

THE INSTITUTE OF ENERGY FOR SOUTH-EAST EUROPE EDITION • Autumn 2018-Spring 2019

A year of Energy Markets in Transition

Editorial



The past few months have been a period of intense activity and great mobility for the Institute with the organization of a series of events in South East Europe and beyond as well as the completion and the launch of major research and study projects. In its work the Institute has been assisted by it dedicated administrative team

but also by its scientific staff which was recently restructured and augmented with the arrival of new expertise. This year started with the launch of a major publication, entitled "Annual Report on Greece's Energy Sector 2019", which the Institute aspires to publish on an annual basis. This study which took almost a year to prepare provides an in depth analysis of Greece' energy situation and its role in SE Europe. This publication which covers the entire energy sector forms a most useful reference for the industry but also for researchers and policy makers. At the start of the year IENE also released the full text of a study it carried out last year on "Natural Gas Supply in South East Europe and the role of LNG" and has since been widely quoted by analysts and journalists.

Last September the Institute published a Working Paper on "Electric Vehicles and their prospects in Greece and SE Europe" following completion earlier last year of a multi client study on the same subject. This study was supported by a diverse group of companies comprising power generators, a major oil and gas regional company and a leading law firm. Also, during the whole of last year the Institute was busy carrying out a pioneering study on the energy self sufficiency of the island of Kastellorizo which is one of Greece's most isolated islands in the south easternmost part of the Dodecanese complex. Because of its remoteness the island has little chance of being connected to the country's main grid hence its long term energy viability in view of the decarbonisation policies pursued by the European Union is in question. The study foresees the combined use of photovoltaics and wind energy backed by adequate storage capacity with the aim of achieving near 100% energy autonomy. Once completed later this year this IENE study could act as a pilot project in pursuing schemes for island energy autonomy not only in Greece but all over Europe.

Last year was remarkable in terms of research and study projects undertaken by the Institute's in house scientific team but also on account of a whole series of events it organized by itself or in association with local partners in Brussels, London, Nicosia, Thessaloniki and Athens. The launch last October of the "SEE Electricity Market Analysis" weekly newsletter came to fill in an important information gap and augments the Institute's serious commitment in providing its members with credible and up to date information in the broad energy sector of SE Europe. In this context it is useful to remind our readers that the Institute currently publishes three weekly newsletters including its flagship "Energy Weekly Report", two monthly ones,(Market Watch and Monthly Analysis, part of the SEE information brief) the bimonthly "Energy Fundamentals and Prices" and several ad hoc reports, company profiles and briefing notes.

Although more than 18 months have passed since publication of IENE's seminal work, the 1150 page " SEE Energy Outlook 2016/2017", is impact is still strong with the Institute is receiving a constant flow of requests for presentations to diverse audiences all over SE Europe. Encouraged by this phenomenal success the Institute is now embarking on its plans to publish next year the 2020 edition of SEE Energy Outlook report. More information on this new endeavor and other tasks which IENE has undertaken or about to start you will read in the following pages of this latest and much revamped issue of IENE News.

IENE's Executive Director Participated in the Annual European Gas Conference



The annual European Gas Conference was once again held in the city of Vienna from January 28-30, 2019 with more than 300 delegates attending this leading energy event considered to be one of the most influential and trend setting industry gatherings in Europe.

Industry leaders such as Gazprom, Equinor, Uniper, OMV, RWW, Cheniere, Snam, Fluxys, Edison, Gas Strategies, Poyry, TAP and several others presented their latest activities and offered their insight on market development and prospects in view of the ever changing global and European demand and supply situation. Senior figures from the IEA, EIB and the European Commision were also there to outline the regulatory and investment framework within which markets operate and also describe the main challenges which lie ahead. The Executive Director of IENE Mr. Costis Stambolis was invited by the organizers to open the panel discussion on regional gas trading prospects by presenting the situation in Central and SE Europe concerning gas trading and the role of the region's nascent gas trading hubs and also participate in the panel discussion among some of the region's top experts. Through a concise presentation on " The Case for a Gas Trading Hub in SE Europe", Costis Stambolis 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.

As Stambolis 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 CEGH could act as a benchmark and pivot for promoting gas trading in the region" In view of EFET's findings, and the work in progress by the Independent Greek Transmission Operator (DESFA) which has established the Hellenic Trading Point (HTP) as virtual trading point with balancing point 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. Following short presentations by the rest of the panel participants a lively discussion took place on the challenges facing the region, as gas becomes a more widely traded energy commodity and as suppliers, traders and customers need to have access to reliable trading platforms which can branch out to meet increased requirements. The other panel contributors included Mr. Gottfried Steiner, CEO of CEGH, Mr. David Viduna, Head of Origination at CEZ, Mr.Janez Kopac, Director of the Energy Community Secretariat and Matthew Drinkwater, Senior Editor of European Gas, Power and LNG at Argus who very capably moderated the session.



The 6th Cyprus Energy Symposium focused on the Transition of the Island's **Energy System**

The 6th Cyprus Energy Symposium, organized once again by the Institute of Energy for SE Europe (IENE) and Nicosia based, FMW- Financial Media Way, took place at the Hilton Park Hotel in Nicosia, on December 4,2018.

The Symposium has been established over the past years as a landmark event in Cyprus for energy policy and business and covered all aspects of the energy sector, but also examined energy market developments in the broader East Mediterranean and the wider NA Europe regions. "Cyprus: Facing the Big Energy Decisions" was the Symposium's main theme. Senior government officials from Cyprus and abroad, academics and company executives presented their expertise, experiences and concerns vis -a vis new developments in the fields of natural gas, electricity and Renewable Energy Sources (RES).

In view a variety of exciting new developments in Cyprus, the Energy Symposium attracted considerable attention since it addressed a number of front line issues, including, among others, the next steps that need to be taken on Cyprus's ongoing hydrocarbon exploration in its EEZ, energy cooperation between countries in the region and company investments in hydrocarbons and electricity, the promotion of plans for taking East Med gas to Europe and the use of natural gas for power generation. The role of renewable energy in advancing and diversifying Cyprus's energy mix, were also discussed in depth. In this context Cyprus's transition into the upgraded energy environment and the island's electricity interconnection with Israel and Greece were discussed in depth.

The President of the Republic of Cyprus, Mr. Nickos Anastasiades, was the keynote speaker of the Symposium while speakers and panelists included senior company executives, energy experts and analysts, senior business executives and academics from Cyprus and Greece.

See link for symposium details:

transition-of-the-islands-energy-system-p4780.html

www.iene.eu/the-6th-cyprus-energy-symposium-focused-on-the-

SE Europe's Upstream Potential and Current Activities fully discussed at IENE's latest Workshop

IENE's latest workshop which was organized in Athens at the end of October 2018 helped reveal the true extent of SE Europe's not insignificant oil and gas resources.

These are to be found in four distinct geographical zones, which inadvertently correspond to geological ones, and are broadly located in the Adriatic, which extends south to the Ionian, the Black Sea, Turkey's Anatolian Basin and the East Mediterranean. Thanks to a highly select group of top experts who participated in this highly focused twoday event, the region's activities in the upstream sector were fully discussed with new data presented for the first time. Following welcome remarks by the chairman of IENE Mr. John Chadjivassiliadis, and Ms. Tereza Fokianou, chairperson of IENE's Upstream Working Group, the Institute's Executive Director introduced the subject



matter of the Workshop through a brief presentation. Then Dr. Yannis Bassias, chairman and CEO of Hellenic Hydrocarbons Recourses Management (HHRM), the Greek state agency in charge of the sector, reviewed Greece's latest efforts in E&P in the context of SE Europe and Balkans drive to develop further indigenous oil and gas resources. Bassias then provided an update focusing on deep sea exploration by citing the huge challenges which lie ahead.

Romania's extensive hydrocarbon reserves offshore and onshore in the Black Sea and production activities were presented in great detail by Dr. Valentina Ivan of EnerCap Capital Partners who provided considerable insight into latest moves by the Romanian government which have apparently stalled temporarily further exploration and production programme by companies. Bulgaria's hydrocarbons footprint and latest developments in advancing the country's hydrocarbon exploration and production were explained by Dr. Valentin Kunev, chairman of the Balkan and Black Sea Petroleum Association. Georgia's upstream sector was at then presented by Dr. Giorgi Tatishvili of the State Agency of Oil and Gas where extensive 2D and 3D seismic surveys use underway. As Dr. Hans Hutta summed up the Black Sea area will need a lot more deep exploration drilling if its true potential is to be exploited and could in the long term emerge as an important oil and gas producing region capable of meeting a portion of European energy demand.

With Turkey being the largest country in the region both in terms of geography and energy demand, efforts continue unabated in exploring for new oil and gas fields both onshore and offshore. Dr. Yurdakul Yigitguden, a well known energy expert and former Secretary General of the Ministry of Energy and Natural Resources in Ankara and more recently Coordinator of OSCE economic and environmental activities, presented a detailed report on Turkey's exploration and production efforts having first provided a most useful background on Turkey's overall energy sector. In spite of consistent efforts over the years indigenous production is stagnating while oil and gas imports are growing with proven reserves also diminishing.

The oil and gas potential of the Alpine Folded Belt, part of the Dinaric - Hellenic range, which expands between the Dinarides in the North and the Hellenides in the south (ie North South Adriatic and Ionian) was fully exploredby Dr. VlatkaVanicek, director for Environmental Protection at the Croatian Hydrocarbon Agency, and by Mr. Ilia Gjermani, Head at the Regulatory and Management of the Petroleum Sector of Albania's ministry of Economy. Mr. Yannis Grigoriou, CEO of Hellenic Petroleum Upstream S.A, (part of the Hellenic Petroleum Group.) focused on Hellenic Petroleum's strategy and actions for the resurgence of the Greek E&P sector including the company's participation in well formed international concortia which have now been awarded major onshore and offshore concessions in Greece's western part but also southwest of Crete.

The Israeli experience was expertly presented by Dr. Gina Cohen who provided a detailed account of Israel's first and subsequent discoveries, which changed the scene for good for hydrocarbon exploration in the East Mediterranean. The significal challenges which now lie ahead for Israel's gas exports were fully analyzed by one of the country's top energy experts. Export destination sat present include Jordan and Egypt, while long term options remain Turkey and Europe, through the much tooted East Med pipeline.

Cyprus's findings and current and planned exploration programme was presented by Mr. Demetris Fessas, Assistant Manager of Cyprus's Hydrocarbon Company, which is the National Hydrocarbons Company of the Republic of Cyprus (RoC) and is responsible for the commercial management of the RoCrights as included in various production sharing contracts. With three exploration rounds already undertaken Cyprus has made two important discoveries (Aphrodite and Calypso) with concessions signed in six out of its twelve offshore blocks. Targeting Zohr analogues, exploration efforts continue in Blocks 6, 7,10 and 11.

With some 65 participants actively engaged in two days of presentations, discussions and social gatherings IENE's latest SEE Upstream Workshop proved another successful event for the Institute. Hellenic Hydrocarbons Resources Management (HHRM), Hellenic Petroleum and Energean Oil and Gas were the event's sponsors.

Global, Regional and National Challenges Debated at IENE's 23rd "Energy & Development" Conference

With more 250 participants and 42 speakers and panelists IENE's 23rd National Energy Conference, "Energy & Development 2018" which was held in Athens on November 22/23, 2018 provided once again a most useful platform for reviewing key issues of the current energy agenda but also in addressing the future challenges of the energy sector.

As usual the conference was backed by Greece's major energy companies and was organized under the auspices of Greece's Ministry of Environment and Energy and with the support of international organisations. The special topic of this year's event was "Strategic Planning and Energy Markets Development", which was meant to underline the important challenges faced by both governments and companies and the efforts required in order to further develop and diversity energy markets. A strategic planning which involves technology advancement in the new digital environment, and a stricter energy security framework capable in dealing with the multiple geopolitical threats but also with the constraints posed by Climate Change mitigation goals.



A highlight of IENE's latest annual conference was the presentation of the World Energy Outlook 2018, published by the Paris based International Energy Agency. WEO 2018 was presented by IEA's energy analyst Mr. Kieran McNamara. WEO's message included mixed signals about the pace and direction of change in global energy as oil markets are entering a period of renewed uncertainty and volatility and natural gas is on the rise and China's rapid demand growth is erasing talk of a gas glut. In addition Solar PV has the momentum while other key technologies and efficiency policies need a push IEA's assessment points to energy-related Co₂ emissions reaching a historic high in 2018 while for the first time, the global population without access to electricity fell below 1billion.

In presenting WEO 2018 Mr. McNamara pointed out that electricity is carrying great expectations, but questions remain over the extent of its reach in meeting demand and how the power systems of the future will operate. He also said that policy makers need well-grounded insights about different possible futures and how these



come about. Hence, WEO provides two key scenarios, the New Policies Scenario and the Sustainable Development Scenario. Addressing the outlook for oil in the medium term, up to 2020, Dr. Leo Drollas, a well known UK based independent energy analyst and longstanding Senior Associate of IENE focused on the sudden drop of the oil price over the past weeks in view of rising commercial stocks, especially, in the USA, Leo Drollas wondered if this weakness is likely to continue and for how long. It will all depend, he said, on the continuation of accelerated US oil production, the state of global stocks and the outlook of demand. As he pointed out forecasting is a dark art rather than a science.

The energy market integration goal in the EU was presented by Ms. Paula Ceballos-Coloma, a Policy Officer at DG Energy in Brussels. In her presentation, the emphasis was placed in market system functionality and the regulatory framework. Also the special role of Iran in the Middle East and Persian Gulf energy play was fully analyzed by the Secretary of the Committee on Environment and Energy of the International Chamber of Commerce (ICC) in Tehran, and longstanding IENE Senior Associate, Dr. Narsi Ghorban. Among other points, Dr. Ghorban described Iran's plans to continue its economic relationship with Europe, as part of the JCPOA agreement. Greece's just completed long term energy planning, and the challenges posed in meeting EU targets, for 2030 and 2040 for renewables, energy efficiency and decarbonisation was the main topic in the address delivered by Greece's Minister for Environment and Energy Mr. George Stathakis and elaborated further in a presentation by Mr. Michael Verroiopoulos, Secretary General of the Ministry of Energy. Besides the Minister's address the chairmen and the CEO's from most of the major Greek energy companies including the Public Power Corporation, Hellenic Petroleum, the Electric Transmission Operator (IPTO), the Hellenic Energy Exchange, the Public Gas Corporation (DEPA), Mytilineos Group, the Hydrocarbons Agency (HHRM), and Energean Oil & Gas, made major statements with each one contributing useful comments in discussing the country's energy situation. Top of the agenda in this discussion was the need for continuing investment in Greece's energy sector where more than€40 billion of energy related investments are earmarked for the Greek market over the next 10 years.

This figure nears €250 billion when it comes to SE Europe as it covers investments in the region's 15 country group, until 2028. The major sponsor of the conference was Hellenic Petroleum, while the strategic sponsor was IPTO. Other sponsors included the Public Power Corporation (PPC), The Hellenic Energy Exchange, Terna Energy and the Mytilineos Group, while among the supporters were Energean Oil & Gas, KG Law Firm, the Public Gas Corporation (DEPA), Gastrade, Heron S.A. and MAS.

11th SE Europe Energy Dialogue attracted high caliber Speakers and several International and Regional Organizations

IENE's long established event, the SEE Energy

Dialogue was held in Thessaloniki, on June 26-27, 2018. This was the 11th edition of the Energy Dialogue which was first launched in 2007. With more than 45 distinguished speakers and panelists from 15 countries and nine well known international organizations participating in this year's Energy Dialogue, this unique event, organized by IENE, once again attracted considerable attention while setting the region's energy agenda for the months to follow.



This year's Energy Dialogue was more timely than ever in view of the fast transition phase that European energy markets are currently undergoing with profound implications for the region's energy landscape. The purpose of this regional forum, which was organized by IENE under the auspices of Greece's Ministry of Environment and Energy, the International Energy Agency (IEA), the Energy Community and with the support of other leading international and regional organizations and major energy companies, brought together highranking government officials, senior business executives and energy experts from all countries of S.E. Europe and beyond. The objective was the exchange of information and ideas, networking and the furthering of co-operation for the tackling of the increased global and regional energy and environmental challenges.

The special theme for last year's SEEED was "Energy Market Transition and Energy Security in SE Europe", signifying the state of flux that characterises SE European Energy Markets today and the emergence of energy security as a topic of prime importance for energy policy. Furthermore, the "SE Europe Energy Dialogue" gathering was highly topical given EU's major drive to establish the "Energy Union" and the emphasis placed on energy security and in view of persisting regional instability. Europe's, and SE Europe's in particular, high dependence on hydrocarbon imports, the current volatile energy pricing environment, the global concern for the development of viable alternatives and the need to promote further carbon free solutions emerge as key policy issues.



As usual the "Energy Dialogue" covered also the latest developments in the region's evolving natural gas, electricity and RES markets and the ongoing energy partnerships with Russia, the Caspian Sea, the East Mediterranean and North Africa.

Last year's Energy Dialogue took place at an opportune moment as the European Commission had commenced an engagement process with West Balkan countries in line with EU's enlargement strategy. In this context the role of energy is considered key to enlargement plans as it provides for vital electricity and gas cross-border links and underwrites substantial investment in the whole supply chain.

The IENE by organising the "11th SE Europe Energy Dialogue" in Thessaloniki contributed once again to a high level discussion on the region's key energy issues but also acted as a facilitator for much needed co-operation between suppliers and consumers and thus promote the role of SE Europe as a vital East-West, North-South energy bridge. After ten successful years the SEEED is now considered the seminal regional energy event that has managed to engage not only the region's top policymakers, financiers and entrepreneurs but also secure high-level participation from some of the world's leading energy and banking institutions. Participation at the 11th SEEED from international and regional organization was especially strong this year comprising the IEA, the European Commission, IRENA, the Energy Community, Eurelectric, EBRD, the Black Sea Trade & Development Bank, the Energy Management Institute and the New Nuclear Watch Institute.

The lead conference sponsors included Greece's Public Power Corporation (PPC) and Hellenic Petroleum, with key supporters the KG Law Firm, EnSCo, IPTO, DESFA and Gastrade while media partners included the Kathimerini Newspaper, Energia.gr and Balkan Green Energy News portals as well as the New Europe Newspaper.



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■ IENE's "4th Energy & Shipping" Seminar was held at Posidonia and focused on Clean Shipping Fuels and LNG

Clean fuels and LNG were global shipping's hottest topics in the 2018 Posidonia International Shipping Exhibition where IENE hosted its long established "Energy & Shipping Seminar" (8/6/2018). As the

International Maritime Organization (IMO) 2020 deadline for a global sulphur limit in fuel oil used on board ships is fast approaching the transition of shipping to cleaner fuels is acquiring a new urgency. Eleven prominent speakers from the oil and gas sector, from the shipping sector and maritime law from Greece and abroad actively participated as speakers and panelists. Nikolas Vernikos, president of ICC Hellas spoke on the broader role of Greek Shipping while IENE's chairman Mr.John Chadjivassiliades in his opening remarks made the connection between shipping and energy.



"Energy and Shipping as a vital link to global economy and business", was the topic of a keynote address by George Tsavliris, CEO, of Tsavliris Group Worldwide Salvage & Towage while the Executive Director of IENE Mr. Costis Stambolis analysed "The current oil and gas pricing environment and implications for shipping". Gus Papamichalopoulos, Deputive Chairman, of IENE, and Senior Partner, of KG Law Firm, was moderator of the second session of the seminar while the "Challenges and opportunities for the Shipping Industry as a result of the new IMO 2020 Regulations with regard to Marine Fuels" were presented by Mr. Yiannis Papanicolaou, Director, Aegean Marine Petroleum Network IncMr. George Dimopoulos, Principal Specialist in DNVGL and Manager of the Maritime R&D, spoke on the "Energy Transition" Outlook, Maritime". The "Development of Greece's first FSRU terminal", was the topic of a presentation by Mr. Ioannis Arapoglou, Chairman of the Board, GASTRADE S.A., while the "Offshore sustainable energy infrastructure and its importance in enhancing the shipbuilding industry in Greece", was presented by Prof. loannis Chatjigeorgiou, from the National Technical University of Athens. Finally, the "Small-Scale LNG Facilities Regulatory Framework & Recent Regulatory Developments in Greece", was discussed by Ms. Zoi Stolaki, Legal Counsel, at DEPA S.A.

Public Gas Corporation (DEPA) and KG Law Firm, Greece's leading legal firm. Greece's pioneering portal Energia.gr was the event's exclusive sponsors.

IENE actively participated in Annual Eurelectric Conference in Ljubljana in June 2018



Under the title "Watt's Next? New Players, Pro ducts and Peers", Eurelectric held its 2018 annual conference on June 4-5 in Ljubljana, Slovenia. The event proved more than rewarding for the 500 plus delegates who gathered from all over Europe to participate in this year's foremost electricity industry event.

Business disrupters and industry captains challenged the mind-set of power sector leaders and triggered participants to look into the future. This year's event posed critical questions such as, What is the potential of increased use of digital platforms across the energy system? What does it take for industry players to integrate sustainability objectives as ultimate business goals? How will the accelerated decarbonization of electricity speed up the decarbonization of other sectors? What solutions will future energy companies offer to enhance consumer relationships and engagement?These were just some of the key items that were tackled over the two days by highcalibre speakers in a mix of keynote speeches, interactive panel discussions and live demonstrations of new and upcoming products and technologies. IENE participated in the special session on "Powering Transition Investments in SE Europe" which was organized in the second day of the Eurelectric conference and was moderated by Anna Dimitrova, Advisor, Energy Policy and Generation at Eurelectric.

More specifically, IENE's Executive Director, Costis Stambolis participated in the panel discussion on "The Clean Energy Investment Challenge for the Region" which was chaired by Janez Kopac, Director of the Energy Community. Costis stressed the need for radical change in the energy policies of most countries in SE Europe since under present conditions planned and ongoing projects on coal/lignite power plants far exceed investments in renewables and energy efficiency. "The European Commission has an important role to play in this much needed energy transition, but the strategic goals it has set have no chance of being implemented by individual countries in SEE, including Western Balkans, in view of policies and methods currently pursued", underlined IENE's Executive Director in his remarks.

IENE's Energy Efficiency Conference covered both Policy and Market Issues



With more than 100 participants from Greece and other European countries and 25 speakers and panelists IENE's one day conference on "Investing in Energy Efficiency", which was held in Athens last May (24/5/2019) proved a great success as it helped to highlight the serious challenges and opportunities that are now being created in the field of energy efficiency especially in the building and industrial sector.

Opening the conference proceedings IENE's chairman Mr. John Chadjivassiliades stressed the key role that energy efficiency now plays in energy strategy at national, EU and global level. "In view of the new high targets set by the EU for a 30% improvement in energy efficiency by EE28 by 2030, coupled with a 40% reduction in greenhouse gas emissions at the same time, but also taking into consideration the latest important developments following consultations with the European institutions in reviewing the relevant European Directive.

By convening this conference IENE sought to map out the latest developments, and also assess the upcoming changes from an institutional, technical and investment angle but also propose needed interventions", said IENE's Chairman. The Secretary General of Greece's Ministry of Environment and Energy, Mr. Michalis Verroiopoulos, also speaking at the start of the conference stressed the fact that energy efficiency now forms an integral part of Greece's long term energy policy, currently being formulated with specific goals fully compatible with EU targets. According to Mr. Verroiopoulos it is estimated that by 2030 more than 300,000 buildings in Greece will have been upgraded and rehabilitated through the application of energy efficiency measures. Hence, there is growing interest from banks which are already participating in EU funded programmes.

The global view on the role of energy efficiency in the energy transition was presented by Ms. Jessica Glicker, senior analyst, at the IEA in Paris. As Ms. Glicker noted "energy efficiency reduced global energy use by 12% in 2016 which is an amount equivalent to the energy use of the European Union. The conference was financially supported by the National Bank of Greece (NBG) and ENSCO, a leading SEE energy trading firm while the financial daily "Naftemporiki" and Greece's leading energy portal, "energia.gr", were the main media partners.

Gas Supply and Transiting Issues in SE Europe highlighted at 2018 «Flame» Conference- IENE participation

The major issues concerning gas supply and transiting in SE Europe and the East Mediterranean were highlighted in a special session which was organized as part of last year's "Flame" conference which took place in Amsterdam between May 14-17, 2018.

The session entitled "Connecting SE Europe" and moderated by the well-known Israeli energy expert Gina Cohen, included presentations by Eser Ozdil from Turkey's PETFORM, Dr. Charles Ellinas from Cyprus' e-CNHC, Dr. Theodore Tsakiris from Nicosia Business School, Ms. Gulmira Rzayeva from the Centre of Strategic Studies (SAM) of Azerbaijan and Costis Stambolis, Executive Director of IENE.



The timely completion of the huge TANAP pipeline and the near completion of TAP and the planned construction of new interconnectors, such as IGB, new FSRU terminals in Greece, Turkey and Croatia have helped create a buoyant atmosphere in anticipation of positive market developments. Consequently, there is much discussion, especially among politicians, on the region's emergence as a major gas hub, vital for European gas supply. This is an issue which IENE's Executive Director expanded upon as he dispelled current speculation on Greece's potential role as a key regional energy hub, critical to regional gas transiting.

"Latest talk by Greek government authorities and various local think tanks promoting the idea of a Greece based regional energy hub can only be seen as politically motivated, in trying to gain points for Greece in the East Med geopolitical arena. Our view is that because of strong geophysical and geopolitical limitations Greece cannot, at least in the foreseeable future, place itself at the epicenter of regional energy flows and related activity. Such role is clearly reserved for Turkey which is far more suitable geographically and in terms of energy flows, to play the role of a major regional energy hub. That said Greece can still have a role, although a secondary one, if it can manage to reorganize its assets and develop a serious gas trading activity as there will be need for gas volumes to be directed north (via IGB and the Vertical Corridor in the first place) or North West (via East Med in the second place). Anticipated additional LNG capacity through the expanded Revithousa LNG terminal (2018) or the planned FSRU in Alexandroupolis (2020) and underground gas storage (in South Kavala), can further enhance the trading aspect of a Greece based "gas trading hub", observed Mr. Stambolis.

■ IENE Executive Director participated in launch of report by New Nuclear Watch Institute for the SEE Electricity Market



On May 10 2018, IENE's Executive Director Mr. Costis Stambolis flew to Sofia where he participate in a special event organized in Bulgaria's capital for the launch of the special report which the New Nuclear Watch Institute (NNWI) prepared on SEE's Electricity Market and the impact of new trends and policies.

The event was convened by Mr. Slavtcho Neykov, Energy Policy Expert and previous head of the Energy Community, and attracted considerable participation from Bulgaria's energy professionals. NNWI's inaugural report was presented by Mr. Tim Yeo, Member of the UK Parliament for over 30-years from 1983-2015. During his time as an MP, Tim was Chair of the influential Energy & Climate Change Select Committee (2010-2015) and of the Environmental Audit Committee (2005-10). Prior to this he served in several Government departments (1988-1194) including Minister for the Environment and Countryside (1993-194) in the John Major Government.

In this latest report the New Nuclear Watch Institute exposes the severity of the challenges facing the electricity market of southeast Europe. Suffering from chronic underinvestment since the dissolution of the Eastern Bloc and the breakup of the Yugoslav state, the region is now beset by an energy infrastructure that is unreliable, inefficient and unsustainable. The report makes clear that urgent need for significant investment in low-carbon generation capacity, not only to protect energy supply security in the decades to come but also to achieve post-Paris Agreement climate action commitments. In particular, an accelerated phase out of coal in tandem with a steady increase in the unit cost of carbon emission-combined with imminent demandside disruptions-could see an electricity deficit opening up as early as 2027. The report's executive summary is presented in the regional news section of this site.

IENE's Executive Director actively participated in the discussion which followed and backed his intervention with data from the Institute's major regional energy study, the "SEE Energy Outlook 2016/17", published last year.



Participation of IENE in 3rd HAEE Conference on European and Global Perspectives of Energy Transition

IENE participated with two papers in the 3rd conference of the Hellenic Association of Energy Economics (HAEE), on "Energy Transition: European and Global Perspectives", which took place in Athens on 3-5 May, 2018.

More specifically, the Institute presented two papers. The first paper was titled "Dominant Energy Security Issues in SE Europe and Proposed Accommodation Strategies", with authors Costis Stambolis, Executive Director of IENE and Dimitris Mezartasoglou, Head of Research at IENE, with the paper presented by C. Stambolis. The second paper, titled "Anticipated Penetration Rate of Electric Vehicles in Greece's Motor Vehicle Market", was authored by Alexandros Perellis, Researcher at IENE, D. Mezartasoglou and C. Stambolis, with the paper being presented by A. Perellis.

The first paper focused on energy security in the Southeastern European region with an emphasis on energy transition both from a market perspective (market integration) and in terms of fuel use (clean fuels). It examines, among others, the role of key energy infrastructure installations as they represent potential hot spots for the region's energy security, as well as measures and policies for managing energy crises.

The second paper presents an overview of the Greek Electric Vehicle Market, the institutional and operational framework governing its operation and development, as well as the technical and non-technical barriers to a widespread adoption of electric mobility in Greece.

These papers are available through: www.iene.eu

IENE Special Event Outlined the Electricity Market Transition in Greece and Europe

In view of the ongoing developments at European and country level, IENE organized an in-depth discussion on Greece's electricity market, currently in transition and how this relates to European developments. Hence, **on March 28, 2018, IENE convened in Athens a special afternoon colloquium, under the title "The Electricity Market in Transition - Latest Developments in Greece and Europe". The event attracted record attendance from market players, senior executives from all major energy companies and several well-known experts.**



In this IENE event, the necessary changes in the organization and operation of the domestic retail market in view of the ongoing decrease of incumbent PPC's market share, decarbonization process and the entry of several new players were also discussed. Key questions about the future of Greece's electricity market and competition in its retail market sparked a broad discussion, facilitating the exchange of views between involved players and consumers.

In his introductory speech, IENE's Chairman, Mr. John Chadjivassiliades, outlined the landscape currently under formation in the energy market and the major changes currently underway. According to Mr. Chadjivassiliades, investments in the transmission network as well as in strong interconnections are some of the most crucial challenges facing the further developments of Greece's electricity system as it was pointed out in the introductory session of the colloquium, the European Union, through coordinated efforts, has over the last few years been promoting the creation of an integrated electricity market. The main objective of the integrated electricity market being the reduction of the energy costs and the strengthening of security of supply, through the formation and gradual convergence of electricity supply prices via mechanisms such as energy exchanges as well as the strengthening and expansion of electricity interconnections among EU member states.

From his part, Dr. Miltiades Aslanoglou (Energy and Regulatory Economics Consultant, Alternate of the Board of Appeal, ACER, and former Deputy Chairman, Regulatory Authority of Energy -RAE, Greece) stressed that Greece needs to improve its digital infrastructure in electricity and natural gas, and also to stop wasting money on things with no future instead of exploiting assets that remain idle Mr. Vassilis Rallis, Senior Advisor, Energy Markets - Regulatory Authority for Energy, Greece, described the advantages of the Energy Exchange to be established by the end of 2018 in Greece.

The Energy Exchange will contribute towards the establishment of a market with benefits to market participants and end users, noted Mr. Rallis. The General Director of Greece's TSO (ADMIE S.A.), Dr. Ioannis Kambouris, focused on the significance of developing the country's electricity network and the relevant interconnections, especially in the islands but also with neighboring countries. The second session, chaired by Dr. Aslanoglou, concerned power generation and trading. Mr. Stavros Goutsos, Deputy CEO of PPC (Greece's Public Power Corporation) S.A., stressed that the company's future relies on natural gas and RES as it gradually withdraws from lignite use. Speaking in the same session, Mr. Dinos Benroubi, Chief Exec Director of Electric Power at Mytilineos Holdings S.A., stressed the "paradox" of PPC's lignite units forcing out of the market' s natural gas units, while CO2 prices in EU ETS are very high and are getting even higher. He added that NOME auctions have failed so far to bring about the liberalization of the retail electricity market.

Mr. George Kouvaris, Chairman of the Board of Directors of Heron Thermoelectric S.A., underlined that independent natural gas units are in operation only to avoid the take-or-pay clause, thus suffering from frequent damages. From his part, Mr. Andreas Petropouleas, Energy Management Director at Elpedison S.A., urgently asked for measures, since, under the present status, the cost falls on the shoulders of the producers. The European Union, through coordinated efforts, has over the last few years been promoting the creation of an integrated electricity market. At the same time, the EU targets for the reduction of greenhouse gas emissions have lead to the radical transformation of the power sector; thus, both electricity markets and networks are in transition. While most European countries have already developed integrated electricity markets, this does not hold for most countries in SE Europe where developments are not particularly satisfactory, despite the fact that Energy Community countries (see the Western Balkans) are already committed to get every country coupled with at least one of their neighbors by the middle of 2018.

The event concluded with a session and a roundtable discussion on some crucial issues of "The Greek Market in Transition", chaired by IENE's Executive Director, Mr. Costis Stambolis, with the participation of representatives from RES and power trading associations and companies. The transition of RES auto producers to a competitive market and participation in the daily market was discussed at length. Several difficulties were identified in the transition phase for the large majority of RES producers.

The main sponsors of this IENE colloquium included PPC, Mytilineos Holdings S.A., Heron Thermoelectric S.A. and ENSCO A.G. Greece's leading energy portal, Energia.Gr, the "Naftemporiki" newspaper and www.naftemporiki.gr website were the event's media partner.



IENE Presentation at OIES Seminar

Following an invitation by Dr. Katja Yafimava, senior research fellow of OIES, Costis Stambolis, IENE's Executive Director visited Oxford on March 16 where he conducted a seminar on the key energy transition and energy security issues currently heading SE Europe's energy agenda.

The seminar attracted a small circle of experts comprising some of OIES's top researchers. In his presentation Costis focused on the observed disparity between stated and pursued EU energy and climate strategies and goals and the actual situation prevailing today in most countries of SEE which depend heavily on indigenous coal resources. A combination of financial and social factors are preventing the abandonment of carbon dependent local economies and hence the transition, over the next 10-15 years, to a carbon free environment presents significant problems, especially since the development of Renewable Energy Sources (RES) and efforts to improve energy efficiency also lag seriously behind. Natural gas is clearly gaining ground as a fuel of choice for many countries in the SEE region and could indeed provide a much needed energy bridge in the transition to a cleaner environment. However, as IENE research shows, the penetration of natural gas in the energy mix of the region over the past 15 years or so, and taking into consideration rising energy demand and changes in consumer behavior patterns, is slow and confounded with problems related to supply, cost and grid distribution expansion. Security of gas supply has been identified as a critical issue for most countries of the region in view of recent history and several disruption incidents. The increased use of LNG could therefore strengthen security but construction and commissioning of new infrastructure is slow. The seminar concluded with a presentation, by Costis, of IENE's work related to the South Corridor and its proposal for adopting an "expanded corridor" approach so as to include a series of new gas tie in and entry points resulting from a plethora of new interconnectors, major pipelines and LNG terminals. Coordination, optimisation and management of a multifaceted "expanded south corridor", in an effort to secure continuous and cost competitive gas supplies for European markets, presents a formidable challenge.

Energy Security and Energy Transition in SEE presented in special IENE London event hosted by the Energy Insitute



South East Europe's role in European energy security, market integration and transition was discussed in the light of latest developments in a special evening lecture jointly organized by IENE and the Energy Institute (EI) in London, on March 15 2018.

The lecture was delivered by Costis Stambolis IENE's Executive Director and Gus Papamichalopoulos IENE's Deputy Chairman and Partner of KG Law firm, with more than 90 energy professionals attending the event. The speakers stressed the role of SEE as an energy bridge between Eastern hydrocarbon resources and energy demanding Western markets, and how the region has emerged over the last few years as a vital link in European energy security architecture. As the economies of SEE countries are catching up with those of the rest of Europe, energy plays an important role both from a financial/ investment perspective but also because of market development (i.e. integration, liberalization, competition, etc.). Although considerable progress has been achieved in recent years on energy market integration, the region currently faces serious challenges when it comes to adapting its energy systems and energy markets to meet EU basic targets (i.e. decarbonization, RES penetration, energy efficiency).

Furthermore, we observe great divergence in the degree of adaptation between the different country groups of the region. With EU member states (Slovenia, Croatia, Romania, Bulgaria, Greece, Cyprus) having to a large extent achieved market integration, while West Balkan countries, with the help of Energy Community, trailing behind but on a firm footing as their regulatory authorities and other institutions are now taking the lead. In their exposition, Costis Stambolis and Gus Papamichalopoulos were greatly assisted by the work undertaken by IENE in its seminal study, the "SEE Energy Outlook 2016/2017", published in June 2017.

A number of key regional energy issues were identified and discussed with Costis Stambolis presenting the overall energy demand – consumption situation, the energy mix and infrastructure background of the region and Gus Papamichalopoulos focusing on energy security, the legal and regulatory environment and the new EU solidarity mechanism. Key issues such as the marked divergence between EU and SEE energy strategies, the region's high energy security vulnerability, energy supply diversification versus security of energy transportation and transmission (oil, gas and electricity) were also highlighted.

■ Joint IENE-Eurelectric Conference in Brussels focused on major challenges and opportunities of Energy Market Integration and Transition in SE Europe



IENE and Eurelectric joined forces, on March 9, by convening a half-day high-level conference in Brussels to review latest developments related to energy market integration and transition in SE Europe.

For some time now, European energy market integration has become a priority issue for EU energy policy, as it offers the prospect of a more cost-effective and competitive power and gas system, enhanced security and cross-border solidarity, and the potential for integrating a greater share of renewable energy (RES) and improved energy efficiency systems.

However, while market integration and transition to cleaner fuels is progressing well at European level, this is not the case for SE Europe. In most SE European countries, regional energy cooperation has been perceived as a necessary part of the European integration process. At the beginning of the present decade, the main targets of EU energy policy were incorporated in the long-term strategies of SEE countries. Lately, the focus has been redirected towards modernization of energy infrastructure, the construction of new facilities, including electricity and gas interconnections, improvement of energy efficiency and increased use of RES. This joint IENE-Eurelectric event. on "Energy Market Integration and Transition in South-East Europe" explored the opportunities and challenges that lie ahead in SEE's energy sector (gas, electricity and RES) and which are associated to the ongoing process of market transformation. The conference commenced with a welcome address by Mr. Henning Häder, Eurelectric's Manager on Energy Policy, Climate & Sustainability, as well as with introductory remarks by IENE's Chairman, Mr. John Chadjivassiliades.

The first session was chaired by Mr. Slavtcho Neykov, former Director of Energy Community Secretariat and current Chair of Eurelectric's WG Group on South-East Europe, as well as Chairman of the Board of Managers of the Sofia-based Energy Management Institute. Mr. Neykov made an Opening Statement describing the current problems SE Europe is facing vis-à-vis Energy Market Integration and Transition and the contribution of the Energy Community in overcoming them.

From his part, the Executive Director of IENE, Mr. Costis Stambolis, provided the Institute's view on the regional energy market integration and transition, as highlighted in IENE's "SE Europe Energy Outlook 2016/2017" study.



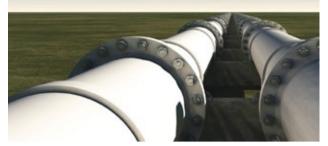
As he stressed, a major finding of the study is that SE Europe, in contrast to the rest of Europe, remains committed to continuing coal use. Based on IENE's estimates, the share of solid fuels for power generation is anticipated to increase steadily in several countries of the region (most notably in Serbia, Kosovo, Croatia, Bosnia and Herzegovina, Montenegro, Greece and Turkey) over the next 10-15 years, as they will struggle to meet increased energy demand.

Hence, the road towards decarbonization and the transition to a "greener" future in SE Europe, with higher use of natural gas and renewables, appears difficult, if not uncertain, in comparison with the rest of Europe. Ms. Anca Cimpeanu, on behalf of DG ENER, European Commission, presented EU's Clean Energy Package and Energy Markets Integration in SEE.





The session closed with a Panel Discussion with the participation of Mr. Olivier Marguette (Head of Business Development Eurasia & AES Bulgaria President, Bulgaria), Mr. Pawel Lont (Secretary Gas Committee, EFET, The Netherlands) and Mr. Dimitris Mezartasoglou (Head of Research, IENE). The second session of this joint IENE-Eurelectric event focused on the opportunities and challenges towards a sustainable energy market in SE Europe. The session started with Opening Remarks by Prof. Farantouris (Head of Legal Dpt., DEPA, Chair ofLegal Affairs Committee, EUROGAS, Professor of EU Law, University of Piraeus, Greece), who co-ordinated its proceedings. The perspective of the industry was analyzed in presentations by Mr. Damjan Medimorec (ENTSO-E RG SEE Governor), Mr. Stavros Goutsos (Deputy CEO, PPC), Mr. Andrea Villa (Head of EU Regulation, ENEL) and Mr. Gurbuz Gonul (Acting Director, Country Support and Partnerships, IRENA). Greece's Public Power Corporation (PPC) S.A. was the lead sponsor of the conference, whereas Euroasia Interconnector and Public Gas Corporation of Greece (DEPA) S.A. were its supporters. Greece's leading energy portal, Energia.Gr, and "New Europe" newspaper were the event's media partners.



Greece's role within the «Expanded South Corridor» was highlighted in joint IENE-KEPA event

On March 5, IENE in co-operation with the Energy & **Climate Change Policy Centre (KEPA) of the University** of Athens, held an ad hoc Afternoon Colloquium to review latest developments in SE European gas markets and the "Prospects for an Expanded South Corridor", as a number of major infrastructure projects are currently underway in SE Europe, which will facilitate the introduction and further use of natural gas in this broader geographical area. The concept of an Expanded South Corridor includes all major gas trunk pipelines, LNG regasification terminals and UGS facilities which will feed gas into the system which will then be directed towards the main European markets. In addition, this expanded South Corridor with its multiple gas entry points and linked underground gas storages and LNG facilities, will provide the necessary gas quantities for the operation of regional gas trading hub(s) thus strengthening the security of energy supply but also enhancing regional gas trade.



The event, which took place in Athens University History Museum, located in the oldest part of Greece's capital, began with an Opening Statement by Mr. Michalis Verroiopoulos, Secretary General for Energy and Mineral Resources, Ministry of Environment and Energy, focusing on the projects underway in Greece and the country's strategic role within the framework of the "Expanded South Corridor". This joint IENE - KEPA Afternoon Colloquium was co-ordinated by a well-known international energy security specialist, Mr. John Roberts, (Methinks Ltd, Scotland and Senior Fellow, Atlantic Council, Washington DC). Mr. Roberts also contributed his viewpoint on the interaction between the regional natural gas projects in SE Europe and the global energy environment. Prof. Dimitris Mavrakis (Director, KEPA) and Mr. John Chadjivassiliades (Chairman, IENE) contributed Opening Remarks on behalf of the organizers. IENE's Executive Director, Mr. Costis Stambolis, analyzed the concept of an "Expanded South Corridor", which was first broached by IENE in January 2015 (at the European Gas Conference in Vienna). IENE's Head of Research, by Mr. Dimitris Mezartasoglou, from his part, described the role of LNG as part of the "Expanded South Corridor".

A Panel Discussion followed, led by Mr. John Roberts, with the participation of Mr. Dimitris Manolis (Director of International Affairs, Greece's Public Gas Corporation S.A. - DEPA), Mr. Spiros Paleoyannis (Managing Director of Medgas and More Ltd., Member of BoD, IENE and former CEO of DEPA) and Dr. Marika Karagianni (Caspian Energy Expert, Dpt. of Black Sea Countries, Democritus University of Thrace). The discussion focused on the origin of gas volumes that are expected to flow through the TANAP-TAP gas pipeline system in 2020, and beyond this date, apart from Azeri gas.

IENE Actively Participated in «7th International Energy and Investment Days» at Novi Sad in Serbia

IENE participated in the "7th International Energy and Investment Days" Forum, which was held on March 1-2, 2018 in Novi Sad, in Serbia.

IENE was represented by its Head of Research, Mr. Dimitris Mezartasoglou, who attended this two-day high-level meeting and presented the Institute's flagship publication, the recently completed "SE Europe Energy Outlook 2016/2017" study. During his presentation, Mr. Mezartasoglou made special reference to renewables and energy investments.

The presence of IENE in the Forum was highly relevant, as the Institute, following completion of the aforementioned study and its expertise on SE Europe's renewables and energy efficiency sectors, presented related findings. In particular, two key regional energy issues were discussed, which concern the various impediments in RES development and the difficult road towards decarbonization in SE Europe. Furthermore, IENE's forecasts for SE Europe's RES growth and energy mix were presented, as there was a special focus on the SEE Energy Investment Outlook 2016-2025. According to the reference scenario, which assumes an average real GDP growth of 1% over 2016-2025 and substantial investments in SE Europe, the total anticipated RES investments in Serbia stand at €2.2 billion out of a regional grand total of about €61.2 billion. This Forum is the only one of its kind in the Vojvodina district and was organized by Central European Development Forum (CEDEF), the Novi Sad Fair and the Provincial Secretariat for Energy, Construction and Transport. The Forum was attended by local government officials, senior representatives of research centers and other speakers from Europe, with Serbia's Energy Minister Aleksandar Antić also participating. Mr. Lambis Kounalakis, Minister Counselor, Head of the Economic and Commercial section of the Embassy of Greece in Serbia, also contributed introductory remarks at the opening of the

Forum.

Publications

IENE's First Annual Report on Greece's Energy Sector was presented in special event in Athens

On February 13 in the presence of a packed audience at the Divani Caravel Hotel in central Athens, IENE presented its first ever annual report on Greece's energy sector. This 184 page document which was researched, written and published by IENE, covers the whole energy sector of Greece and contains several references to SE Europe. A long standing project by IENE concerning the regular reporting at country level has now come to fruition with the publication of the first such country report on Greece's energy sector.

IENE's Annual Energy Sector Report on Greece was presented by Mr. Costis Stambolis, the Institute's Executive Director and by Mr. Dimitris Mezartasoglou, Head of Studies at IENE, who along with Mr. John Chadjivassiliadis, Chairman of IENE, were the principal authors of the report.

Mr. Michalis Verroiopoulos, Secretary General of the Ministry of Energy and Environment, also addressed the gathering stressing the need for coherent and environment friendly energy policies, while Prof. Pantelis Capros, chairman of IENE's Scientific Council and head of E3MLab, contributed his insight on the actions required to make Greece's energy system more agile and efficient. Finally, Mr. Michael Filippou, Chairman and CEO of Greece's newly established Hellenic Energy Exchange, underlined the role of energy exchanges in the organization and running of national and regional energy markets. More than a 100 people from all different energy branches and executives from Greece's top energy companies and organizations attended this major event which was sponsored by three of the country's leading energy groups, namely Hellenic Petroleum, the CENERGY company, part of the Viohalco group, and the Hellenic Energy Exchange.



The report is freely available and can be downloaded from www.iene.gr & www.iene.ru

SEEEO 2016-2017 STUDY

The SEEEO 2016/2017 study, published in May 2017, provides a thorough and comprehensive insight of the region's energy sector and contains a huge amount of data including energy demand and supply projections and investment estimates until 2025 for a whole range of energy applications. According to IENE's latest study, the total estimated investment potential in the region amounts to €267 billion, in the forthcoming decade, in the base scenario and €321 billion in an optimistic scenario. Commenting on EU and SEE energy policies, IENE's study observes that there is "painful realization of the conflicting points of view between EU energy planners and SEE countries' priorities when it comes to the development of indigenous energy sources. The hierarchy agreed and followed by the countries at national energy policy level is strictly determined by economic considerations and gives credence to solid fuels, in spite of GHG commitments and the overall EU Climate Change policy direction".

Oil and coal still appear as a mainstay of the regional energy mix, whereas natural gas is becoming increasingly important to the energy mix, mainly used as a balancing fuel by several SEE countries, both for power generation and domestic use.

South East Europe

Energy Outlook 2016/17

New Weekly Publication on SEE Electricity Markets

In light of increased interest and energy trading activity in SE Europe, IENE last October launched a weekly newsletter on SEE's vibrant electricity markets. SEE Electricity Market Analysis is IENE's latest newsletter, the first issue of which appeared on October 2nd, 2019. The analysis covers the electricity markets in Greece, Italy, Bulgaria, Romania, Hungary, Republic of Serbia, Croatia and Turkey. Electricity market clearing prices of each country are presented on a weekly, daily, hourly, monthly and yearly basis together with electricity market volumes also on a weekly, daily, hourly and monthly basis. ENERGYLIVE, an Athens based

energy data provider is assisting IENE with data processing and analysis in connection with the latest newsletter. This latest electricity focused market analysis augments IENE's bimonthly newsletter, "Market Fundamentals and Prices."





Research & Studies

IENE Released major Study on Gas Supply in SE Europe and the Key Role of LNG

Early on January 2019 the Institute released an important study which deals with the current status and prospects for gas supply in SE Europe and the key role of LNG. The study covers primarily the gas demand and supply conditions which together with critical gas storage issues are examined on a global and regional basis. Special reference is made to LNG because of its growing importance for the safe operation of gas networks in various countries and because of its potentially crucial role in market development and competition. In this light, all ongoing and planned gas interconnection projects are examined together with the major cross-country gas pipelines currently under construction or in a development phase.

The study covers latest developments in the global gas market as well as in the gas markets of selected countries in SE Europe (i.e. Greece, Turkey, Bulgaria, Romania, Serbia, Croatia and North Macedonia), but



New IENE Working Paper on the Electric Vehicle Market in SE Europe

In July 2018 IENE published Working Paper, No 24, on the "Prospects for the Electric Vehicle Market and Business Opportunities", with special reference to SE Europe and Greece. The paper summarizes the findings of a corresponding major study by IENE on the region's Electric Vehicle Market. The electrification of the transport sector could play a key role in the decarbonization of the global energy system, as long as the grid is powered by green energy and hence the use of Electric Vehicles (ENs) is considered vital in this respect. The EVs due to their rapid technological evolution are expected to reach parity with the petrol fueled ones during 2018 and eventually achieve a cheaper cost of ownership in 2022 even if the conventional ICE vehicles improve their fuel efficiency by 3.5% per year23. It is now obvious that the vehicle market is shifting towards electricity.

In 2016 the global sales of plug in electric vehicles reached 753,000, 60% of which were battery-electric vehicles (BEVs). China was for the 2nd consecutive year the largest EV market in the world with more than 40% of the global sales, while Europe was the 2nd largest market with 215,000 EVs sold, which corresponds to



also in Italy and Ukraine, with specific reference to how all these markets are expected to change over the next few years. It also analyses the geopolitical developments in the SEE region and how these are expected to impact the balance of regional gas markets, the emergence of FSRU projects and their strategic role in enhancing regional energy security, with special reference to the Alexandroupolis FSRU project and the possibilities for the establishment of a gas trading hub in Greece and in the region

In addition, a discussion is made on the possibility of establishing both national and regional gas trading hubs very much in line with similar gas hubs currently operating in several European countries.

The study is available at:

www.iene.eu/latest-ienes-study-on-gas-supply-in-se-europe-and-thekey-role-of-Ing-has-been-completed-p4781.html

28,5% of the global market. United States were left in the 3rd place with 160,000 EVs sold. The rapidly decreasing cost of batteries, which is the most cost intensive EV component, would be the main driver for dropping the price of EVs in the near future. Therefore, the cost of EV batteries fell by 73% between 2010 and 2016 (BNEF, 2017). During 2017 Manufacturers have introduced in the market various battery electric vehicles (BEVs) and plug-in electric vehicles (PHEVs) in most vehicle classes.

Various economic studies have attempted to predict the future of electric vehicles. BNEF in one of its studies (2016) predicts that the rapid development and cost reduction in battery technology during the 2020s will make EVs a more economic option than gasoline or diesel cars in most countries. Moreover, the study forecasts 60 million new EV sales by 2040 corresponding to 54% of new light duty vehicle sales. Such a development would displace the use of 19 million barrels of crude oil per day on the transport sector, substituting it with 10.82 TWh of electricity per day which would account to a consumption of 3950 TWh annually, equivalent to 16% of the electricity consumption of 2016. The market for EVs in Greece is in its infancy accounting for only 334 passenger PEVs in circulation in 201746, while the local fleet includes also 113 passenger tricycles, 124 electric motorbikes and 14 electric trucks (2016). However, 2017 has been a significant year for electric mobility in Greece as the EV market share jumped up from 0.06% to 0.19 % with the market almost tripling in volume, achieving a market growth of +243%. The most significant trend is the turn of the consumers towards PHEVs which accounted for 80.1% of the total sales (+821%).

The working paper is available at: www.iene.eu/articlefiles/working%20paper%20no%2024.pdf

Our People

A number of changes were affected in the last quarter of 2017 and first half of last year following the promotion of certain staff members, the departure of others and the arrival of new ones. Four new colleagues joined the Institut'e staff strengthening its scientific, media and administration capabiliries.

We welcome our new team members



Alexandros Perellis is a researcher and joined the Institute as Research Associate in November 2017. Alexandros is an

Industrial Engineer, graduate of the School of Engineering at Democritus University (DUTH) in Thrace.In addition, he holds an MSc degree in Sustainable Energy Engineering from the Technical University of Denmark (DTU). Through his studies, he has developed strong skills in the elaboration of projects related to solar energy systems, modeling and analysis of sustainable energy systems, feasibility studies, energy efflciency and indoor climate. As a master-thesis student, he has participated in the TOPWASTE project in collaboration with Risø DTU, where he contributed in the development of an optimization tool, OptiWaste, which handles waste and energy flow optimization problems and can be integrated with other energy optimization tools. Alexandros is responsible for the publication of "Electric Mobility Update" (IENE's bimonthly newsletter) and participates in the elaboration of the Institute's research projects and analyses, with main focus on RES and sustainability. He is the main author of the recently completed multiclient IENE study on the "Prospects for the Electric Vehicle Market in Greece and Business Opportunities".



Adam Adamopoulos is a professional journalist with long experience in energy related publications. He joined IENE as media

specialist and senior writer in June 2018. Adam has worked for a variety of publications including daily newspapers, magazines, but also for radio and television. For a number of years he was international news editor of the monthly Energia magazine, published by Delos Communications, and for the Athens fi nancial daily Imerissia and Fileleftheros daily of Cyprus. Adam also worked for the Financial Times daily news programme at the ERT 1 television broadcaster and for Sky Radio's daily FT news programme. Since June this year he has taken over as administrator of IENE's websites while also contributing to IENE's various publications. Adam has contributed the scenario for the financial video documentary which was used for the introduction of the FTSE/ ASE indices in the Athens, London and New York roadshows. Adam has also contributed the scenario on the "History of Energy" for a video documentary by Delos Communications. He is a graduate of the well known Stavrakos Film School and is a fl uent English language speaker.



Elena latridi

joined IENE's team in September 2018. She is a Turcologist having graduated from the National and Kapodistrian

University of Athens and holds an MSc degree in Energy and Environmental Investments from the University of West Attica. She speaks English, German and Turkish. She holds the position of IENE's membership secretary but is also involved with the planning and coordination of IENE workshops and conferences in Greece and SEE countries.



Alina Gourgioti

started working as IENE's first knowledge officer in October 2018. Alina is a graduate in International and European Studies

from the University of Piraeus and obtained an Msc in Global Environmental Governance at Vrije Universiteit Amsterdam. She speaks fluent English and French and she has worked previously for Non Governmental Organisations and has also research experience. At IENE Alina, among others, has undertaken the coordination of Institute's various scientific committees.

Wishing the best to their next steps

Nikolas Sofianos, who from 2008 and until last year was research coordinator resigned from his post in October 2017 in order to embark on a independent consulting career. Nikolas has retained his position as an External Research Associate of IENE contributing on a regular basis news and analysis. Ms Maria Kostoula, who was a part of the administration team left the Institute in May 2018 to take over a position as manager of a vast tourist complex on the island of Kos. Mr. Dimitris Faros left IENE last summer, where for many years was media specialist, in order to pursue an academic career and complete his Ph. D. Thesis.

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!



Lean more about our work and become a member

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IENE News

is an occasional newsletter published by the Institute of Energy for South East Europe