present in the panel discussion was also Dr. Sotiris Kapellos, representing HELPE Renewables, and HELAPCO, the Hellenic Association of Photovoltaic Companies, addressed the issue of PV investments in Greece and called for the simplification of licensing procedures and a full implementation of EU guidelines for electricity market liberalization (Target model, Storage, Balancing of RES etc.). Then, Dr. George Ageridis (CRES, Electromobility) addressed the electrification of the transport sector by analyzing the carbon neutrality of EVs and their energy efficiency, then switched his focus towards battery technology, which represents the key factor for EVs development. He also predicted that in 2050 the 81.5% of the electricity used for mobility could derive from RES and stated that EVs should not be seen as a market product or a market regulating tool but as part of the means for energy transition.

■ Greece's vibrant Electricity Market discussed in well attended IENE event

A half day conference on the "Challenges Facing Greece's Electricity Market" was successfully organized by the Institute at the Divani Caravel hotel in Athens on Thursday, May 9 drawing large crowds of attendees and an impressive list of speakers and panelists.

The dominant issue in today's energy scene in Greece is the forthcoming transition of the market from the present mandatory pool system into a more open market to be based on the so called "Target Model", according EC's latest electricity market design, and in conjunction with the much anticipated operation of the recently founded Hellenic Energy Exchange, which is slated to commence operations by the end of this year. Electricity market integration in parallel to the operation of local and regional power exchanges is the European norm to which the Greek electricity market must abide.

This latest IENE event provided the opportunity for most of Greece's key players to participate and air their views on the forthcoming structural changes in the operation of the electricity market and the need for further improvements, including the strengthening of market mechanisms such as the introduction of electricity coupling with neighboring markets.

A total of 19 speakers and panelists participated in this timely event included senior executives from the Hellenic Energy Exchange (EnEx), the Public Power Corporation (PPC), the Independent Power Transmission Operator (IPTO), the Regulatory Energy Authority (RAE), the Association of Independent Electricity Producers, and from Elpedison, Heron Thermoelectric and Protergia, the three major independent power producers. Other speakers and panelists included Mr. Elias Karidogiannis, Chairman of electricity trader ENSCO and member of IENE's board of directors, Mr. Anastassios Tossios, Chairman of IENE's Natural Gas Committee and Commercial Director, EDA Attica, Mr. Anthony Kontoleon,



from the Hellenic Union of Industrial Consumers of Energy (UNICEN), Mr. Constantine Athanasiadis, chairman of the Hellenic Association of Electricity Traders, Mr. Panayiotis Papastamatiou from the Hellenic Wind Energy Association, Mr. Stylianos Loumakis, chairman of the Association of PV Producers, Mr. Vassilis Rallis an independent energy consultant and Ms. Maria Koulouvari, Deputy Director, Department of Guarantees of Origin & Energy Disclosure, Operator of RES & Guarantees of Origin (DAPEEP SA) Professor Pantelis Capros, head of the E3-Modelling, from the National Technical University of Athens (NTUA), and chairman of IENE's scientific committee delivered the conference keynote address where he described the electricity market operation so far and its various deficiencies but also identified the various pitfalls awaiting the market's next phase. Also, Mr. Andreas Petropouleas, head of operations at Elpedison, and chair of IENE's electricity committee, who provided a very factual analysis of Greece's current electricity market operation. This latest IENE event was sponsored by PPC, EnEx and Elpedison.

■ IENE participated in Annual BBSPA Conference



IENE participated in the high-level 25th annual BBSPA Conference, which was held on April 4-5, in Bucharest. IENE was represented by its Head of Research, Mr. Dimitris Mezartasoglou, who attended the Conference and through a presentation on "The Case for a Gas Trading Hub in SE Europe", he outlined the prevailing situation in Central and SE Europe and presented data which showed the degree of market engagement of the various regional gas hubs currently in operation in Greece, Turkey, Bulgaria and Romania.

As Mr. Mezartasoglou noted in his presentation, "today, there is not a single gas trading hub – under the accepted terminology - in operation east and south east of Vienna, whose Central European Gas Hub (CEGH) could act as a benchmark and pivot for promoting gas trading in the region". He then went on to portray the differences between the operating 'semi' gas hubs in the region on the basis of the latest 2018 EFET scoreboard. In view of EFET's findings, and the work in progress by Greece's Gas Independent Transmission System Operator (DESFA), which has established the Hellenic Trading Point (HTP) as virtual trading point with balancing platform, it seems that the HTP is on the way of becoming the region's leading gas trading platform, a position which will be further enhanced by the forthcoming full operation of the Hellenic Energy Exchange (EnEx) later this year. The BBSPA Conference was attended by representatives from Romania's Energy Ministry, the Romanian Energy Regulatory Authority (ANRE), the Bulgarian Energy and Water Regulatory Commission, Norton Rose Fulbright, Osaka Gas, CMS, Deloitte, Lloyd's Register, Energy Exemplar Europe, Uniper, CEGH, MET Energy Trading Bulgaria, the Atlantic Council, Romanian Petroleum Exploration and Production Companies Association (ROPEPCA), Hellenic Hydrocarbon Resources Management, Gas Connect Austria, MOL Group, Romgaz, Transgaz, among others.

■ EMI's Conference in Stara Zagora Focused on "The Clean Energy Package and Energy Investments" – IENE actively participated

Early in April 2019 IENE participated in a major regional conference on "Clean Energy" organized by Sofia based Energy Management Institute (EMI), which took place in Bulgaria's coal producing region in Stara Zagora.



"The Clean Energy Package and Energy Investments – Realities and Challenges" conference was held on April 4-5, in Stara Zagora, Bulgaria and IENE participated upon the invitation of Mr. Slavtcho Neykov, Chairman of EMI. Mr. Alexandros Perellis, Senior Researcher at IENE, participated in the conference as a panelist in a round table discussion, which gave emphasis on the status of the investment process at an international, European, regional and national basis through the prism of energy investments regime and the major open issues in this regard, including terms of climate change.

As Mr. Perellis noted, "The region still invests in coal. There are approximately a total of 7.2 GW coal projects under development, in either announced, pre-permitted or permitted phase excluding Turkey, which has 36.6 GW on the pipeline. So, we cannot say that currently energy transition in the region is under way. Even if the planned coal projects end up being cancelled, the region will be tied with the coal economy for at least 15 years into the future".

He then presented the case study of Greece, with regard to energy investments, highlighting the current RES deployment and recent change of RES support regime, noting that even though support mechanisms progressed in a less generous status, the declining prices of RES systems kept driving its deployment, primarily solar PV in the country.

The conference was held in the city of Stara Zagora, which is in the midst of energy transition as it's the capital of Stara Zagora Province, south-central Bulgaria, where the Maritsa Iztok Complex, the largest energy complex in South Eastern Europe is located. The debate on decarbonization is very vibrant in the region, as approximately 12,000 people are currently employed in the coal/lignite industry and many more are indirectly involved in the regional coal based economy; thus the road to decarbonization is passing through the total transformation of the local economy. The problem of investment funding was thoroughly addressed as well as "an economically viable and fair transition for the people of the region, which must be technology neutral", as Secretary General of Eurelectric, Mr. Kristian Ruby stated.

EMI's Conference in Stara Zagora was attended by representatives from Bulgaria's Energy Ministry, Eurelectric, Euracoal, Energy Community Secretariat, Bulgaria's Electricity System Operator, Institute for Market Economics (IME), WWF Bulgaria, KNSB/CITUB trade unions, Support Confederation of Labour-Bulgaria, National Expert Council on Climate Change –Bulgaria as well as local and national media, representatives of the local economy and energy experts.



■ IENE supported "Energy Transitions 2019" organized by the Royal Institute of International Affairs

On March 18 the annual "Energy Transitions 2019" conference took place in London organized by the Royal Institute of International Affairs, widely known as Chatham House. The conference, where IENE was a supporting organisation, was structured in four main sessions.

The first session explored the issues of disruption and innovation addressing the critical role of new technologies, the introduction of new market players and the necessary reform of policies and strategies that will assist in the adjustment to this new energy market. The second session examined several aspects of electrification and its impact on the electricity systems. Data architecture and data transparency, system flexibility and interconnections between markets were highlighted amongst others while the examples of Denmark and Norway were analysed. The third session focused on the accessibility to energy on a global level. The need for large scale systems and distribution grids was emphasized whereas China was particularly examined. The fourth session provided insight to investments in light of the energy sector's transition. The panel identified risks, challenges and opportunities that should be considered for the adaptation of the business strategies and business models to the new reality. The case of Nigeria was specifically explored.

Overall, the "Energy Transitions 2019" was a high-level conference which provided a thorough overview of new actors, new technologies and business models. IENE actively contributed to "Energy Transitions 2019" with the Institute's Knowledge Officer Ms. Alina Gourgioti travelling to London to participate in this major energy policy event.

■ IENE's "Geopolitics of Energy Transition" attracted key regional players

The special colloquium convened by IENE in Athens on March 5 to discuss the geopolitics of Energy Transition at regional level proved hugely successful judging by the range of topics discussed and the high level of speakers and panelists who participated in the event.



With more than 100 participants including 20 speakers and panelists, this unique gathering which was held in Greece's Ministry of Foreign Affairs, attracted participants and speakers from several countries in the region and beyond ranging from the UK, the Netherlands and Russia to Turkey, Israel, Cyprus, Bulgaria, Romania and of course from Greece.

The event's significance was underlined by the strong political representation from Greece since the minister of Environment and Energy Mr. George Stathakis opened the proceedings of the Colloquium by a strongly worded address where he outlined Greece's current activities in the broad energy sector stressing his government's increasingly important and fast moving efforts in developing international energy connections in electricity and gas. Stathakis's opening speech was followed by an equally important intervention by one of his predecessors, the well respected Prof. John Maniatis, MP, and former minister for energy (2012-2015). Maniatis, who is credited with Greece's resumption of oil and gas exploration since 2011 and for gearing a number of major energy infrastructure projects stressed the need for regional cooperation in energy as "the only way for moving forward and accelerating economic development ". According to Maniatis Greece is capable of attracting some € 50 billion of investments in the energy sector over the next 10 years.

The Colloquium's main topics included a review of the global and geopolitical developments and an assessment of their impact on the energy sector. Of particular interest were the presentations contributed by John Roberts from the UK, Gokhan Yardim from Turkey, Slavtcho Neykov from Bulgaria, Prof. Ionut Purica from Romania, Dr. Danila Bochkarev from Russia, Dr. Nektaria Karakatsani from Greece, Dr. Gina Cohen from Israel, Dr. Yannis Bassias from Greece and by Dr. Marika Karayianni also from Greece. The Colloquium's main sponsors were Greece's Independent Power Transmission Operator (IPTO) and KG Law Firm one of Greece's leading law firms, while energia.gr, Greece's primary energy portal was the event's media partner.

■ EI's International Petroleum Week attracted global interest - IENE participation

The International Petroleum Week organized by the Energy Institute in London at the end of February attracted huge international interest judging from the wide media coverage and the more than one thousand delegates from more than 40 countries.

Focusing on the themes of geopolitics, sustainability and technology the conference hosted some 120 keynote speakers and panelists who between them reviewed latest developments from a policy, technology and investment point of view.

Included in the subject areas of the conference was a wide ranging discussion on the future for the oil and gas industry, the geopolitics of oil and gas and what will energy security look like over the next decade, the role of blockchain as a driver for enhancing business value, actions to tackle climate change and the role of the oil and gas industry. In this context BP's presentation of its annual Energy Outlook was particularly relevant as it provided a solid and well referenced background on which the whole discussion ensued. The increasingly assertive role of Russia in oil and gas was another subject area which attracted considerable interest together with the latest developments in the Caspian region.



Equally important was the discussion on Africa's position as the new frontier area for oil and gas with several examples fully analyzed from Ghana, Mozambique, Tanzania, Senegal/ Mauritania and Uganda.

Assuring fuel integrity from terminal to pump in the downstream supply chain fuel authentication was another area of prime interest together with the role of liquid fuels in European climate strategy. The Institute of Energy for SE Europe (IENE) was represented by its Executive Director, Mr. Costis Stambolis who together with Senior Research Associate Dr. Charles Ellinas participated in most sessions taking active part in discussions and comment.

Mediterranean Hydrocarbon developments was officially announced which actually took place on October 8, 2019 at EI's premises in central London.

Educational Activities

■ IENE's latest Seminar on Greece's New Electricity Market



On November 6, 2019 IENE successfully concluded its second educational course which dealt with the operation of Greece's electricity market in anticipation of the new energy market framework both in Europe and Greece and the implementation of the Target Model. The course, which focused on the domestic electricity market, was organized successfully with the participation of 27 students, all coming from major energy companies and law firms in Greece. The course, which was supported by the Hellenic Energy Exchange (HENEx), focused on the forthcoming launch of the Energy Exchange following the implementation of EU's Target Model as well as the relevant changes that will take place during the transition process, which will lead to an integrated market for the benefit of participants and end consumers alike.

More specifically, the second IENE seminar covered the following topics: (a) Introduction to Greece's Energy Exchange (Part A' and B'), (b) Target Model Implementation in Greece and economic repercussions (for the companies and for the consumers), (c) Introduction to Forward Market - Clearing House and Back Office, (d) Introduction to Day-Ahead Market, (e) Introduction to the Balancing Market, (f) Introduction to Forward Market - Legal financial products, (g) Introduction to Intraday Market and (h) Key milestones and challenges of the new electricity market in Greece. The main purpose of the seminar was to discuss and analyse the regulatory and legislative issues as well as the operational aspects of Greece's new electricity market following the creation of the four new markets.

The seminar's instructors included some of the most prominent experts of the Greek energy sector, with deep knowledge of the electricity markets as well as executives of the newly established Hellenic Energy Exchange.

■ IENE successfully conducted 2nd Energy and Geopolitics Seminar



On April 22 the last class of the Institute's pioneering seminar "An Introduction to Energy and Geopolitics" was held thus concluding this highly relevant IENE course. The seminar was organized in partnership with the Institute of International Relations (IIR) of the Panteion University of Athens and actually took place at the Institute's premises which are situated in Plaka, Athens's historic neighborhood in the foothills of the Acropolis.

This was the second time that IENE convened such a seminar with the first one having taken place in 2015. The seminar, which was conducted at graduate level, comprised of 18 three hour sessions which took place mostly in the evening (17:00-20:00) and included lectures from 15 university and industry instructors. A total of 16 students participated coming from a diverse background with all of them actually being active energy professionals working for large energy corporations and law firms. A wide range of disciplines were represented among the seminar's students including mechanical and electrical engineers, petroleum geologists, software developers, policy makers and lawyers.

The subjects which were covered in this latest IENE seminar included the basic principles of geopolitics, a review of the parameters involved in the global energy system, the key role of oil and gas, oil and gas exploration, Energy Transition issues, decarbonisation and the role of renewables and energy efficiency. Also a review was presented of major energy infrastructure projects in SE Europe and in the East Med. In addition to subjects of direct energy relevance the seminar included lectures on the global economy, development issues in emerging economies, the military dimension of modern geopolitics, the role of USA and Russia, the rise of China, an introduction to the Law of the Sea and the dynamics of geopolitical friction in the East Mediterranean.

With nine students having opted to continue their studies with the preparation of a thesis, to be supervised by IENE and IIR, the next few months will be busy culminating in an award ceremony in early October. The successful students will receive a Diploma in Energy & Geopolitics Studies to be awarded by IENE and IIR.

Our People

IENE's External Associates

External Research Associates play a vital role in the operation of the Institute through their regular contribution to IENE's activities, including publications and research. In this issue we present three long standing associates with regular presence and valuable input to Institute's work.



Nikolaos Sofianos worked for IENE for ten years (2007 - 2017) firstly as a Researcher and later as Research Coordinator of the Institute. He

is a graduate of the department of History and Philosophy of Science of the National Kapodistrian University of Athens while he holds a master's degree in Economic Development from the University of Glasgow in Scotland. He has carried out extensive research into Renewable Energy Sources and their implementation in SE Europe. He was the Coordinator of the EU funded research project Geofar. His main area of interest is energy policy issues. He participates as a publishing assistant in the "Energy Issues", "SE Europe Energy Brief" and he has authored many articles. Since 2016, he participates in the Board of IENE as a partner.



Anastasios Mastrapas is worked for two years (2014-2016) at IENE as full time Researcher and Scientific Associate.

He is an Electrical Engineer with an MSc in Economics and Finance (AUEB). He was Assistant Editor of "Market Fundamentals and Prices" (bi-monthly Newsletter of IENE) and participated in the development of Institute's research projects.

He has a 8-year working experience in Renewable Energy Sources (RES) and in the electricity industry sector. He is currently an external Research Associate contributing regularly to analysis and energy market issues.



Vasilis Rallis is an Energy and Business Development expert, focusing on Energy Efficiency, Renewables

and Fintech and lately has joined the Institute as an external Senior Research Associate of IENE. Previously he was an economist at the Greek Regulatory Authority of Energy (RAE). He has also managed various large-scale projects with multiple stakeholders in the electricity and natural gas markets and participated in the Target Model Task Group. He holds an MBA (Alliance Manchester Business School), an Economics Degree (Athens University of Economics and Business -former ASOEE) and the Global Energy Certificate (Harvard Business School).

IENE Comment

EIB's decision to suspend funding for Fossil Fuels Projects can only be described as irrational



The unquestioned belief, not to say dogma, by some people that global environmental catastrophe is imminent, through the foreseen steep rise of atmospheric temperatures and sea levels as stipulated by Climate Change theory, is leading to some completely irrational decisions. Such a mind-boggling decision was taken on November 14 by the governing board of the European Investment Bank (EIB), according to which the Bank has decided to suspend all funding related to coal, oil and natural gas projects by the end of 2021. As EIB is the foremost EU lender and a trend setter at that, it is expected that the Bank's example will soon be followed by EBRD, but also by major commercial banks.

And although EIB's decision concerning the provision of funding for the construction of new coal-fired power plants is, to a large extent, understandable and is in line with stated EU policy towards decarbonization and carbon neutrality by 2050, it is less so when it comes to new petroleum projects and completely inexplicable in the case of natural gas. As we have now entered an energy transition phase whereby over the next 20 to 30 years we shall witness the gradual phasing out of fossil fuels, natural gas, by tacit agreement between industry and the European Commission, is widely accepted as the fuel of choice, which shall see us through to a cleaner environment. So, as industry and power generators are abandoning coal, which because of the continuing rise of emission costs are also becoming uneconomic to operate, they are already switching to natural gas and renewables. >>>>



To read the full article please visit :

www.iene.eu/eib-s-decision-to-suspend-funding-for-gas-projects-can-only-be-described-as-irrational-p5408.html

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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