INSTITUTE OF ENERGY FOR SOUTH-EAST EUROPE

IENE Conference on

"Oil Refining, Storage and Retail in SE Europe"

Thessaloniki, March 30-31, 2017

a part of the

"S.E. Europe Energy Dialogue (SEEED)"

Conference Conclusions and Recommendations

Athens, May 2017

➢ *Conclusions and Recommendations*

(a) Review of Proceedings

More than 100 delegates gathered for a one and a half day highly focused conference, entitled "Oil Refining, Storage and Retail in SE Europe", which was convened by the Institute of Energy for SE Europe (IENE) on March 30-31 in Thessaloniki. The conference, which was part of the aforementioned "SE Europe Energy Dialogue", dealt with the current issues faced by refineries and oil marketing companies in the region. Twenty speakers and panelists from 12 different countries actively participated in the five sessions which formed this unique event which was fully backed by **Hellenic Petroleum S.A.**, the region's petroleum market leader.

Opening remarks and keynote presentations were contributed by Mr. Grigoris Stergioulis, CEO of Hellenic Petroleum, Mr. John Aligizakis, the Chairman of Greece's Oil Marketing Companies Association and IENE's Chairman Mr. John Chatzivassiliadis. Mr. Stergioulis referred to the dominant issue of competitiveness in European refining industry, which suffers greatly due to the high cost of compliance to the EU's environmental standards that do not exist in competitive areas such as Turkey, the Middle East and South East Asia. As a result, the refineries in SE Europe are experiencing strong global competition and their position becomes very vulnerable. Mr. Aligizakis expressed his optimism for the recovery of Greek petroleum products market, despite the existing challenges, including the decreased consumption due to the recession and overtaxation. Based on data presented by Mr. Aligizakis, a decline of 5% has been recorded in Greek fuels market during the first quarter of 2017, but he estimated that the market will restore its balance after the first half of this year under the condition that the Greek economy will stabilize and international oil prices and taxes will remain at current levels. A prerequisite is the formation of a healthy business environment, with clear rules and no "protective" measures. "We want the state to be strict with us," he said.

In the first session on Friday (31/3), Dr. Leo Drollas, a well-known international analyst based in London, and John Cooper, the Director General of Fuels Europe, which is the petroleum industry's Brussels-based body, provided the expert background and discussed the prevailing dynamics and organisation of the global and European oil market.

More specifically, Dr. Drollas estimated that crude oil prices may temporarily exceed the level of $55 per barrel, but they will not overcome the threshold of $60 per barrel over the next decade. This is largely due to the substantial increase of global oil productivity, while at the same time oil costs are declining rapidly. The crude oil prices depend, at least short-term, on the compliance of OPEC countries to reduce oil production, the possibility of extending this agreement, as well as the current developments in the US oil market. Dr. Drollas also argued that Saudi Arabia is in a difficult position, because if it will decide to cut oil production without the other countries follow its “path”, it will see the gap to be covered by the US crude, while if the other countries continue to expand their market shares, they should simultaneously reduce sharply their government spending.

Mr. Cooper stressed that a delegation of Fuels Europe will start immediately discussions in the US and Japan in order to address directly the economic and environmental problem that has arisen from the oil marketing activities with high sulfur content in international waters. This issue is of paramount importance to the EU and a "threat", according to Mr. Cooper, especially after 2020 as it will particularly concern everyone involved, although now all maintain a keep waiting attitude, even those in the shipping industry. He also referred to the investments that are usually made in the EU’s refining sector highlighting that 90% of them are outside the EU because of the high costs imposed by EU directives.

In addition, there was a panel about fuels marketing, storage and transportation in SE Europe that presented the key challenges. Mr. Roberto Karahannas, General Manager, Domestic & International Retail of Hellenic Petroleum SA, who was the keynote speaker, initially referred to the developments in the European fuels market over the last few years, which is characterized by the predominant oversupply of gasoline and the concomitant lack of sufficient diesel quantities. He stressed that the main reasons that hinder the smooth functioning of the petroleum products market in SE Europe are the legal issues and bureaucracy, political will, smuggling and corruption.

Mr. Petros Papasotiriou, Managing Director at Asprofos Engineering, a subsidiary of Hellenic Petroleum, stressed that the prompt involvement of an experienced engineering company minimizes the risks of oil refining projects suggesting that refineries and storage facilities operators must invest on highly-skilled and tech engineering to keep their facilities up-to date and to deal with the challenges of the market. Moreover, Mr. Diomidis Stamoulis, Senior Director, Strategic Planning of Industrial Activities and Participations at Hellenic Petroleum, concluded that the greatest risk for the refining industry as a whole is to embark on an investment race with shippers that could not justify the investments undertaken. The focus should rather be on infrastructure to capture opportunity from their existing configuration and internal streams.

(b) Conclusions

The SE European refineries, as reviewed in the conference, are mostly underutilized, with the exception of Bosnia. Increasing refinery throughput is difficult as only a small part of the region’s crude is directed to petroleum products. Most processed crude goes into gasoline and heating oil derivatives, with the market for these products limited in both size and margins. The operational efficiencies in refineries in the West Balkans are also lacking. SEE refineries generally have inadequate capabilities in global crude trading and rely heavily on Middle East and Russian oil. These refineries produce limited amounts of value-added petrochemical and lubricant products and do not have the advanced equipment to be found in refineries in neighbouring EU countries. These findings suggest that within the next 3-5 years, the bulk of the region’s major refineries will need to change their operating models, undergo regional consolidation or close down.

Another important finding of the conference was the realization that due to a very special set of circumstances, the SE European refinery scene is undergoing a renaissance, in stark contrast with developments in Central and Western Europe and USA where closures and mothballing has been the order of the day. Upgrading and revamping of refinery complexes in Greece, Bulgaria, Romania and Serbia appear to be the order of the day while a brand new refinery is actually being built in Turkey.

Refining in SE Europe has to be viewed in broader context. As it became apparent from the various presentations and deliberations in the conference, refinery operators in SE Europe can access and secure better, more cost-effective crude supplies by improving their trading capabilities and forming international partnerships or joint ventures. Operators need a stronger focus on their main priorities (i.e. advanced refining equipment, investment planning and realization) in order to develop smarter investment strategies. For instance, Slovenia, without a domestic refining capacity, relies heavily on maritime imports of fuel from multinational oil traders. Croatia's refinery operates at 50 to 60% of capacity. One option is for Slovenia and Croatia to pursue cross-border collaboration, and integrate their supply chains, allowing Slovenia to secure some of Croatia's spare refining capacity. Another option is to consolidate within and across borders.

As pointed out at the conference, the oil refining sector is crucial to the EU economy. Fuels Europe says that European refineries create €23 billion a year of value added to local and national economies, and downstream businesses employ 640,000 people, while the EU refining industry contributes €270 billion to the EU economy in excise duties and taxes collected by each country every year.

However, high energy, labor and legislation compliance costs, lower complexity and utilization rates and more expensive feedstock contribute to a refinery closure risk in SE Europe. The risk is exacerbated by strong competition from Russia, the Caspian Sea and the Middle East where refineries are located in proximity to crude oil (and gas) production, with much larger economies of scale and access to waterborne transport as well as higher density of demand.

A number of refineries in SE Europe are considered to be much too small to afford complex solutions such as gasification of heavy fuel oil, hydrodesulphurization and competitive power and steam generation. Refineries in Greece, Turkey and Israel appear to be more complex and of higher productivity. The LUKOIL-operated refinery in Romania is experimenting with combustion of residuals in a modern fluidized bed boiler, but steam and power efficiencies are well below international market standards. Refineries in Romania, Serbia and Croatia are supported by low royalties for domestic oil and gas production that is effectively a cross subsidy to refining and marketing of liquid fuels. It seems that unless certain changes are introduced towards enhancing refining productivity, the combined impacts of gas competition, high RES penetration and competition by imported oil products are going to push the majority of regional refineries out of business.

At the other end of the spectrum, refineries in Greece thanks to consistent investment in upgrading and revamping over the last five to six years have increased their complexity and now produce at highly competitive prices a range of export products including diesel, gasoline and heating gas oil.

(c) Recommendations

The following recommendations have been formulated by the Conference Organizing Committee after reviewing in detail the Conference proceedings.

(1) Refining groups in the region should invest on highly skilled labour and high tech engineering in order to keep facilities up to date and also identify and apply innovative techniques.

(2) Following on (1), IENE could undertake the organization of “Refining, Storage and Oil Markets” Conference once every two years in order to review current situation, identify potential problem areas but also outline investment and financing opportunities.

(3) Encouraged by the wide participation and strong industry interest during the 30/31 March Conference in Thessaloniki, IENE could undertake the setting up of a regional comprehensive database to include information on refining, storage and retail. This database will be freely accessible to IENE corporate members.

(4) IENE, through its “Downstream” scientific committee, to undertake the preparation of a Working Paper (WP) on refining in SE Europe. The WP will highlight technical characteristics, weaknesses as well as challenges in the regional refining sector.