

THE 145TH MEETING OF OAPEC EXECUTIVE BUREAU



**SECOND ASIA COOPERATION
DIALOGUE SUMMIT**



The Cover

The meetings of the Second Asia Cooperation Dialogue Summit (ACD Summit), held in Thailand from 8 to 10 October 2016, had a special significance due to the economic and developmental issues on its agenda, including energy security as one of the top strategic issues in Asia and around the world. The meetings were attended by Their Highnesses and Excellencies Heads of States and Emirs, as well as, senior officials in Asian countries including OAPEC members. The Emir of the State of Kuwait HH Sheikh Sabah Al Ahmed Al Sabah attended the event.



The 10th Middle East Petrotech 2016

6



Joint Press Conference for Saudi, Qatari, and Russian Energy Ministers

11

ORGANIZATION OF ARAB PETROLEUM EXPORTING COUNTRIES (OAPEC)



The Organization of Arab Petroleum Exporting Countries (OAPEC) was founded on the basis of the agreement signed in Beirut, Lebanon on 9 January 1968 between the governments of Kingdom of Saudi Arabia, the State of Kuwait and the (then) Kingdom of Libya. The agreement stipulates that the Organization shall be domiciled in the City of Kuwait.

The principal objective of the Organization is the cooperation of the members in various forms of economic activity in the petroleum industry, the determination of ways and means of safeguarding the legitimate interests of its member countries in this industry, individually and collectively, the unification of efforts to ensure the flow of petroleum to its markets on equitable and reasonable terms, and providing appropriate environment for investment in the petroleum industry in member countries.

In 1970 the United Arab Emirates, the State of Qatar, the Kingdom of Bahrain and the Republic of Algeria joined the Organization, followed by the Syrian Arab Republic and the Republic of Iraq in 1972, Arab Republic of Egypt in 1973, then the Republic of Tunisia in 1982 (its membership was suspended in 1986). Any Arab country which derives a significant share of its national income from petroleum is eligible for membership in OAPEC upon the approval of three-quarters of the member countries, including all three founding members.

- **OAPEC-Sponsored Ventures:** OAPEC has sponsored the creation of four companies: The Arab Maritime Petroleum Transport Company (AMPTC), established in 1972 with headquarters in Kuwait City, the Arab Shipbuilding and Repair Yard Company (ASRY) established in 1973 with headquarters in Bahrain, the Arab Petroleum Investments Corporation (APICORP) established in 1974 with headquarters in Khobar, Saudi Arabia, the Arab Petroleum Services Company (APSC) established in 1975 with headquarters in Tripoli, Libya.



The 145th Meeting of OAPEC Executive Bureau

16



The 16th Meeting of Experts on Natural Gas Investment Cooperation Potentials in OAPEC Member Countries

20

In this issue

Editorial	4
OAPEC Member Countries	6
OAPEC Activities	16
OAPEC Sponsored Ventures	29
Petroleum Developments	30
Tables Annex	43

OAPEC Monthly Bulletin is published by the General Secretariat of OAPEC- Information and Library Department.

(ISSN: 1018-595X)

Annual Subscription (11 issues)

Arab Countries

Individuals: KD 10 or equivalent in USD \$

Institutions: KD 15 or equivalent in USD \$

Other Countries

Individuals : USD \$ 40

Institutions : USD \$ 60

Subscription orders should be sent to : P.O. Box 20501 Safat - Kuwait 13066 - State of Kuwait

Tel : (+965) 24959724

Fax : (+965) 24959755

E-mail :

oapec@oapecorg.org

Web-site: www.oapecorg.org

oapec

@oapec

All rights reserved. No reproduction is permitted without prior written consent of OAPEC.

OAPEC'S ORGANS

The Organization carries out its activities through its four organs:

- **Ministerial Council:** The Ministerial Council is the supreme authority of the Organization, responsible for drawing up its general policy.
- **Executive Bureau:** The Executive Bureau is composed of one representative from each of the member countries, drawing recommendations and suggestions to the Council, reviewing the Organization's draft annual budget and submitting it to the Council, it also adopts the regulations applicable to the staff of the General Secretariat. The resolutions of the Executive Bureau are issued by the majority of two-thirds of all members.
- **General Secretariat:** The General Secretariat of OAPEC plans, administers, and executes the Organization's activities in accordance with the objectives stated in the agreement and directives of the Ministerial Council. The General Secretariat is headed by the Secretary General. The Secretary General is appointed by resolution of the Ministerial Council for a tenor of three years renewable for similar period(s). The Secretary General is the official spokesman and legal representative of the Organization and is accountable to the Council.

The Secretary General directs the Secretariat and supervises all aspects of its activities, and is responsible for the tasks and duties as directed by the Ministerial Council. The Secretary General and all personnel of the Secretariat carry out their duties in full independence and in the common interests of the Organization member countries. The Secretary General and the Assistant Secretaries General possess in the territories of the Organization members all diplomatic immunities and privileges.

- **Judicial Tribunal:** The protocol of the Judicial Tribunal was signed in Kuwait on 9 May 1978 and came into effect on 20 April 1980. The Tribunal is competent to consider all disputes related to the interpretation and application of OAPEC's establishment agreement, as well as disputes arising between two or more member countries concerning petroleum operations.

SECOND ASIA COOPERATION DIALOGUE SUMMIT BANGKOK DECLARATION & ECONOMIC RELATIONS DEVELOPMENT AMONGST ASIAN COUNTRIES



The meetings of the Second Asia Cooperation Dialogue Summit (ACD Summit), held in Thailand from 8 to 10 October 2016, had a special significance due to the economic and developmental issues on its agenda, including energy security as one of the top strategic issues in Asia and around the world. The meetings were attended by Their Highnesses and Excellencies Heads of States and Emirs, as well as, senior officials in Asian countries including OAPEC members. The Emir of the State of Kuwait HH Sheikh Sabah Al Ahmed Al Sabah attended the event. The summit was crowned by announcing the “Bangkok Declaration”. The declaration reiterated the desire of the convening Asian countries to boost mutual cooperation to achieve sustainable development goals by 2030. The declaration welcomed the continuation of the Asian dialogue as a platform to enhance economic cooperation between its countries. It also referred to the importance of boosting partnership between public and private sectors in these countries.

The Second Asia Cooperation Dialogue Summit enjoyed special significance due to Asia’s position on the map of the global economy and energy balance. Asian countries come on top of the energy consumers, especially China, India, Japan, and South Korea. The relative importance of the Asian countries is expected to grow in coming years due to growing population rates in most of them especially China and India. Arab countries in Asia, led by OAPEC member countries, enjoy a significant status since they top the world’s oil and natural gas reserves.

Economic relations between Asian countries, including China, have strategic and historic roots. The Silk Road, crossing Asia from east to west all the way to China and vice versa, was the main route for international trade. Commercial ships from the Arabian Gulf countries played a pioneering role in the trade exchange movement between the east and the west parts of the continent in the end of the 19th century and the beginning of the 20th century.

Nowadays, economic relations between Asian countries are witnessing major developments. The energy industry is one of the main components of the economic relations between the Asian countries, which are characterized by the reciprocal dependence between net hydrocarbons (crude oil, LNG) importing countries in the eastern part of the continent; and major exporting countries in the western part of the continent. Eastern Asian countries claim more than two thirds of the petroleum exports of the western Asian countries.

The last three decades witnessed a noticeable growth in the size of the commercial exchange between countries in Asia. In 2015, India has been classified as the biggest trade partner for the GCC countries in terms of non-oil exports by 8.5% of the total non-oil exports to the GCC; and by 12.8% of the GCC's total non-oil imports.

Willing to develop energy cooperation with the East Asian countries, West Asian Arab countries, led by OAPEC members, have moved to boost their presence in the Asian market, especially downstream products, in order to secure safe outlets for their petroleum products, as well as, invest in the exploration and production sectors. The last two decades witnessed a strong presence of the GCC countries in the East Asian energy market through the establishment of oil projects like refineries, or investing in the capitals of Asian petroleum and petrochemical companies. They have also opened regional offices to seek petroleum and hydrocarbon opportunities in East Asia. The outcome was positive and noticeable.

The Second Asia Cooperation Dialogue Summit (ACD Summit) has been a good opportunity for discussion and dialogue on current and future mutual economic challenges facing the Asian countries. The challenges include discrepancy in economic, social, human, and

population development rates, energy poverty in some Asian countries, insufficient capitals, shortage in technology, as well as, environmental challenges. In this vein, it is worth mentioning the various economic challenges facing the Arab petroleum exporting countries as a result of the declining oil prices in the world markets, which caused a big drop in these countries' revenues in general. The impact continues. Hopes are high for a global economic recovery that would reflect positively on the global oil market recovery.

OAPEC Secretariat General has followed up the progress of the Second Asia Cooperation Dialogue Summit (ACD Summit) and highly appreciates the efforts of the Asian countries' leaders in boosting economic cooperation between their countries. In this regard, the Secretariat General welcomes the Summit's resolution on establishing a permanent secretariat for the Asia Cooperation Dialogue in the State of Kuwait. Choosing Kuwait as headquarters is a token of appreciation to Kuwait's efforts in boosting Asian cooperation. This choice reiterates Kuwait's significant position in the dialogue with the petroleum importing countries, since Kuwait is also a founding member of OAPEC. The Organization hopes that the joint efforts would result in finding a common platform for the current challenges and future prospects of the energy and petroleum industry. The Secretariat General foresees promising energy cooperation opportunities between Asian countries. It hopes that such events would contribute to developing economic cooperation mechanisms among Asian countries in order to improve and support the petroleum trade in the Arab countries, which would ultimately help boosting the economic movement and increasing economic and social development rates in Asia.

BAHRAIN

THE 10TH MIDDLE EAST PETROTECH 2016

“TOGETHER FOR INDUSTRY, GOVERNMENT, AND EDUCATION EXCELLENCE”



OAPEC Secretariat General took part in the 10th Middle East Refining and Petrochemicals Conference and Exhibition “Petrotech 2016” held in Manama, Bahrain from 26 to 29 September 2016 under the patronage of His Royal Highness Prince Khalifa bin Salman Al Khalifa the Prime Minister of Bahrain. The conference’s slogan was “Together for Industry, Government, and Education Excellence”.



HE Sheikh Mohammed bin Khalifa bin Ahmed Al Khalifa, Minister of Oil and Chairman of NOGA, opened the conference and welcomed the distinguished guests at the 10th Middle East Refining and Petrochemicals Conference and Exhibition. The Minister then reviewed the most significant challenges facing the petroleum industry in light of the declining oil prices. HE Al Khalifa referred to the positive outcome of the unofficial OPEC meeting held recently

in Algeria. He expected oil prices to stabilize soon at levels that serve the interests of both producers and consumers.

The Minister said that the current round's slogan **“Together for Industry, Government, and Education Excellence”** has the support of the whole sector since the region needs more cooperation, adopting best practice in the downstream industry, and working on transferring technology to achieve highest performance and growth rates.

He pointed out that in spite of the declining crude oil prices; the refining industry has introduced unprecedented expansion opportunities and growing profits. HE Al Khalifa stressed that there are a number of integrated mega projects in the region, where investment cycle takes no less than 10 years. He called for exploring other capital markets instead of relying fully on regional banks.

He underlined that investing in the private sector or partnerships between the public and private sectors were good funding options for new refining projects. The Minister then presented the most important investment projects under execution in Bahrain to develop the petroleum industry.

This was followed by an inaugural speech by Mr Bakheet Al Rashidi, Chairman of

Middle East Petrotech and President and CEO of Kuwait Petroleum International. He stressed the important role of the conference in exchanging expertise and being informed about the most recent technologies and strategies that contribute to the development of the petroleum industry. He pointed out that the conference includes 21 technical sessions, 3 of which are key sessions, while others would be held in parallel, in which more than 100 technical papers will be presented by distinguished experts. The papers discuss the following:

- Operational excellence in refining and petrochemicals
- Production units integration, reliability, and technologies
- Best practices in downstream industries
- Energy management techniques and production development
- Health, safety, and environment protection
- Smart industrial facilities and their role in improving downstream industries

A pre-conference forum was held to discuss vital roles of industry, government and education through 3 sessions by experts, including





Professor Jan Brecht, from King Abdullah University of Science and Technology KSA; Dr Jawahir Al Mudhahki, CEO, National Qualifications Authority, Bahrain, Eng Nizar Al Adsani, Chief Executive, Kuwait Petroleum Corporation, and Lord David Howell, Baron Howell of Guildford PC, former Energy Minister, UK.

Simultaneously, the 10th Middle East Refining and Petrochemicals Exhibition was inaugurated. About 90 exhibitors from GCC and Arab downstream companies took part in the event. OAPEC Secretariat General participated in the exhibition presenting a group of its latest technical, economic and

statistical studies, periodicals, and scientific journals.

The Secretariat General also presented a paper to the conference titled “OAPEC Oil Refineries’ Strategy to Produce Cleaner Fuel while Maintaining Profitability” by Dr Samir Al Qaraish. He reviewed the current national standard specifications for transportation fuel in the member countries, most important obstacles hindering fuel production with international standards, and plans and measures to overcome these obstacles. He then concluded by stating that OAPEC member countries have made a significant advancement in improving the national standard specifications in the past 10 years. However, they still need more measures to enable them to produce fuel according to the latest international standards.

The Secretariat General also participated with a poster



entitled the “Arab Refining Industry’s Performance Improvement Plans” prepared and presented by Engineer Emad Mekki. The poster included defining the operational performance level of OAPEC and non-OAPEC

Arab oil refineries, reasons of low performance levels in some countries, and solutions adopted to improve the Arab refining industry to reach international standards.

The Secretariat General was represented

by Dr Samir Al Qaraish, Director, Technical Affairs Department; Engineer Emad Mekki, Senior Refining Expert; and Mr Nasser Bakheet, Managing Editor of the monthly bulletin.

AL FALIH: 4 PILLARS FOR ENERGY TRANSITION SUCCESS



HE Eng Khalid A. Al Falih, Saudi Arabia's Energy and Industry Minister, said that future transitions and challenges in the energy sector are not easy. They vastly outgo past challenges. This calls for serious endeavours that are based on clear and ambitious plans to guarantee a secure and sustainable future.

In his speech at the World Energy Congress entitled "Energy: new horizons" held recently in Istanbul, Turkey, HE Al Falih mentioned four key factors for the success of energy transition. First: climate change, by moving from the discussion level to the implementation stage to sustain the future of energy security. Second: securing the provision of steady energy supplies. Third: boosting research and creativity efforts. Fourth: realizing policy and system harmony between countries and markets, as well as, striking a balance between society's economic and environmental goals. He clarified that the sustainable development goals adopted by the UN in 2015, encourage fighting energy poverty and inequality to guarantee prosperity for all societies. Also he added that the issue needs the collaboration of international institutions, policy makers, producers, and consumers.

HE Al Falih reiterated that KSA continued to invest in the oil industry in order to keep in pace with future increasing demand. KSA has also taken measures to boost the efficiency of energy consumption including boosting its solar energy

capacities, which it initially targets to use in generating 10 gigawatts of electrical power by 2020. These measures come under the umbrella of KSA's commitment at the COP21 held in Paris in 2015.

In his speech, the Minister also reviewed the "Saudi Arabia's Vision 2030" explaining that the vision aims at making the Saudi economy stronger, more sustainable, and more capable of global competition through adopting comprehensive economic reforms. He said that the Kingdom will activate various energy-related aspects in line with the "2030 Vision" building up on its current three economic pillars, which are; oil, gas and chemicals, and mining sectors.

HE Al Falih mentioned that KSA will increase its conventional and unconventional gas production by about 50% to reach 18 billion scf/d by 2020. Clean gas will claim more than 70% of the fuels' mix used in the Saudi energy sector; making it the highest across the world.

JOINT PRESS CONFERENCE FOR SAUDI, QATARI, AND RUSSIAN ENERGY MINISTERS



HE Eng Khalid A. Al Falih, Saudi Arabia's Energy and Industry Minister, HE Dr Mohammad bin Saleh Al Sada, Qatar's Minister of Energy and Industry, and HE Alexander Novak, Russia's Energy Minister, held a joint press conference at the GCC headquarters in Riyadh, KSA, on 23 October 2016 following the joint meeting between the GCC and Russian Energy Ministers.

In his speech, HE Al Falih stressed the solidity of the economic conditions in the GCC countries in spite of the economic challenges resulting from the sharp decline of oil prices. He explained that oil markets are currently recovering; however, they still need serious measures and sincere global efforts by major oil exporters to accelerate the market rebalance. He described the GCC-Russian talks as fruitful and sincere as there is agreement on many points.

On his part, HE Novak stressed that the joint talks were serious.

The conveners reiterated their commitment to full cooperation to evaluate the oil market. He believed that the oil market imbalance might be a sign of bigger crises in the future if it maintained the same pace. The Minister reiterated the importance of cooperation of all countries around the world and their contribution in providing urgent and effective solutions to rebalance the energy market.

Talking to the press, HE Dr Al Sada has stated that the joint meeting comes in pursuit to a series of meetings. He added that the oil market is now closest to rebalancing although at a slow pace. This situation has driven the GCC Energy Ministers and their Russian counterpart to meet in order to take serious measures on finding solutions and drawing a 'roadmap' to accelerate the rebalancing of the oil market. The initiative has also the consent of non- OPEC petroleum exporting countries.

Stressing economic solidity in GCC countries in spite of the sharp decline of oil prices

KUWAIT

CALCULATED KUWAITI MEASURES TO HANDLE OIL PRICE SLUMP



In a televised interview with Sky News Arabia on the sidelines of the International Monetary Fund (IMF) meetings held recently in Washington, USA, Kuwait's Deputy Prime Minister, Minister of Finance, and Acting Oil Minister HE Anas Al Saleh said that Kuwait has enough reserves that allow for taking calculated decisions to handle the global oil price slump. In line with its financial and economic policies for more than 60 years, Kuwait has been able to create financial surplus to feed into the future generations' fund. He pointed out that investment revenues are not part of the state's public budget income calculations.

The Minister said that the breakeven price for Kuwait's public budget is about \$66 per barrel. He added that Kuwait has the capacity to handle such prices for a limited period of time while seeking to activate reform measures through cutting expenditure and maximizing income. As for public debt, he stated that by comparing the public debt percentage to Kuwait's GDP, there would be a big demand for Kuwaiti bonds in global markets.

HE Al Saleh explained that the plans are to raise as much as KD2 billion from the domestic market and KD3 billion from global bond markets.

UAE

UAE OPENS FIRST BERTH FOR VLCC TANKERS



The UAE's Energy Minister HE Suhail Mohammed Faraj Al Mazroui stressed that inaugurating the UAE's first berth for very large crude carriers (VLCC) will contribute to establishing his country's significant status on the world's energy trade map. The terminal was opened in Fujairah by HH Sheikh Hamad bin Mohammed Al Sharqi, Supreme Council Member and Ruler of Fujairah. On this occasion the Minister said that this strategic project highlights the UAE's position as a global energy hub as well as Fujairah's strategic location.

HE Al Mazroui added that this step reflects HH

the Ruler of Fujairah's vision for the emirate's future. He explained that Fujairah's berth is a milestone in the course of comprehensive development being carried out to implement the UAE Vision 2021 and the UAE National Agenda. The project also supports the long-term vision on energy and the maximum utilization of each individual emirate's competitive capacities in this field. The Minister said that by the opening of the largest VLCC facility in the Middle East, the UAE sets yet another record as the facility can receive oil tankers with a capacity of up to 260,000 tonnes (two million barrels) 24/7.



MOVING FORWARD ENERGY STRATEGY TO 2035



In his speech titled **‘Moving Forward with an Energy Strategy to 2035’** before the EU- Egyptian Conference, Egyptian Minister of Petroleum and Mineral Resources HE Eng Tarek El Molla stated that setting up a plan for sustainable energy until 2035 in cooperation with European Union (EU) is a vital step towards a better future. The strategy aims to develop the Egyptian energy sector and overcome its challenges specially the increasing demand, which led to less commitment to energy efficiency, and affected investment flow. He stressed the importance of expanding the diversification of the energy mix which depends mainly on petroleum and gas.

The Minister added that the National Energy Strategy to 2035 aims to achieve energy security through boosting and diversifying energy efficiency and sustainability by addressing payment dues and implementing subsidies reform in a socially-responsible way, good governance and modernization of the petroleum and gas sectors, as well as, encouraging private sector investments.

HE El Molla stated that energy challenges in Egypt are huge, nevertheless; they are solvable. He stressed that Egypt has all success components, as well as, the political will and the help of its partners’ expertise. The Minister reiterated his Ministry’s commitment to creating the appropriate investment climate through financial incentives, the availability of skilled labour force, and the transparency of regulations and systems needed for successful cooperation and partnerships. He pointed out that these are considered decisive factors to meet Egyptian energy needs and ‘achieve the energy efficiency model we seek.’ The Minister also underlined Egypt’s long strategic relationship with the EU that has always proved its solidity in the face of any challenges.

Organization of Arab Petroleum Exporting Countries

OAPEC



www.oapec.org



@OAPEC1



OAPEC1

THE 145TH MEETING OF OAPEC EXECUTIVE BUREAU



OAPEC Executive Bureau held its 145th Meeting on Sunday 16 October 2016 in Kuwait. The meeting was chaired by HE Sheikh Talal Nasser Al Athbi Al Sabah, Kuwait's Representative at the Executive Bureau and Acting Undersecretary at Kuwait's Oil Ministry. Kuwait heads OAPEC's current round 2016. Their Excellencies the Executive Bureau Members represented their countries at the meeting.

The Chairman opened the meeting with a speech welcoming Their Excellencies the Executive Bureau Members and wishing them a pleasant stay in Kuwait. He also thanked OAPEC for their sincere efforts in preparing for the meeting to ensure its swift



progress.

Then, OAPEC Secretary General HE Abbas Ali Al Naqi addressed the meeting welcoming Their Excellencies the Executive Bureau Members. HE Al Naqi indicated that the meeting was allocated

for considering OAPEC's provisional budget (Secretariat General and Judiciary Tribunal) for the year 2017.

The meeting then moved on to discuss the points on the meeting agenda and took necessary actions respectively.



HE Dr. Mattar Al Neyadi
UAE



HE Ali Abdul Jabbar Al Sawad
BAHRAIN



HE Eng. Nasser Bin Ibrahim Al Fawzan
KSA



HE Mohammed Bu Emamah
ALGERIA



HE Hasan M. Habibib Al Rufaii
IRAQ



HE Eng. Abdullah Al Khattab
SYRIA



HE Sheikh Talal Naser Al Sabah
KUWAIT



HE Sheikh Mishall bin Jabor Al Thani
QATAR



HE Eng. Gamal Abdul Hameed Hijagzi
EGYPT



HE Eng. Mohammed K.Zendah
LIBYA





OAPEC AWARD FOR SCIENTIFIC RESEARCH 2016



On 25 October 2016, OAPEC Award 2016 Committee convened at the Organization's Headquarters in Kuwait. The topic of this year's award is "Re-Refining of Used Lubricating Oils and its Economic and Environmental Implications". OAPEC Secretary General, HE Abbas Ali Al Naqi, chaired the meeting which was attended by committee members:

- **Dr Samir Mahmoud Al Qaraish**, Head of the Technical Department (OAPEC);



- **Engineer Emad Nasif Mekki**, Senior Refining Expert, OAPEC;
- **Dr Yasser M. Baghdadi**, Oil Industries Expert, OAPEC;
- **Dr Sayyed A. Al Kharashi**, Petroleum Expert/ Refining and Manufacturing Advisor, Egypt
- **Dr Faisal S. Al Humaidan**, Associate Researcher, KISR, Kuwait;
- **Dr Mabrouk E. Sulayman**, Research, Development, and Supporting Services Senior Manager, TAKREER, UAE.

By the deadline date on 31 May 2016, OAPEC Secretariat General received 13 research

papers as follows: Bahrain (1), Algeria (2), Iraq (2), Egypt (7), and Pakistan (1- through ARAMCO).

A final report was prepared after collating and discussing the Committee members' remarks on the quality of the presented research works. The Committee made a decision that has been submitted to the Executive Bureau for consideration and endorsement during their meeting to be held on 8 and 9 December 2016. Winners will be announced during OAPEC Ministerial Council's meeting scheduled on 11 December 2016.



THE 16TH MEETING OF EXPERTS ON NATURAL GAS INVESTMENT



The 16th Meeting of Experts on Natural Gas Investment Cooperation Potentials in OAPEC Member Countries took place on 26 and 27 October 2016 at OAPEC Secretariat General's Headquarters in Kuwait. The meeting was attended by 14 experts from OAPEC member countries as follows: Bahrain (2), Algeria (2), KSA (2), Kuwait (8), in addition to the Secretariat General's delegation (6).

COOPERATION POTENTIALS IN OAPEC MEMBER COUNTRIES



OAPEC Secretary General HE Abbas Ali Al Naqi opened the meeting with a speech welcoming the participants and appreciating OAPEC member countries' sincere efforts in creating an appropriate atmosphere for Arab cooperation. He stressed the Secretariat General's keenness on following up Arab and international developments in the natural gas industry. This keenness stems from OAPEC's belief in natural gas as one of the most important sources for Arab economic and social development. HE Al Naqi reviewed some of the important indicators in the industry during 2015, which witnessed growing global demand for natural gas by about 1.7%.

After endorsing the meeting agenda, Director of the



Technical Affairs Department Dr Samir Al Qara'ish reviewed the Secretariat General's activities since the last meeting in addition to the most significant developments in the industry as well as the outcome of the relevant technical studies prepared by the Secretariat General. All reflected in OAPEC's monthly bulletin, the Secretary General's Annual Report, and the Statistical Report.

The participants gave presentations on the developments of the natural gas industry in their respective countries as follows:

Eng. Adnan Al Makhraq, Gas and Licensing Director, NOGA, Bahrain, presented a paper on "Developments of Natural Gas Sector in Bahrain". Mr Mijlid Miloud, Statistical and Economic Studies Director, Energy Ministry, Algeria, presented a paper that gave an overview of the gas industry in Algeria.

Sheikh Khaled Al Sabah, Naphtha/Benzene/LNG Sales Director, Global Marketing Sector, Kuwait Petroleum Corporation (KPC), presented a paper on "Importing Natural Gas in Kuwait".

The first day of the meeting was concluded by a workshop that included a paper on "LNG Floating Storage and Re-gasification Units" presented by Eng. Wa'el Hamid, Gas Industry Expert, Technical Department.

Among the most important findings of the meeting:

- Attention given by the member countries to the gas industry and increasing its percentage



in the energy mix. Executing LNG receiving terminal projects especially FSRUs in light of the increasing global demand for natural gas that exceeds domestic production in some Arab countries.

- Member countries continued to inject more investments in the natural gas sector as a result of the increasing reliance on gas as a preferred fuel for the electricity sector, and many other transformational industries, in addition to its importance as feedstock for petrochemical industries.
- The importance of boosting bilateral or multilateral cooperation among member countries to serve joint interests.
- Participants requested the Secretariat General to provide them with its publications (studies and reports) on the natural gas industry and its developments in the world markets.
- Continuing with organizing workshops as part of the meeting to tackle the most significant technical developments in the gas industry globally.

By the end of the meeting, the participants lauded the Secretariat General's efforts in organizing such meetings and its keenness on creating the appropriate atmosphere for exchanging knowledge and expertise between OAPEC natural gas specialists.





OAPEC JOINT VENTURES' 45TH COORDINATION MEETING

On 29 October 2016, OAPEC Secretariat General held the 45th Coordination Meeting for OAPEC Joint Ventures in Cairo, Egypt. The meeting was chaired by HE Abbas Ali Al Naqi, OAPEC Secretary General; and it was attended by the joint ventures' CEOs and GMs as representatives of their companies.

The meeting aimed at highlighting the activities, and the financial and operational results of the joint ventures during 2015 and the first half of 2016. Cooperation, collaboration, and challenges facing these companies were also discussed. A

recommendations and conclusions report will be then submitted to the next OAPEC Ministerial Council's meeting in December 2016.

The revision of the joint ventures' activities in 2015 and the first half of 2016 showed that despite the difficult conditions facing a number of these companies, they managed to achieve good operational and financial results. It is worth-mentioning that some joint ventures face challenges due to difficult security conditions in some of these companies' venues of operation.



OAPEC & GOIC BILATERAL RELATIONS



On 9 October 2016, OAPEC Secretary General His Excellency Abbas Ali Al Naqi received in his office at OAPEC headquarters in Kuwait HE Dr Ali Al Mulla, Assistant Secretary General for Industrial Projects

at the Gulf Organization for Industrial Consulting (GOIC). The two sides discussed bilateral relations and means for developing them. They also tackled issues of mutual interest.

www.oapecorg.org



@OAPEC1



OAPEC



OAPEC CONTINUES ENVIRONMENT & CLIMATE CHANGE EFFORTS IN 2016

15th Coordination Meeting for Arab Negotiating Group on Climate Change

Arab League Secretariat General held the 15th Coordination Meeting for the Arab Negotiation Group on Climate Change in Rabat, Morocco, from 25 to 29 September 2016. OAPEC Secretariat General took part in the meeting as a member of the Arab Negotiating Group. It presented a paper on the Paris Agreement and its implications for the petroleum industry and the Arab countries.

23rd Coordination Meeting for OAPEC Environment Experts

In line with OAPEC Action Plan 2016, the 23rd Coordination Meeting for OAPEC Environment and Climate Change Experts was held in Cairo, Egypt, on 30 and 31 October 2016.

OAPEC Secretary General HE Abbas Ali Al Naqi opened the meeting stressing the keenness of the Organization on holding such meetings with the aim to boost Arab coordination.

In his speech, he reviewed the current developments with regards to climate change. He stressed the importance of advance coordination for the upcoming COP22 to be held in November in Marrakesh. HE Al Naqi pointed out that energy projections indicated that fossil fuel will continue to be an energy source for long decades to come. The Secretariat General will

OPEC Coordination Meeting on Climate Change



OAPEC Secretariat General took part in the OPEC Coordination Meeting on Climate Change held in Vienna on 18 and 19 October 2016. Experts from a number of OPEC member countries along with representatives from OAPEC and the Moroccan Government (as Chair of the COP22) as well as the French Government (as former Chair of the COP21) participated in the event.

OAPEC representative at the event the Director of the Information and Library Department/ Member of the UNFCCC Arab Negotiating Group Mr Abdul Kareem Ayed presented the basic elements of the Paris Agreement and the status of the Arab members with regards to the



INDCs, economic diversification, response measures' impact, adaptation and mitigation measures, and the Arab countries' stances towards the progress of the negotiations.

organize an event during the conference on "Creating Value-added from CO2 Emissions", in cooperation with a number of member countries participating in the conference. He underlined the importance of the Arab countries' attendance at the Agreement meetings in order to form a unified stance in Marrakesh.

Experts and specialists from some of OAPEC member countries took part in the meeting including KSA, Kuwait, Egypt,

Algeria, and Qatar. An Arab League representative along with a GCC Secretariat General's representative also participated in the meeting. OAPEC Secretariat General presented a paper on the "UNFCCC Developments".

Most important recommendations by the meeting included:

- Stressing the responsibility of the countries enlisted in the Agreement's Annex I to steer international efforts on

reducing emissions.

- The rejection of the Arab Negotiating Group of abandoning any of the basic principles governing the international cooperation on climate change or renegotiating them.

The participants stressed the importance of attending OAPEC's event "Creating Value-added from CO2 Emissions" on the sidelines of Marrakesh COP22 co-organized with Qatar.



ORGANIZATION OF ARAB PETROLEUM EXPORTING COUNTRIES
OAPEC

The General Secretariat

Upcoming
Events

9-8
December
2016

146RD OAPEC EXECUTIVE BUREAU MEETING

11
December
2016

96TH OAPEC MINISTERIAL COUNCIL MEETING



APICORP CONTINUES TO PERFORM STRONGLY IN FIRST HALF OF 2016



The Arab Petroleum Investments Corporation (APICORP), a multilateral development bank established by the member states of the Organization of Arab Petroleum Exporting Countries (OAPEC), reported a strong performance in the first half of 2016. Total profit for the 6 months was \$55.1 million, which was only marginally lower than the first half of 2015 (\$56.5 million). This was achieved despite challenging market conditions resulting from the fall in oil prices.

As a further indication of the company's financial strength, Moody's Investors Service has recently affirmed APICORP's foreign currency issuer rating at "Aa3" with a "Stable" outlook. In maintaining its rating status, Moody's cited the increase of APICORP's callable capital in 2016 from \$500 million to \$1 billion. Moody's also noted the improvement of the Company's liquidity profile, with liquid assets significantly higher than

liabilities. Other factors underpinning APICORP's credit rating were a strong capital adequacy position, moderate balance sheet gearing, conservative provisioning for non-performing assets and the company's sources of funding becoming more diverse and enjoying longer maturity profiles.

Since the commencement of the second half of the year, APICORP has been very active, working on a broad range of financing and investment opportunities. Three transactions have already been announced: in July, the Company launched a landmark shipping fund with the National Shipping Company of Saudi Arabia (Bahri), which will invest up to \$1.5 billion in 15 Very Large Crude Carriers (VLCCs). In October, APICORP issued a \$300 million Formosa bond in the Taiwanese market; and, most recently, the Company arranged a 3-year \$100 million Murabaha Financing Facility for Egyptian General Petroleum Corporation (EGPC).

Petroleum Developments in the World Market and Member Countries*

1. Oil Market

1. Prices

1-1 Crude Oil Prices

Weekly average price of OPEC basket decreased during the first week of August 2016, to reach \$39.1/bbl, and raise thereafter, to reach its highest level of \$45.5/bbl during the fourth week, as shown in figure 1:

Figure - 1 Weekly Average Spot Price of the OPEC Basket of Crudes 2015 - 2016 (\$/bbl)



On monthly basis, OPEC Reference Basket in August 2016, averaged \$43.1/bbl, representing an increase of \$0.4/bbl or 1% comparing with previous month, and a decrease of \$2.4/bbl or 5.2% from the same month of previous year. Brief rebound in the oil market, which was triggered by speculation that oil producers might agree to curb output at September meeting in Algeria, and weak dollar, were major stimulus for the increase in oil prices during the month of August 2016.

Key Indicators

- In August 2016, **OPEC Reference Basket increased** by 1% or \$0.4/bbl from the previous month level to stand at \$43.1/bbl.
- **World oil demand** in August 2016, **increased** by 1.2% or 1.2 million b/d from the previous month level to reach 98.5 million b/d.
- **World oil supplies** in August 2016, **increased** by 0.3% or 0.31 million b/d from the previous month level to reach 98.1 million b/d.
- **US tight oil production** in August 2016, **decreased** by 2.5% to reach about 4.6 million b/d, whereas **US oil rig count increased** by 33 rig from the previous month level to stand at 333 rig.
- **US crude oil imports** in July 2016, **increased** by 3.7% from the previous month level to reach 8.3 million b/d, whereas **US product imports decreased** by 5.8% to reach about 2.3 million b/d.
- **OECD commercial inventories** in July 2016 **increased** by 32 million barrels from the previous month level to reach 3111 million barrels, and **Strategic inventories** in OECD-34, South Africa and China **increased** by 1 million barrels from the previous month level to reach 1867 million barrels.
- **The average spot price of natural gas** at the Henry Hub in August 2016 **remained stable** at the same previous month level of \$2.82/million BTU.
- **The Price of Japanese LNG imports increased** in July 2016 by \$0.3/m BTU to reach \$6.3/m BTU, the **Price of Korean LNG imports increased** by \$0.2/m BTU to reach \$5.9/m BTU, whereas **the Price of Chinese LNG imports decreased** by \$0.6/m BTU to reach \$5.4/m BTU
- **Arab LNG exports to Japan, Korea and China** were about 2.491 million tons in July 2016 (a share of 25% of total imports).

* Prepared by the Economics Department.

Table (1) and figure (2) show the change in the price of the OPEC basket versus last month and the corresponding month of last year :

	Aug. 2015	Sept.	Oct.	Nov.	Dec.	Jan. 2016	FEB.	Mar.	Apr.	May	June	July	Aug.
OPEC Basket Price	45.5	44.8	45.0	40.5	33.6	26.5	28.7	34.7	37.9	43.2	45.8	42.7	43.1
Change From previous Month	-8.7	-0.6	0.2	-4.5	-6.9	-7.1	2.2	5.9	3.2	5.4	2.6	-3.1	0.4
Change from same month of previous Year	-55.3	-51.2	-40.0	-35.1	-25.9	-17.9	-25.3	-17.8	-19.4	-19.0	-14.4	-11.5	-2.4

* Effective June 16, 2005 OPEC replaced its seven-crude basket with one comprised of eleven crudes, one from each member country (weighted according to production and exports to major markets). Effective 1 January and mid of October 2007, Angola's Girassol and Ecuadorian Oriente crudes have been incorporated to become the 12th and 13th crudes comprising the new OPEC Basket. As of Jan. 2009, the basket excludes the Indonesian crude. As of Jan. 2016, the basket price includes the Indonesian crude.

Figure - 2 Change in the Price of the OPEC Basket of Crudes, 2015-2016 (\$/bbl)

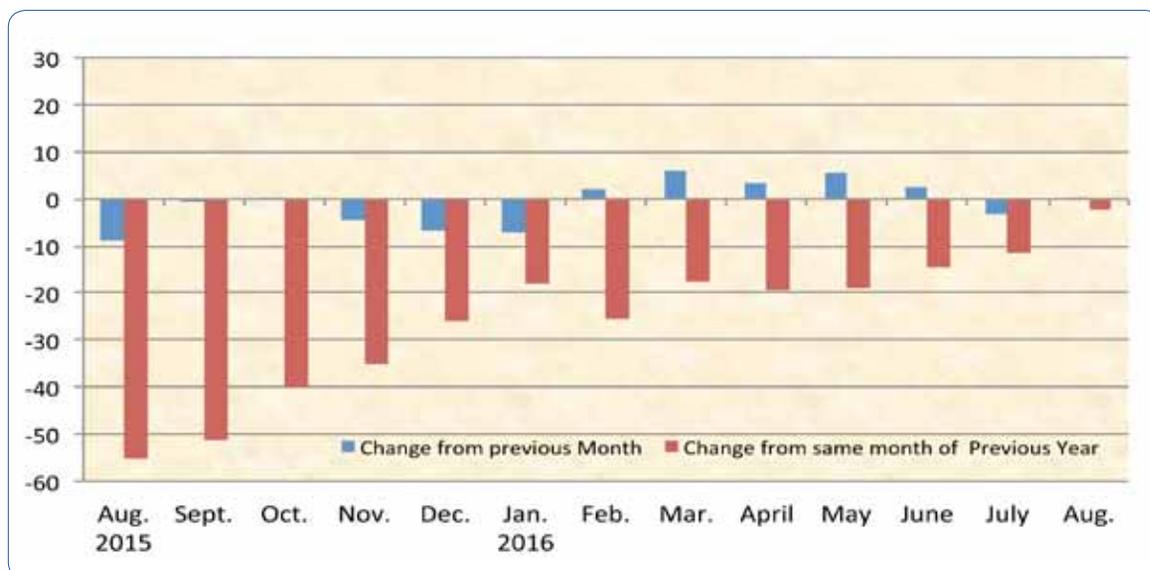


Table (3) in the annex show spot prices for OPEC basket and other crudes for the period 2014-2016.

1-2 Spot Prices of Petroleum Products

- US Gulf

In July 2016, the spot prices of premium gasoline decreased by 8.2% or \$5.7/bbl comparing with their previous month levels to reach \$63.4/bbl, spot prices of gas oil decreased by 10.8% or \$6.1/bbl to reach \$50.6/bbl, and spot prices of fuel oil decreased by 3.1% or \$1.1/bbl to reach \$34.1/bbl.

- Rotterdam

The spot prices of premium gasoline decreased in July 2016, by 11.1% or \$7.8/bbl comparing with previous month levels to reach \$62.4/bbl, spot prices of gas oil decreased by 9.4% or \$5.6/bbl to reach \$53.8/bbl, and spot prices of fuel oil decreased by 0.5% or \$0.2/bbl to reach \$37.6/bbl.

- Mediterranean

The spot prices of premium gasoline decreased in July 2016, by 12.4% or \$7.8/bbl comparing with previous month levels to reach \$54.9/bbl, spot prices of gas oil decreased by 8.9% or \$5.4/bbl to reach \$55/bbl, and spot prices of fuel oil decreased by 0.3% or \$0.1/bbl to reach \$36.9 bbl.

- Singapore

The spot prices of premium gasoline decreased in July 2016, by 12.2% or \$7.2/bbl comparing with previous month levels to reach \$51.9/bbl, spot prices of gas oil decreased by 7.1% or \$4.2/bbl to reach \$54.8/bbl, and spot prices of fuel oil decreased by 0.5% or \$0.2/bbl to reach \$38.4/bbl.

Figure (3) shows the price of Premium gasoline in all four markets from July 2015 to July 2016.

Figure - 3 Monthly Average Spot Prices of Premium Gasoline, 2015-2016 (\$/bbl)

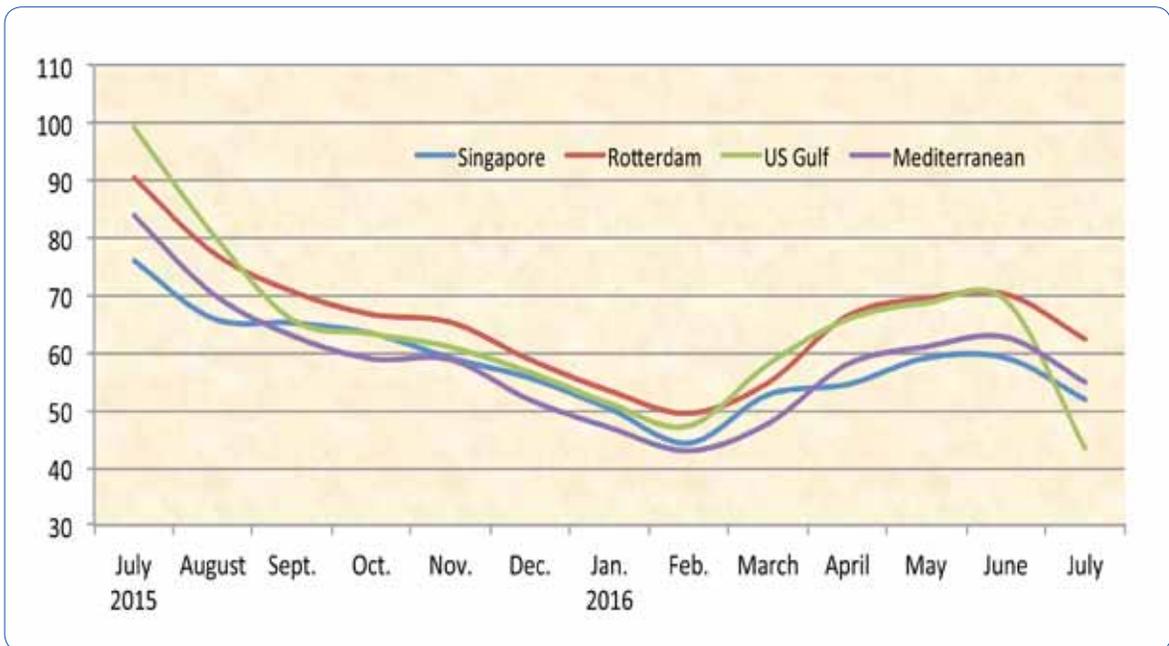


Table (4) in the annex shows the average monthly spot prices of petroleum products, 2014-2016.

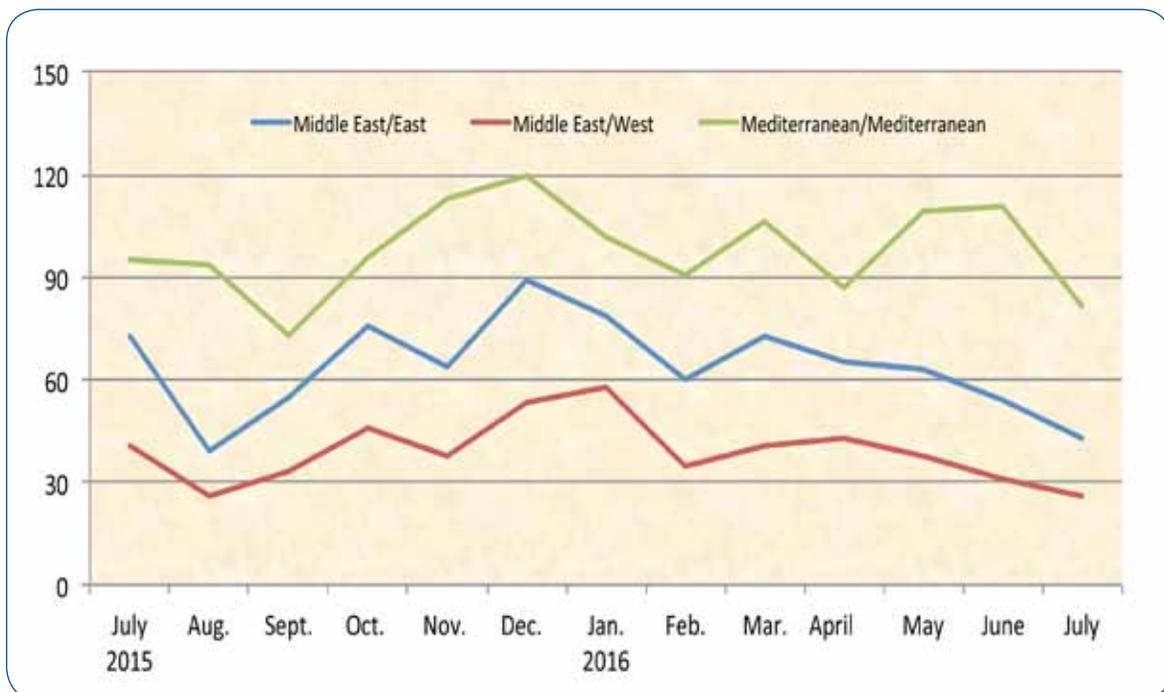
1-3 Spot Tanker Crude Freight Rates

In July 2016, Freight rates for crude oil for tanker size (230-280 thousand deadweight tons (dwt)), leaving Middle Eastern ports to the East, decreased by 11 points or 20.4% comparing with previous month to reach 43 points on the World Scale (WS*), freight rates for crude oil for tanker size (270-285 thousand deadweight tons (dwt)), leaving Middle Eastern ports to the West, decreased by 5 points or 16.1% comparing with previous month to reach 26 points on the World Scale (WS), and freight rates for inter - Mediterranean for small to medium sized tankers (80-85 thousand deadweight tons (dwt)), decreased by 29 points or 26.1% comparing with previous month to reach 82 points on the World Scale (WS).

Figure (4) shows the freight rates for crude oil to all three destinations from July 2015 to July 2016.

Figure - 4 Monthly Spot Crude Oil Tanker Freight Rates, 2015 -2016

(World Scale)*



* World Scale is a method for calculating freight prices. One point for the WS means 1% of the standard price of freight in the direction in the WS book, which is published annually by the World Scale Association. The book contains a list of prices in the form of US dollar per ton, called "World Scale 100," for all the major routes in the world.

1-4 Spot Tanker Product Freight Rates

In July 2016, monthly spot Tanker freight rates for petroleum products [for tanker size 30-35 thousand deadweight tons (dwt)], leaving Middle Eastern ports to the East, increased by 5 points, or 5.2% comparing with

previous month to reach 101 points on WS. Whereas freight rates for Petroleum Products across Mediterranean [for tanker size 30-35 thousand deadweight tons (dwt)], decreased by 12 points, or 9% to reach 121 points on WS, and freight rates for petroleum products [for tanker size 30-35 thousand deadweight tons (dwt)], leaving Mediterranean to North-West Europe decreased by 12 points, or 8.4% to reach 131 points on WS.

Figure (5) shows the freight rates for oil products to all three destinations from July 2015 to July 2016.

Figure - 5

Monthly Spot Product Tanker Freight Rates, 2015 -2016

(World Scale)

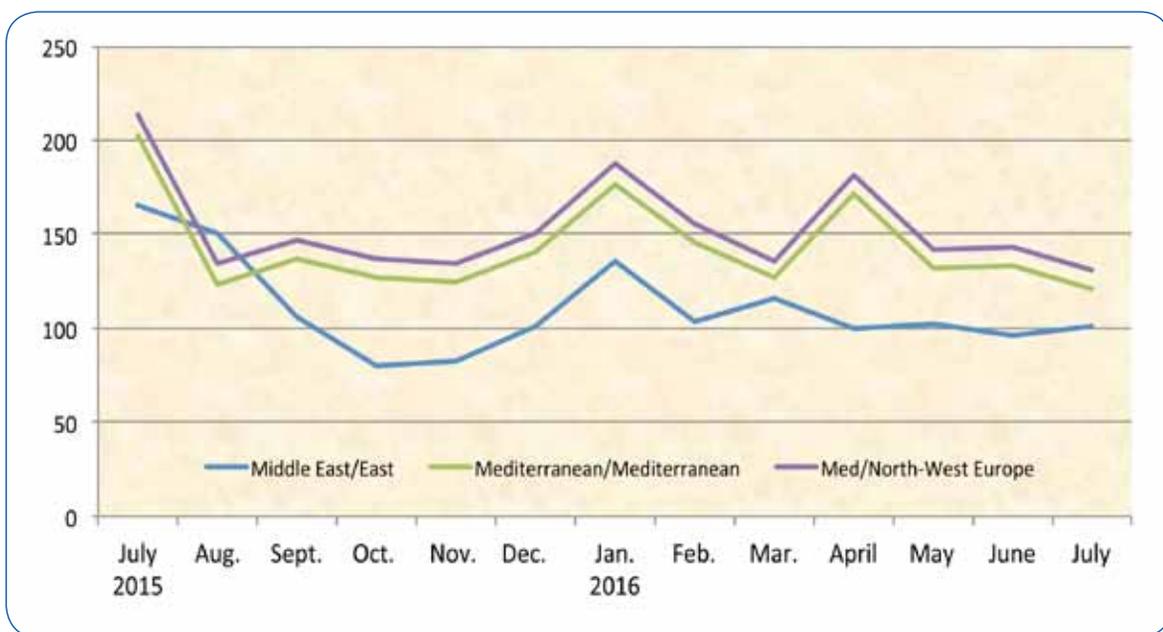


Table (5) and (6) in the annex show crude and products Tankers Freight Rates, 2014-2016.

2. Supply and Demand

Preliminary estimates in August 2016 show an increase in world oil demand by 1.2% or 1.2 million b/d, comparing with the previous month to reach 98.5 million b/d, representing an increase of 1.7 million b/d from their last year level.

Demand in OECD countries decreased by 0.4% or 0.2 million b/d comparing with their previous month level to reach 47.4 million b/d, representing an increase of 0.7 million b/d from their last year level. Whereas demand in Non-OECD countries increased by 2.8% or 1.4 million b/d comparing with their previous month level to reach 51.1 million b/d, representing an increase of 1 million b/d from their last year level.

On the supply side, preliminary estimates show that world oil supplies for August 2016 increased by 0.3% or 0.3 million b/d, comparing with the previous month to reach 98.1 million b/d, representing an increase of 1.4 million b/d from their last year level.

In August 2016, OPEC crude oil and NGLs/condensates total supplies increased by 1% or 0.4 million b/d comparing with the previous month level to reach 40.4 million b/d, a level that is 1.5 million b/d higher than last year. whereas preliminary estimates show that Non-OPEC supplies decreased by 0.2% or 0.1 million b/d comparing with the previous month level to reach 57.7 million b/d, a level that is 0.2 million b/d lower than last year.

Preliminary estimates of the supply and demand for August 2016 reveal a shortage of 0.4 million b/d, compared to a surplus of 0.5 million b/d in July 2016 and a shortage of 0.1 million b/d in August 2015, as shown in table (2) and figure (6):

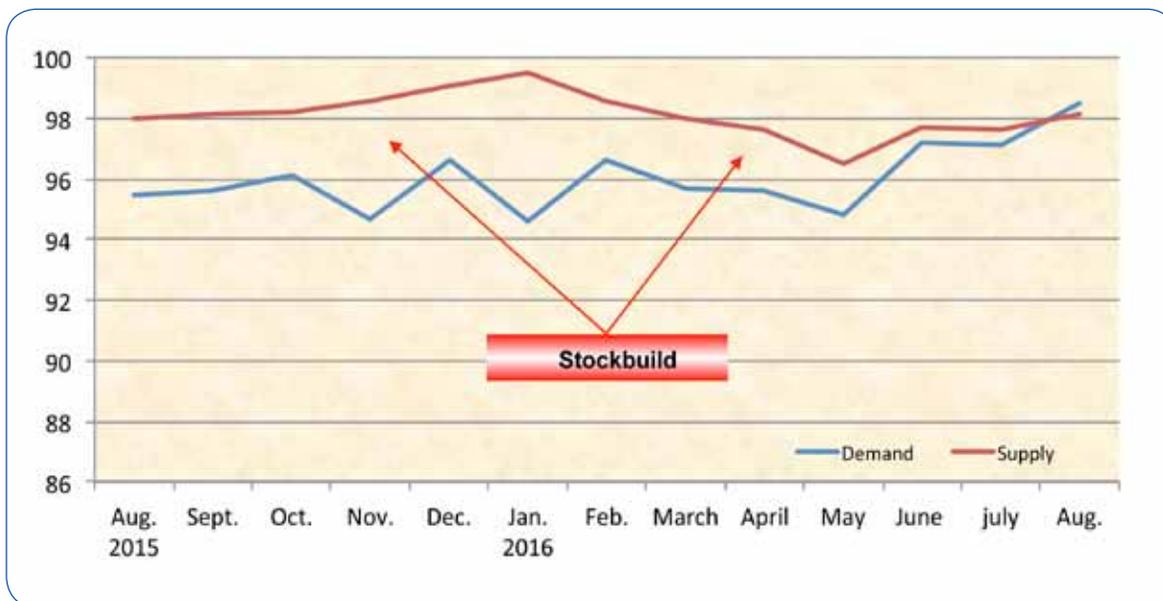
	<i>August 2016</i>	<i>July 2016</i>	<i>Change from July 2016</i>	<i>August 2015</i>	<i>Change from August 2015</i>
<i>OECD Demand</i>	47.4	47.6	-0.2	46.7	0.7
<i>Rest of the World</i>	51.1	49.7	1.4	50.1	1.0
<i>World Demand</i>	98.5	97.3	1.2	96.8	1.7
<i>OPEC Supply:</i>	<u>40.4</u>	<u>40.0</u>	<u>0.4</u>	<u>38.9</u>	<u>1.5</u>
<i>Crude Oil</i>	33.6	33.2	0.4	32.2	1.4
<i>NGL's & Cond.</i>	6.8	6.8	0.0	6.7	0.1
<i>Non-Opec Supply</i>	55.4	55.4	0.0	55.4	0.0
<i>Processing Gain</i>	2.3	2.4	-0.1	2.5	-0.2
<i>World Supply</i>	98.1	97.8	-0.1	96.7	1.4
<i>Balance</i>	-0.4	0.5		-0.1	

Source: Energy Intelligence Briefing September 8, 2016.

Tables (7) and (8) in the annex show world oil demand and supply for the period 2014-2016.

Figure - 6 World Supply and Demand

(Million b/d)



US tight oil production

In August 2016, US tight oil production decreased by 116 thousand b/d or 2.5% comparing with the previous month level to reach 4.555 million b/d, representing a decrease of 735 thousand b/d from their last year level. The US oil rig count increased by 33 rig comparing with the previous month level to reach 333 rig, a level that is 255 rig lower than last year, as shown in table (3) and figure (7):

Table 3 US* tight oil production

(Million b/d)

	August 2016	July 2016	Change from July 2016	August 2015	Change from August 2015
tight oil production	4.555	4.671	-0.116	5.290	-0.735
Oil rig count (rig)	333	300	33	588	-255

Source: EIA, Drilling Productivity Report for key tight oil and shale gas regions, August 2016.

* focusing on the seven most prolific areas, which are located in the Lower 48 states. These seven regions accounted for 92% of domestic oil production growth during 2011-2014 (Bakken, Eagle Ford, Haynesville, Marcellus, Niobrara, Permian, Utica)

Figure - 7 US tight oil production and oil rig count

(Million b/d)



3.Oil Trade

USA

In July 2016, US crude oil imports increased by 293 thousand b/d or 3.7% comparing with the previous month level to reach 8.3 million b/d, whereas US oil products imports decreased by 142 thousand b/d or 5.8% to reach about 2.3 million b/d.

On the export side, US crude oil exports increased by 94 thousand b/d or 17.3% comparing with the previous month level to reach about 638 thousand b/d, and US products exports increased by 86 thousand b/d or 2.3% to reach 3.9 million b/d. As a result, US net oil imports in July 2016 were 28 thousand b/d or nearly 0.5% lower than the previous month, averaging 6.1 million b/d.

Canada remained the main supplier of crude oil to the US with 39% of total US crude oil imports during the month, followed by Saudi Arabia with 14%, then Venezuela with 10%. OPEC Member Countries supplied 40% of total US crude oil imports.

Japan

In July 2016, Japan's crude oil imports increased by 12 thousand b/d or 0.4% comparing with the previous month to reach 3.1 million b/d. And Japan oil products imports increased by 138 thousand b/d or 33.5% comparing with the previous month to reach 550 thousand b/d.

On the export side, Japan's oil products exports increased in July 2016, by 5 thousand b/d or 0.9% comparing with the previous month, averaging 579 thousand b/d. As a result, Japan's net oil imports in July 2016 increased by 145 thousand b/d or 5% to reach 3.1 million b/d.

Saudi Arabia was the big supplier of crude oil to Japan with a share of 34% of total Japan crude oil imports, followed by UAE with 26% and Qatar with 8% of total Japan crude oil imports.

China

In July 2016, China's crude oil imports decreased by 136 thousand b/d or 2% to reach 7.3 million b/d, and China's oil products imports decreased by 12 thousand b/d or 1% to reach 1.2 million b/d.

On the export side, China's crude oil exports reached 58 thousand b/d, the highest level since April 2016. And China's oil products exports increased by 185 thousand b/d or 13.4% to reach 1.2 million b/d. As a result, China's net oil imports reached 7.2 million b/d, representing a decrease of 4.7% comparing with the previous month.

Angola was the big supplier of crude oil to China with 15% of total China's crude oil imports during the month, followed by Saudi Arabia with 13%.

Table (4) shows changes in crude and oil products net imports/(exports) in July 2016 versus the previous month:

Table 4 USA, Japan and China Crude and Product Net Imports / Exports (Million bbl/d)

	Crude Oil			oil Products		
	July 2016	June 2016	Change from June 2016	July 2016	June 2016	Change from June 2016
USA	7.650	7.451	0.199	-1.583	-1.356	-0.227
Japan	3.144	3.132	0.012	-0.029	-0.163	0.134
China	7.278	7.438	-0.161	-0.068	0.129	-0.197

Source: OPEC Monthly Oil Market Report, various issues 2016.

4. Oil Inventories

In July 2016, **OECD commercial oil inventories** increased by 32 million barrels to reach 3111 million barrels – a level that is 196 million barrels higher than a year ago. It is worth mentioning that during the month, **commercial crude inventories in OECD** increased by 2 million barrels to reach 1237 million barrels, and **commercial oil products inventories** increased by 30 million barrels to reach 1874 million barrels.

Commercial oil inventories in Americas increased by 17 million barrels to reach 1653 million barrels, of which 677 million barrels of crude and 976 million barrels of oil products. **Commercial oil Inventories in Europe** increased by 12 million barrels to reach 1017 million barrels, of

which 364 million barrels of crude and 653 million barrels of oil products. **Commercial oil inventories in Pacific** increased by 3 million barrels to reach 441 million barrels, of which 196 million barrels of crude and 245 million barrels of oil products.

In the rest of the world, commercial oil inventories decreased by 15 million barrels to reach 2959 million barrels, and the **Inventories at sea** decreased by 16 million barrels to reach 1225 million barrels.

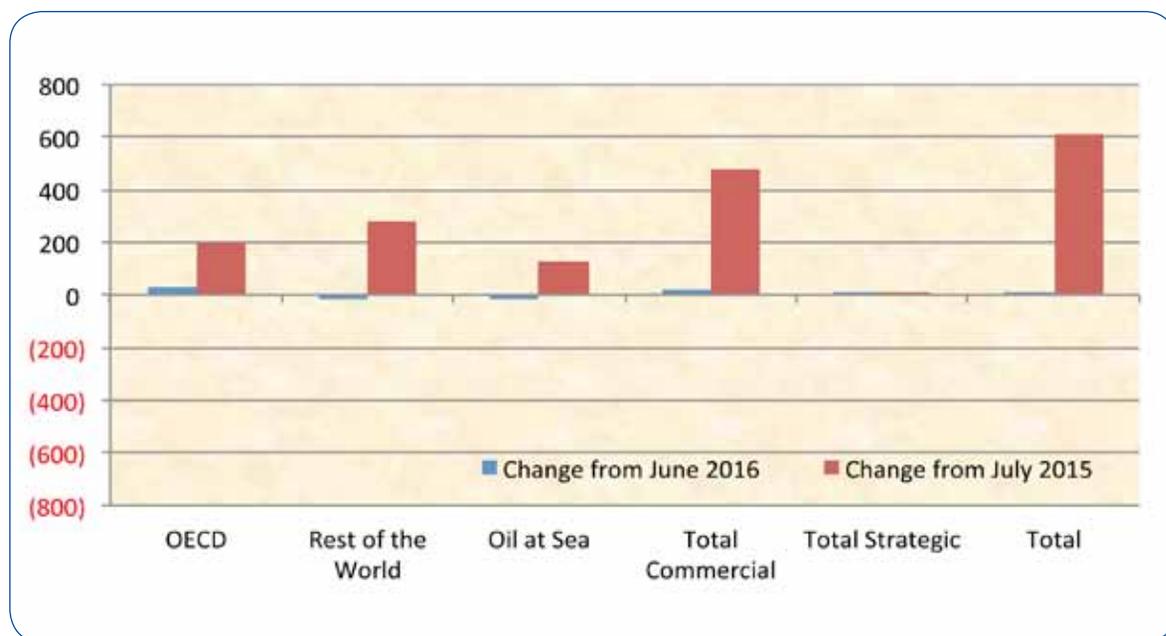
As a result, **Total Commercial oil inventories** in July 2016 increased by 17 million barrels comparing with the previous month to reach 6070 million barrels – a level that is 478 million barrels higher than a year ago.

Strategic inventories in OECD-34, South Africa and China increased by 1 million barrels to reach 1867 million barrels – a level that is 11 million barrels higher than a year ago.

Total world inventories, at the end of July 2016 were at 9162 million barrels, representing an increase of 2 million barrels comparing with the previous month, and an increase of 615 million barrels comparing with the same month a year ago.

Table (9) in the annex and figure (8) show the changes in global inventories prevailing at the end of July 2016.

Figure - 8 Changes in Global Inventories at the End of July 2016 (Million bbl)



II. The Natural Gas Market

1- Spot and Future Prices of Natural Gas in US market

The monthly average of spot natural gas price at the Henry Hub in August 2016 remained stable at the same previous month level of \$2.82/ million BTU.

The comparison, shown in [table \(5\)](#), between natural gas prices and the WTI crude reveal differential of \$4.9/ million BTU in favor of WTI crude.

Table 5 Henry Hub Natural Gas, WTI Crude Average, and Low Sulfur Fuel Oil Spot Prices, 2015-2016 (Million BTU¹)

	Aug. 2015	Sept.	Oct.	Nov.	Dec.	Jan. 2016	Feb.	Mar.	Apr. 2016	May	June	July	Aug.
Natural Gas ⁽²⁾	2.8	2.7	2.3	2.1	1.9	2.3	2.0	1.7	1.9	1.9	2.6	2.8	2.8
WTI Crude ⁽³⁾	7.4	7.8	8.0	7.4	6.4	5.4	5.2	6.5	7.1	8.1	8.4	7.7	7.7

1. British Thermal Unit.

2. Henry Hub spot price.

3. WTI – West Texas Intermediate Crude oil price, in dollars per barrel, is converted to dollar per million BTU using a conversion factor of 5.80 million BTU/bbl.

Source: <http://www.eia.gov/dnav/ng/hist/rngwhhdM.htm>

2- LNG Markets in North East Asia

The following paragraphs review the developments in LNG Markets in North East Asia, concerning prices and Japanese, Chinese and South Korean imports of LNG and their sources, and Spot LNG Exporters Netbacks.

2.1. LNG Prices

In July 2016, the price of Japanese LNG imports increased by \$0.3/million BTU comparing with the previous month to reach \$6.3/ million BTU, the price of Korean LNG imports increased by \$0.2/million BTU comparing with the previous month to reach \$5.9/ million BTU, whereas the price of Chinese LNG imports decreased by \$0.6/million BTU comparing with the previous month to reach \$5.4/ million BTU.

2.2. LNG Imports

Total Japanese, Korean and Chinese LNG imports from various sources, decreased by 7.8% or 841 thousand tons from the previous month level to reach 9.982 million tons.

[Table \(6\)](#) shows the prices and quantities of LNG imported by Japan, South Korea, and China for the period 2014-2016.

Table 6 LNG Prices and Imports: Korea, Japan, and China 2014-2016

	Imports (thousand tons)				Average Import Price (\$/million BTU)		
	Japan	Korea	China	Total	Japan	Korea	China
2014	88505	37402	19891	145798	16.1	16.3	11.7
2015	84850	33141	19606	137597	10.2	10.6	8.6
January 2015	8434	4122	2121	14677	15.1	14.3	11.1
February	7730	3098	1661	12489	13.3	13.4	10.3
March	8137	3048	1346	12531	12.2	13.1	10.1
April	6598	2839	1545	10982	10.2	11.7	8.1
May	5755	2364	1123	9242	8.7	9.5	8.8
June	6633	1777	1724	10134	8.6	9.1	9.5
July	6953	2271	1922	11146	8.9	8.8	7.5
August	7062	1998	1348	10408	9.2	9.2	7.1
September	6853	2450	1295	10598	9.6	9.6	7.4
October	6057	2915	1602	10574	9.4	9.7	8.0
November	6694	2706	1818	11218	8.9	9.5	7.9
December	7944	3553	2101	13598	8.5	8.7	7.6
January 2016	7245	3338	2464	13047	7.9	8.0	7.3
February	7370	2998	1801	12169	8.0	7.8	6.9
March	7959	3282	1702	12943	7.2	7.3	6.6
April	6382	2177	1861	10420	6.4	6.6	6.6
May	5455	2218	1425	9098	5.9	6.0	6.3
June	6193	2484	2146	10823	6.0	5.7	6.0
July	6460	1918	1604	9982	6.3	5.9	5.4

Source: World Gas Intelligence various issues.

2.3. Sources of LNG imports

Australia was the big supplier of LNG to Japan, Korea and China with 3.143 million tons or 31.5% of total Japan, Korea and China LNG imports in July 2016, followed by Qatar with 16.3% and Malaysia with 15.2%.

The Arab countries LNG exports to Japan, Korea and China totaled 2.491 million tons - a share 25% of total Japanese, Korean and Chinese LNG Imports during the same month.

2.4. LNG Exporter Netbacks

With respect to the Netbacks at North East Asia markets, Russia ranked first with \$5.06/million BTU at the end of July 2016, followed by Indonesia with \$4.98/million BTU then Australia with \$4.94/million BTU. And LNG Qatar's netback reached \$4.81/million BTU, and LNG Algeria's netback reached \$4.52/million BTU.

Table (7) shows LNG exporter main countries to Japan, South Korea, and China and their netbacks at the end of July 2016.

Table 7 LNG Exporter Main Countries To Japan, Korea and China, And Their Netbacks At The End Of July 2016

	Imports (thousand tons)				Spot LNG Netbacks at NE Asia Markets (\$/million BTU)
	Japan	Korea	China	Total	
Total Imports, of which:	6460	1918	1604	9982	
Australia	1996	111	1036	3143	4.94
Qatar	716	822	91	1629	4.81
Malaysia	1124	179	212	1515	4.93
Indonesia	840	307	124	1271	4.98
Russia	340	65	-	405	5.06

* Export Revenues minus transportation costs, and royalty fees.
Source: World Gas Intelligence various issues.



Tables Annex

