

IENE Conference

"11th SE Europe Energy Dialogue (SEEED)"

Thessaloniki, June 26-27, 2018

Conference Review, Conclusions and Recommendations

Athens, July 2018

Conclusions and Recommendations

(a) Review of Proceedings

Thessaloniki was the city that hosted this year's "SE Europe Energy Dialogue (SEEED)", IENE's long established event focusing on the regional energy agenda, which took place on June 26-27, 2018. "Energy Market Transition and Energy Security in SE Europe" was the special theme for this year's SEEED, 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.

The purpose of this regional forum, which was organized by IENE under the auspices of Greece's Ministry of Environment and Energy, and with the support of leading international and regional organizations and major energy companies, was to bring together high-ranking government officials, senior business executives and energy experts from all countries of SE 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.

Furthermore, the "SE Europe Energy Dialogue" was highly topical given EU's major drive to establish the "Energy Union" and the emphasis placed on energy security, especially on account 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.

The 11th SEEED started on Tuesday, June 26, with opening remarks by Mr. John Chadjivassiliadis, Chairman of IENE. During this **opening session**, which was chaired by the Institute's Executive Director, Mr. Costis Stambolis, Mr. Michalis Verroiopoulos (Secretary General for Energy and Mineral Resources, Ministry of Environment and Energy, Greece), Mr. Simon Uzunov (Electricity Expert/Deputy

Head of Unit, Energy Community, Vienna) and Mr. Gurbuz Gonul (Acting Director, Country Support and Partnerships, IRENA, Abu Dhabi) were the keynote speakers.

It is worth noting that in a specially prepared video message the Executive Director of the Paris-based International Energy Agency (IEA) Dr. Fatih Birol welcomed IENE's initiative to convene this year's conference at regional level, which is indicative, as he said, of efforts undertaken by various groups of countries worldwide to address pressing issues related to market integration and energy resource management. Dr. Birol also underlined the importance of SE Europe as a key corridor for the energy supply of European markets and the efforts now being undertaken to diversify routes and suppliers where the recently completed TANAP gas pipeline, with its extension TAP, still under construction, will play a key role. Such pipelines, pointed out Dr. Birol, will not only help diversify routes but also provide alternative gas supplies to the demanding European markets.

The **first session**, on the international and regional perspectives, was chaired by Mr. Gus Papamichalopoulos (Deputy Chairman, IENE, Partner, KG Law Firm, Greece). The speakers of this session included Mr. Tim Yeo (Chairman of The New Nuclear Watch Institute, Former Minister of Energy, UK), Dr. John Kambouris (Chief Officer of Operation, Infrastructure & Market, IPTO, Greece), Dr. Yurdakul Yigitguden (Independent Energy Consultant from Turkey and Former Co-ordinator of OSCE Economic and Environment Activities, Organization for Security and Co-operation in Europe), Prof. Dr. Ionut Purica (Executive Director, Advisory Center for Energy and Environment, Romanian Academy, Romania) and Dr. Charles Ellinas (CEO & Founder, EC Natural Hydrocarbons Company Ltd., Cyprus and UK).

Chaired by Dr. Hans Hutta (General Manager, International Center for Petroleum & Industrial Management - ICM, Austria), the **second session** focused on the changing regional energy landscape and key policy issues. During this session, Mr. Costis Stambolis, Executive Director of IENE, made a presentation based on the theme of this year's SEEED, entitled "Energy Market Transition and Energy Security in SE Europe", while also referring to the background paper, which the Institute prepared on the occasion of this year's conference under the same title. Ms. Eugenia Gusilov (Director, Romania Energy Center (ROEC), Romania) and Dr. Spyros Kiartzis (Manager

New Technologies and Alternative Energy Sources, Hellenic Petroleum S.A., Greece) followed, with useful insights into energy and business challenges in Romania and Greece respectively.

The **third session**, on energy and geopolitical perspectives in SE Europe, was a panel discussion that was chaired by Mr. Christos Dimas (Chairman of the Geopolitics and Energy Committee and Member of the BoD, IENE, Honorary Chairman of the Hellenic-Russian Chamber of Commerce, Greece). The contributors to this panel discussion included Mr. Aleksandar Kovacevic (Energy Expert, Serbia), Prof. Dr. Ionut Purica, Mr. Yurdakul Yigitguden, Mr. Vladimir Durovic (Energy Expert, Croatia) and Dr. Christos Papadopoulos (Regional Director Europe, Energy Exemplar, UK). The discussion broadly examined the relevance and importance of SEE to current developments in the energy policy sphere (i.e. Energy Union, decarbonization, solidarity mechanisms) in the EU.

The proceedings of the second day (Wednesday, June 27, 2018) of IENE's 11th SEEED started with the fourth session, on the ascendance of electricity markets in SE Europe and infrastructure and investment priorities. Covering a wide range of subjects, including electricity market operation, regulatory and legal issues, crossborder electricity trading, grid expansion and power exchanges, this session, chaired by Mr. Nenad Stefanovic (Senior Expert for Electricity, Energy Agency of the Republic of Serbia (AERS), Serbia), was divided into two parts. The speakers of the first part included Ms. Epistimi Oikonomopoulou (Policy Officer Unit B1, DG Energy, Brussels), Mr. Ioannis Retsoulis (Advisor - Wholesale Markets & Network Codes, Eurelectric, Brussels), Mr. Aleksandar Mijuskovic (Executive Director Coordinated Auction Office in South East Europe, SEECAO, Montenegro), Mr. Simon Uzunov (Electricity Expert/Deputy Head of Unit, Energy Community, Vienna) and Mr. Francisco-Jose Fortuny (Principal Banker, Natural Resources, EBRD, London). In the second part, Mr. Vassilis Rallis (Energy Expert, Regulatory Authority for Energy, Greece), Mr. Milos Mladenovic (Managing Director, SEEPEX, Serbia), Mr. Konstantin Konstantinov (CEO, IBEX, Bulgaria), Mr. Aristeidis Tasoulis (Hellenic Energy Exchange (HEnEx), Athens) and Mr. Roman Matkiwsky (Energy & Infrastructure, Black Sea Trade & Development Bank, Thessaloniki) discussed the latest developments of SEE's power exchanges and the increasingly important role which they play in market operation and market integration.

The fifth session, on the challenges and opportunities of SE Europe's expanding natural gas market, focused on the major gas Interregional projects, the Expanded Southern Gas Corridor and the role of East Med Gas, as well as on gas interconnectors and market integration, energy security issues and the role of LNG. This session, chaired by Dr. John Desypris (Head of Regulatory Authorities, Mytilineos Holdings S.A., Greece and past chairman of IENE), was also divided into two parts. The speakers of the first part included Mr. Gokhan Yardim (Natural Gas General Manager, Turkerler, Ankara, Turkey), Mr. Aleksandar Kovacevic (Energy Expert, Serbia), Mr. Vladimir Durovic (Energy Expert, Croatia), Mr. Dimitris Kardomateas (Head of the Strategy & Development Division, Hellenic Gas Transmission System Dimitris Operator, Greece) and Mr. Manolis (Head of International Activities/Projects, Public Gas Corporation (DEPA), Greece). The speakers referred mostly to national market developments, while all of them stressed the growing need for interconnectivity and cross border trading. In the **second part**, Mr. Michalis Stergiopoulos (Manager, Gas Distribution Company Thessaloniki-Thessalia S.A., Greece), Mr. Ilia Gjermani (Head, Regulatory and Management Ministry of Economy, Trade and Energy, Tirana, Albania), Mr. Anastasios Tosios (Commercial Director, Attiki Natural Gas Distribution Company, Greece) and Ms. Ljiljana Topalovic (DSO coordinator, Srbijagas, Serbia) discussed the evolution of natural gas markets in SEE, referring to specific examples from the different countries in the region. Regarding distribution sector, the main target remains to develop new infrastructure and increase penetration in commercial and residential market.

The critical issues facing Renewable Energy Sources (RES) in SE Europe, with a special focus on its prospects and energy storage and new funding schemes for RES, were the main subjects covered by the conference's **sixth session**. Prof. Dimitrios Mavrakis (Director, Energy Policy and Development Center, National and Kapodistrian University of Athens, Greece) chaired this session, while speakers included Mr. Manuel Serrano Matoses (Head of New Technologies/Department of Technology at ETRA Group, Spain), Dr. Vesna Borozan (Professor, Faculty of Electrical

Engineering and Information Technologies, University of Ss. Cyril and Methodius, Skopje, FYR of Macedonia), Dr. Christos Papadopoulos (Regional Director Europe, Energy Exemplar, UK) and Dr. Platon Baltas (Senior Partner, EUDITI, Athens, Greece).

Chaired by Dr. Vesna Borozan, the **seventh and final session**, covered issues concerning energy efficiency in SE Europe, with a special reference on energy poverty, energy efficiency and innovative applications in the building sector and financial support schemes and access to electricity and heating fuel. This session's speakers included Dr. George Paparsenos (Energy Expert, Greece), Ms. Astghine Pasoyan (Executive Director, Foundation to Save Energy (ESF), Armenia), Mr. Nikola Tomasovic (Energy Consultant, WEC - Future Energy Leader, Serbia), Ms. Eva Athanasakou (Managing Partner, EYDITI, Greece) and Ms. Mavica Iliou (Director, Green Banking & Development Programmes, Group ESMS Officer, Piraeus Bank, Greece).

Greece's Public Power Corporation (PPC) S.A., Hellenic Petroleum S.A. and Public Gas Corporation (DEPA) S.A. were the conference's leading sponsors, whereas supporters included Greece's IPTO, EnSCo, DESFA, Gastrade and KG Law Firm. Media partners included Kathimerini, New Europe, Balkan Green Energy News and Energia.gr.

(b) Conclusions

While market integration and transition to cleaner fuels is progressing satisfactorily 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 modernisation of energy infrastructure, the construction of new facilities, including electricity and gas interconnections, improvement of energy efficiency and increased use of RES with the drive towards decarbonization being a dominant theme.

A major finding of this year conference is that SE Europe, in contrast to the rest of Europe, remains committed to continuing coal use. Based on Institute'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 8-10 years, as they will struggle to meet increased energy demand and coal/lignite appears to be still cost effective, although it is not known for how long it will keep its price advantage. 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.

At the 11th SEEED, the key role that the European Union is playing in energy developments in SE Europe, through the intervention of the European Commission, was amply demonstrated. A number of presentations did in fact focus on specific initiatives and work packages which the EC is currently implementing, as part of existing policies related to the strengthening of regional energy security but also in the area of energy transition and the promotion of clean fuels, including renewables.

The importance of regional energy cooperation was stressed during this conference as a key building block for the Energy Union since close cooperation between major actors can advance EU energy policy objectives, help integrate energy markets and increase security of supply. Central and SE Europe Energy Connectivity (CESEC) is such one initiative which has helped bring together EU Member States and Energy Community Contracting Parties. The role and latest work undertaken towards this direction by the Vienna-based Energy Community was explained by Dr. Simon Uzunov who discussed the main issues pending in the **electricity** sector. As Dr. Uzunov pointed out the role of the Electricity Community has been crucial over the past years, since EC's foundation in 2005/2006, in transferring European technical knowhow and European Acquis to the West Balkan area, which has enabled the functioning of their energy markets in line with EU requirements. A necessary condition for the eventual and full integration of their electricity markets in the EU.

The challenges and difficulties now faced by the European electricity industry, as European market integration becomes a reality, were highlighted in several presentations. One of the most important challenges is the further optimisation of the use of existing interconnectors. Despite considerable investments in

transmission grid, tradable cross-border capacities continue to be limited. It is worth noting the electricity interconnection between Montenegro and Italy through a submarine cable with a capacity of 1 GW (in the first phase, it will operate with a capacity of up to 0.5 GW), which is expected to boost electricity market integration and hydro exploitation.

In SE Europe, it is highly important to understand the current status of the market liberalization process, which has faced several difficulties and numerous non-technical obstacles in the past as the incumbent companies in almost all SEE countries solidly resisted any change on the grounds of losing control of the market and hence weakening of their bureaucratic hold. Currently, the situation in the six SEE EU member countries, including Bulgaria, Croatia, Cyprus, Greece, Romania and Slovenia, looks varied with certain countries having managed to complete what appeared to be an anomalous transition period and other countries still trying to adapt to EU competition rules.

In the six SEE Energy Community Member States of Western Balkans, including Albania, Bosnia and Herzegovina, Kosovo, FYR of Macedonia, Serbia and Montenegro, we have the intervention of the Energy Community through the contracting parties, which has facilitated the overall transition process to European Acquis. In the case of Turkey, a much larger country compared to any of the other SEE states, but which affects to a large extent financial, trade and energy flows to the rest of SE Europe, the progress achieved in electricity market operation unbundling and competition in the retail area has been impressive and has now entered a critical stage with the market opening up much faster than anticipated.

Hence, overall, it seems that some solid steps have been made towards electricity market competition. However, in the case of Western Balkans, progress is not very satisfactory in most contracting parties, largely because of the inflexible market structure and the stiff hold of the state over market mechanisms. A general observation is that the electricity markets in SE Europe are still highly fragmented. All Western Balkan countries are still lagging behind in establishing organised power exchanges as a precondition for efficient electricity trading. Only Serbia has established one so far, which is not very liquid yet. Cross-border electricity trade is

below the region's potential, reflecting the aforementioned high level of market fragmentation. As the Western Balkan countries do not have the critical size to develop liquid markets in isolation, cross-border cooperation is essential for achieving important cost savings for energy consumers through increased competition and more effective use of existing generation and transmission infrastructure in the region. A regional approach would also attract more investments, which is especially critical for the less developed gas markets of the region. In addition, most SEE markets have regulated segments and incumbent utilities in dominating position and also lack reliable price signals.

As Mr. Yeo analysed during IENE's conference, the electricity market in SE Europe is far more precarious than current forecasts indicate. The likelihood of external shocks — whether supply- or demand-driven — have been underestimated, putting future system resilience at risk. As a result, in the absence of a concerted, swift response, the regional electricity market will function under much tighter constraints than perceived today. Should the decision to expand capacity — by means of investment in low-carbon infrastructure — not be made, SE Europe faces an electricity shortfall as early as 2027, he said. This would likely raise electricity prices for the region and so endanger household living standards and dampen business activity. The region's economic development would be slowed and its energy balance dislocated. The clear course of action is to commit — politically and financially — to an expansion of zero or low carbon power generation capacity. As such, the installation of RES and large hydro, CCGT and for some countries the installation of nuclear facilities to be operational between 2025 and 2030 is a necessary hedge against future instability.

Over the past five years, important steps regarding the long-term development of the SE **European gas market** have been recorded. However, a highly fragmented landscape for the gas market development in the region still exists. Latest IENE analysis shows that the only way forward for the development of a regional gas market is the consistent and rapid implementation of the provisions of the Third Energy Package, at least to the extent that the 6 SEE EU Member States and the 6 SEE Energy Community Contracting Parties have committed to adopt it in a legally

binding way. A constraint in SE Europe remains the limited interconnectivity and access to international gas markets.

Regarding **oil markets** in SE Europe, all countries with refineries, except of Albania and Romania, are fully or mostly dependent on crude oil imports. SEE countries without operating refineries are fully dependent on oil derivatives imports. Over the last few years, major investments have been made in refining sector, predominantly in hydrocracking capability-diesel production. Greece, as the biggest regional producer of oil derivatives, has developed substantial exports, mostly to Mediterranean markets. European refineries will come under increased pressure over the next few years due to the growing competition from Middle East refineries and Russian refiners who have invested heavily in upgrading capacity, among others, making more difficult to accept surplus gasoline from EU refineries.

In terms of energy geopolitics, the East Med and Middle East regions remain volatile. Developing and exporting oil and gas is a challenge, especially in the prevailing low demand -low price environment globally. Disputes are often the result of competing oil and gas interests and unresolved border and Exclusive Economic Zone (EEZ) disputes, particularly in the East Med. Egypt is successful in exploiting its hydrocarbon resources and liberalising its energy market. Low gas prices are posing their own challenges on aspirations to export East Med gas. One of the key findings of the conference is that the East Med still has reasonable prospects for more gas discoveries, but securing export markets is a major challenge with no easy options.

Renewable energy sources (RES) are constantly increasing their position in the energy mix of SE Europe. In 2016, RES accounted to 23.6% of SEE's gross final energy consumption, compared to 17.4% of 10 years ago, based on data provided by Eurostat. The important role of the Energy Efficiency Directive, the heating/cooling policy as well as the significance of international funding for energy efficiency and RES projects, mainly in the Balkan countries, through the World Bank, the European Investment Bank and the European Bank for Reconstruction and Development (EBRD), among others, were also underlined. The case of CrossBow, a European programme for RES and energy storage in SE Europe, was analysed in detail, highlighting that there are priorities towards decarbonization process, including

electricity production from clean energy sources and phasing out of fossil fuels from transport. The complexity and uncertainty that dominates the international energy market was also stressed. "In a world that is changing at a very fast pace, we need consistent and frequent information," Christos Papadopoulos of Energy Exemplar said, predicting that uncertainty will escalate in the future.

In terms of **energy efficiency**, the important role of buildings as energy consumers was also stressed, noting that in the Western Balkan countries buildings represent about 50% of the total energy consumption in the region. In addition, the benefits of improving energy efficiency in buildings and the related energy savings that lead to lower operating costs, a healthier living environment and working place for citizens were presented thoroughly. The need for a gradual decentralization of Europe's energy system through the use of sustainable energy in buildings was a key finding of this year's two-day conference as the potential for RES and energy efficiency is high in SE Europe.

Driven by concerns to alleviate energy poverty, especially in the poorer regions in SE Europe, but also by EU's stated goals to include energy efficiency improvement in its overall energy transition strategy, buildings have emerged as a prime target where sizable energy savings can be realized. In this context, we should remember that the EU had already set a target for a 20% energy efficiency improvement in buildings by 2020, which in 2016 the European Commission proposed to be upgraded to 32.5%, which has now been duly endorsed by the European Parliament by 2030. As a result, a number of new measures are expected soon in order to ensure that this new and highly ambitious target is met.

The benefits from the improvement of energy efficiency in buildings as well as the difficulties involved in implementing EU and national policies were also discussed and analyzed at length. The need for buildings to be seen as energy consumers, rather than just a simple building envelope, was stressed by Ms. Eva Athanasakou, Managing Partner of Euditi, an energy and environmental design firm. As the vast majority of energy used in buildings goes for heating and cooling (85%), a number of available and well tested techniques can be used to improve energy use and reduce costs. As 75% of the existing building stock in Greece is regarded as energy

inefficient, there is a huge potential for energy efficiency improvements; hence, contributing partly in achieving the set climate targets.

Today, addressing **energy poverty** is one of the main challenges faced by SEE countries. Most conference delegates agreed that a common approach should be implemented regarding the definition of energy poverty by the EU Member States, which would beneficial as it would allow the effective coordination of policy interventions in order to protect vulnerable consumers. Emphasis was also placed on the high correlation between the percentage of the population that lies on the poverty line, and the percentage of the population, now facing increased debts in their electricity bills. More specifically, more than 30% of the total population of three Balkan countries (i.e. Greece, Serbia and Bulgaria) faces problems with the payment of bills.

(c) Recommendations

The following recommendations have been formulated by the Conference Organizing Committee after reviewing in detail the Conference proceedings and the various presentations and interventions by Energy Dialogue participants.

- (1) There is a need for convergence of the national laws of SEE countries with the European acquis in relation to the energy consumers' rights and protection in electricity and gas sectors, with special focus on enhancing energy efficiency.
- (2) Each SEE country should strive to implement its part in the development of joint infrastructure projects in order to enhance energy interconnectivity (mainly gas and electricity), market operation and security of energy supply with benefits for the consumers.
- (3) There is a need to develop organized power exchanges in Montenegro, Albania, FYROM and Bosnia and Herzegovina and promote day-ahead market coupling in Western Balkans through the WB6 Memorandum of Understanding on regional electricity market development.
- (4) As some countries in the SE European region are using nuclear energy for power generation (Bulgaria, Romania, Croatia, Slovenia, Turkey) and are either expanding them in building new ones, the nuclear option for power

- generation in the broader region should be seriously considered especially since it bodes well with decarbonization policies.
- (5) There is a need to develop environmental friendly schemes and more detailed country strategies in order to attract private investment in SEE's renewable energy and energy efficiency sectors versus carbonization attempts.
- (6) There is a need to introduce digitalization technologies in the transmission and distribution grids and smart metering to improve the operation and management of the system, as well the reliability and the resilience, offering better services to the consumers and high RES penetration as well.
- (7) The energy poverty issue should be properly assessed and included as an important parameter in energy efficiency programmes in SE Europe. National programmes to address energy poverty should offer implementation mechanisms specifically designed to improve energy efficiency for vulnerable consumers and ensure access to these programmes to low-income households. Apart from implementing low-cost energy efficiency measures to tackle energy poverty, these should also encompass: replacement of household appliances, replacement of inefficient heating system (with the use of renewables, where possible), different levels of retrofitting the building envelope, total renovation of the buildings, subsidies, which are suitable and useful for energy-poor households (e.g. in the case of high interest rates), interest free loans should be introduced, and all state-owned or council housing should be renovated to improve the housing conditions.
- (8) A yearly review of the energy agenda of the SEE region should be undertaken in order to meet new challenges where energy security once again is emerging as key priority by policy setting organisations, such as the EC and the OECD/IEA, which could be backed by specialised organisations with good knowledge of the region, such as the Energy Community, CESEC, the Energy Charter, the Banks (e.g. EBRD, EIB and Black Sea Trade and Development Bank) and IENE.