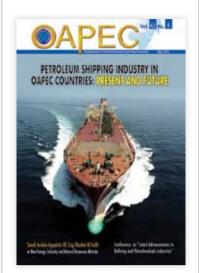
May 2016

PETROLEUM SHIPPING INDUSTRY IN OAPEC COUNTRIES: PRESENT AND FUTURE



Saudi Arabia Appoints HE Eng Khaled Al Falih as New Energy, Industry and Natural Resources Minister

Conference on "Latest Advancements in Refining and Petrochemicals Industries"



The Cover

The petroleum shipping industry attracts great attention in terms of Arab and international economies due to its vital role in the movement of oil, petroleum products, and natural gas supplies from exporting ports to importing around the ports globe. More than two thirds of the world's petroleum supplies are transported through giant and large tankers, which start their journeys from exporting ports in producing countries to importing countries' ports.



ORGANIZATION OF ARAB PETROLEUM EXPORTING COUNTRIES (OAPEC)

Rounds on Oil and

in Egypt in 2016

Natural Gas Exploration



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.





CONFERENCE ON "LATEST ADVANCEMENTS IN REFINING AND PETROCHEMICALS INDUSTRIES"

The "Latest Advancements in the Relating and Petrochemical Industries Conference" was had in Namuna, Hallenin, Selfering 17-19 April 2016 under the partners of the Advancements Nation of Barbarians, 18-16, in the advancement National Advancement of Hallenin, 18-16, in the Advancement of Ha

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Conference on "Latest Advancements in Refining and Petrochemicals "Industries

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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.

EDITORIAL

PETROLEUM SHIPPING INDUSTRY IN OAPEC COUNTRIES: PRESENT AND FUTURE

The petroleum shipping industry attracts great attention in terms of Arab and international economies due to its vital role in the movement of oil, petroleum products, and natural gas supplies from exporting ports to importing ports around the globe. More than two thirds of the world's petroleum supplies are transported through giant and large tankers, which start their journeys from exporting ports in producing countries to importing countries' ports.

The industry's importance increases in OAPEC member countries due to their leading status in the world's petroleum industry on the one hand, and the important geographical position of some member countries overlooking some strategic international waterways on the other hand. Recorded data show that oil tankers have claimed more than half of the total trade fleet in the Arab countries in 2015 with tankers whose total load reached 8431.5 thousand tons; most of which from OAPEC members.

Many member countries have taken the initiative since long decades to establish national petroleum and gas tankers and navigational services companies, and build ports according to approved international standards. Also, within the framework of the joint Arab action, they established the Arab Maritime Petroleum Transport Company (AMPTC) in 1972; its headquarters in Kuwait. It is the first of all OAPEC joint ventures. Its purpose is to handle all operations related to the marine transportation of hydrocarbons. The company's fleet currently consists of crude oil, clean petroleum products, and LNG tankers. In the same vein, the Arab Shipbuilding and Repair Yard Company (ASRY) was established in 1973; its headquarters in Bahrain. The objectives of ASRY cover the building, repair and maintenance of all types of ships including tankers and other marine transport vessels that are related to the shipping of hydrocarbons. This reinforces the strategic dimension of OAPEC joint ventures and the special attention given to the shipping sector.

The petroleum shipping sector is directly affected by the world oil market developments. The current fall of oil prices contributed to a drop in the profits of the Arab petroleum shipping sector. It caused fluctuation of crude oil freight index from the Arabian Gulf towards the East via giant tankers of 230-280 thousand DWT of load.

Navigational data recorded in 2015 indicate that some oil traders have chartered tankers to store crude oil due to the abundant oil supplies and low prices hoping to make profits once oil prices recover in a repetition of the 2009 scenario. United Nations Conference on Trade and Development (UNCTAD)'s annual report points out that oil freights have dropped last year due to various factors including technological developments in the tankers industry leading to more fuel consumption efficiency in ships. The sector has been influenced by economic, climate, security, and other factors too. It is also worth to mention at this point the risks faced by OAPEC oil tankers due to piracy in the Horn of Africa, which led to financial losses.

The Arab shipping sector faces many challenges, most significant of which are the economic challenges. The sector suffers from weak contribution of the Arab private sector due to low participation of banks in funding

maritime services and shipbuilding projects, the discrepancy between operational fees and wages and the level of the provided navigational services. This is in addition to legislative challenges as a result of administrative and customs restrictions, as well as the differences between administrative systems from one country to another.

Current shipping developments call for more coordination and cooperation between Arab countries in developing Arab ports, and unifying economic and legislative procedures, in order to face mutual challenges and make more progress in this vital sector of promising cooperation between Arab countries, and boost the Arab countries' presence at international and regional organizations related to the shipping industry so that they can clarify their stances and defend their interests, as well as, promote cooperation with the international community. This in itself has been a vision and a goal called for by many Arab economic conferences and summits.

While observing the developments in the petroleum shipping sector, OAPEC Secretariat General appreciates the efforts of its member countries and joint ventures in this regard, and hopes that the current economic conditions of the world's petroleum market, which affected all petroleum sectors including transportation and shipping, will improve. It also hopes that the private sector's share in the shipping sector will increase in a way contributing to the mitigation of economic and administrative burdens at governmental departments. The organization also hopes to make use of international expertise in the shipping sector to improve it.





SAUDI ARABIA'S VISION 2030

ROADMAP TO FACE FUTURE ECONOMIC CHALLENGES

STRESSING ARABIC AND ISLAMIC DEPTH



Saudi Arabia announced its future strategic vision "Saudi Arabia's Vision 2030" recently. It includes economic, industrial, administrative, social, cultural, and security dimensions. It acts as a roadmap to handle future challenges according to a scientific, economic, and objective approach. The three pillars of the Vision2030 are:

First: stressing the Arabic and Islamic depth.

Second: stressing the importance of maximizing the use of the

kingdom's investment potentials

Third: transforming the kingdom's strategic and geographic position between important global waterways into a global hub connecting three continents, Asia, Europe and Africa.

Among the main features of the vision is transforming Aramco into an industrial giant and transferring its ownership to the Public Investment Fund, which will become the largest sovereign wealth fund in the world. The efficiency of the fund's management will be increased to improve its return on investment, with the aim of diversifying the government resources and economy. The vision encourages the growth of Saudi companies to be a major player in the world markets. It also encourages enterprises small works on mitigating long bureaucratic measures, as well as, expands on e-governance. The vision also plans to enter longpartnerships neighbouring and friendly countries for knowledge transfer and trade.

On energy, the vision stated that although KSA has strong potentials for

solar and wind power, and its domestic energy consumption will increase three fold by 2030, KSA still lacks a competitive renewableenergysectoruntil now. Therefore, the vision targets generating 9.5 gig watts of renewable energy as a first step. It also aims at localizing a significant portion of the renewable energy value chain in the Saudi economy, including research and development, and manufacturing, among others. KSA will seek to put in place a legal and regulatory framework that allows the private sector to buy and invest in the renewable energy sector, while providing the required funding through public and private sectors' industrial partnerships.

The vision's energy goals have been summed up as follows:

- Moving from KSA's current position as the 19th largest economy in the world into the top 15
- Increasing the localization of oil and gas sectors from 40% to 75%
- Increasing the Public Investment Fund's assets from SAR 600 billion to over 7 trillion

Governmental subsidies programme's efficiency

ESTABLISHMENT OF THE
BIGGEST SOVEREIGN
FUND IN THE WORLD
PRIVATIZING SOME
OF THE STATE-OWNED
ASSETS
ENCOURAGING
PUBLIC AND PRIVATE
SECTORS TO INVEST IN
RENEWABLE ENERGIES

will increased be via maximizing its use and redirecting it to those who need it whether really citizens economic or sectors. Subsidies without clear criteria are one of the main reasons behind limiting the competitiveness energy of the sector. Using market prices as a basis will encourage basic companies services' production increase and competitiveness, and will diversify the kingdom's energy mix on the long run. Therefore, clear subsidies' criteria will be set based on the maturity of the economic sectors, their ability to compete locally and internationally, and their actual need for subsidies without negatively affecting promising strategic and sectors.





SAUDI ARABIA APPOINTS HE ENG KHALED AL FALIH AS NEW ENERGY, INDUSTRY AND NATURAL RESOURCES MINISTER

Saudi Arabia's Royal Diwan has announced, in a statement issued on 7 May 2016, a number of royal decrees to restructure some ministries, apparatuses, and public authorities. A number of ministers and officials have been replaced. The Ministry of Petroleum and Mineral Resources has been renamed as the Ministry of Energy, Industry and Natural Resources, which will be specialized in energy and relevant issues, as well as, electricity and industrial activities. The Ministry will also handle the national programme on developing industrial complexes.

The royal decrees have also appointed HE Eng Khaled Al Falih, previously health minister, as the new Energy, Industry and Natural Resources Minister. HE Eng Ali Al Naimi has been relieved of his duties as Petroleum and Mineral Resources Minister and has been appointed as Advisor at the Royal Diwan with a ministerial status.

The statement pointed out that the restructuring of some ministries, apparatuses, and public authorities stemmed from the concept of continuous development, and in line with the KSA's 2030 vision to contribute to improving governmental bodies and the level of provided services to citizens and expats. This all feeds into achieving a better future and sustainable development. The statement clarified that these amendments aim at defining responsibilities and facilitating measures to provide better services in line with the country's policies.

Minister Khaled Al Falih is also Chairman of the state oil company Aramco. He is one of the remarkable oil figures both regionally and internationally.

On his part, HE Abbas Ali Al Naqi, OAPEC Secretary General, has sent a cable of congratulations, also on behalf of OAPEC staff, to HE Al Falih, on the occasion of his new appointment wishing him all success in his new post while looking forward to continuing Saudi Arabia's great support for OAPEC activities.



HE ENG TAREK AL MULLA

3 INTERNATIONAL BID ROUNDS ON OIL AND NATURAL GAS EXPLORATION IN EGYPT IN 2016

Egypt's Petroleum and Mineral Resources Minister HE Eng Tarek Al Mulla announced that the Egyptian petroleum sector will offer 3 new international bid rounds in 2016 which include 27 onshore and offshore blocks across Egypt. They will be launched by the end of April 2016 in 11 areas, 6 of which in the Western Desert and 5 in the Gulf of Suez.

HE Al Mulla added in a speech at the opening of the "8th Conference for the Mediterranean Countries", held recently in Egypt, under the slogan "The First Step to Explore Gas & Petroleum Treasures in the Mediterranean". that his country is well-qualified to play an effective role in energy on a regional level due to having all potentials to be a strategic hub for the natural gas trade, in cooperation with international petroleum companies, since gas has become an important factor to face current and future energy challenges.

The Minister numbered the challenges facing the Egyptian petroleum sector including amending the energy subsidies programme, aging infrastructure and refineries, and accumulating debts of foreign partners. He explained that in the past two years, the Egyptian government has taken many measures to overcome these challenges and



worked on increasing search, exploration, and production to secure sustainable energy supplies for domestic and future needs.

The Minister said that the new gas discoveries in the Mediterranean, crowned by Dhahr Gas Field discovery in collaboration with Italy's Eni, represent success stories of the Egyptian petroleum sector. These new discoveries contribute to boosting regional cooperation in energy to secure safe energy

supplies at balanced prices. They also help boosting energy efficiency in the Mediterranean.

He stressed the great importance of using latest technologies in resolving production problems and working on nationalizing these technologies through encouraging scientific research via concluding agreements protocols and with Egyptian universities and research centres to launch applied research on the petroleum and natural gas industry.

UAE



JOINT PETROLEUM PROJECTS BETWEEN

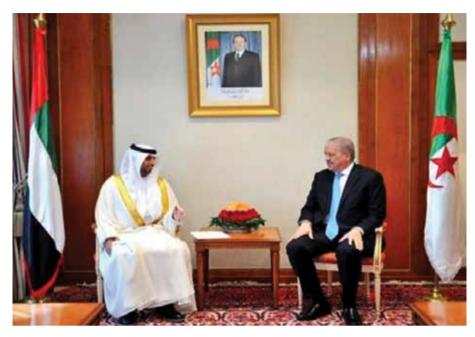
UAE &ALGERIA

Within the framework of continued bilateral cooperation coordination between and OAPEC member countries, the UAE's Energy Minister HE Eng Suhail Al Mazrouei went to Algeria on an official visit in April 2016. He met Algeria's Prime Minister HE AbdulMalik Sallal, to whom he conveyed the greetings of the UAE's political leadership. Energy cooperation between the two countries has been discussed during the meeting.

A press statement issued by the Algerian Presidency stated that the two sides agreed to continue boosting cooperation in the field of energy by executing joint petrochemicals projects. The statement said that discussions also tackled current energy market developments. It was agreed to continue consultations between the two countries to help restore the oil market balance to an acceptable level.

On his part, HE Al Mazrouei stressed during the meeting that his country was keen to develop cooperation between the two countries in all aspects in order to achieve mutual benefits. He wished Algeria's government and people more progress and prosperity. The Minister pointed out that the UAE has acquired recently the Spanish CEPSA Complex in Algeria.

HE Al Mazrouei also met with Algeria's Energy Minister HE Dr Saleh Khebri and a number of senior Algerian officials. Bilateral relations were discussed and views exchanged on topics of mutual interest. Exchanging expertise in the fields of energy, oil and



DEVELOPING
COOPERATION
BETWEEN THE TWO
COUNTRIES IN ALL
ASPECTS TO SERVE
MUTUAL INTERESTS

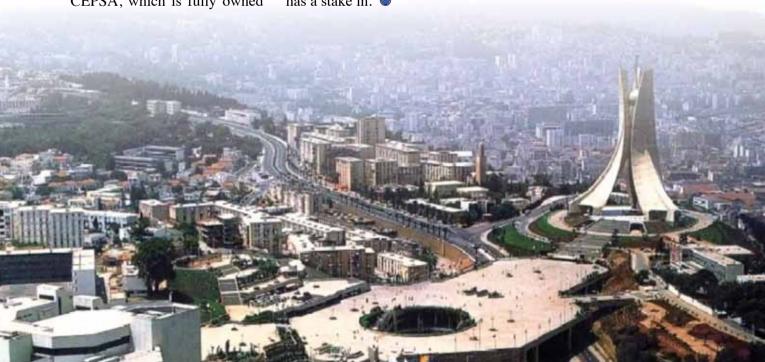
CONTINUED
CONSULTATIONS
TO CONTRIBUTE
TO RESTORING
BALANCE TO THE
OIL MARKET TO
ACCEPTABLE LEVELS

natural gas and renewable energy was also tackled in a way to serve the interests of the two countries.

HE Khebri hailed the positive outcome of this meeting clarifying that there are many joint projects under study in the field of fuels. He hoped to reach tangible results very soon.

It is worth mentioning that CEPSA, which is fully owned

by IPIC, has been operation for 29 years in Algeria. It is one of the largest international companies operating in the field of oil in Algeria. The company operates also in the vehicle industry, with a production capacity of 25,000 vehicles of the German Mercedes Benz brand. It is considered the largest car-making project in the Arab world that the UAE has a stake in.

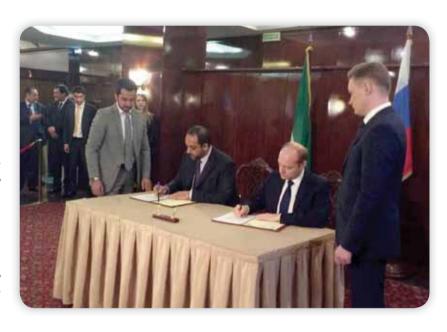




5TH MEETING OF JOINT KUWAITI-RUSSIAN GOVERNMENTAL COMMITTEE

PROMISING ENERGY COOPERATION OPPORTUNITIES BETWEEN THE TWO COUNTRIES

Kuwait's Minister of State for Cabinet Affairs HE Sheikh Mohammad Abdullah Al Mubarak Al Sabah headed the Kuwaiti delegation to the fifth meeting of the joint **Kuwaiti-Russian** governmental committee held on 20-22 April 2016. HE Alexander Galushka. **Minister for the Development** of Russian Far East, headed the Russian side. The meeting aimed at reviewing economic cooperation between the two countries especially in energy, oil, and gas.



The meeting began with subcommittees meetings, including: oil, gas, and energy; investment and financial cooperation; and scientific and technological cooperation. The ministerial session was then held on 22 April 2016. At the end of the meeting, the two sides signed the final protocol of the 5th meeting of the Kuwaiti-Russian joint governmental committee for commercial, economic, scientific, and technological cooperation, as well as, a scientific cooperation agreement between Kuwait Institute for Scientific Research (KISR) and the Russian Topchiev Institute of Petrochemical Synthesis.

HE Al Abdullah said in a speech during the ministerial meeting that global oil markets continued fluctuating due to many factors represented in oversupply, world economic slowdown, unconventional oils boom, and an unprecedented record levels of commercial inventories at consuming countries. He clarified that these factors led to a sharp drop in oil prices and considerable drop of oil countries' revenues. That also led to a drop in the world's companies' profits, postponement or cancellation of many petroleum projects, and job cuttings.

HE Sheikh Mohammed called upon the Russian side to cooperate in oil and LNG, and build strategic partnerships between national companies in the two countries to meet domestic and international demands.

The Minister pointed out that

scientific research cooperation in energy will contribute to developing oil reserves, production, and refining skills. He stressed that the cooperation between the two countries is vital for complementing the role of oil as a drive of the global economy and as a main source of energy.

Russian head The of delegation referred the promising cooperation prospects in energy, oil, gas, and electricity. He clarified that many Russian countries would like to operate in the Kuwaiti market, including those specialized in infrastructure. He said that Gazprom has actually started its operations in Kuwait. The Russian official also praised the cooperation between Kuwait Investment Authority and Russia's Direct Investments Fund.

KNPC SIGNS KD1.2 BN PROJECT LOAN

Kuwait National Petroleum Company (KNPC), a KPC affiliate, has signed recently the first tranche of financing for its Clean Fuels Project. The tranche, provided by local banks and lasting for 10 years, is worth KD1.2 billion and led by National Bank of Kuwait and Kuwait Finance House.

It is the largest loan in the history of Kuwait. Interests will be determined between the banks according to their individual systems.

The project aims at producing high-quality petroleum products according to international environmental standards in response to the global markets demand.

The signing represents a new mechanism for funding mega petroleum projects different than the old direct project funding by KPC. The new two tranches policy comprises about 70 per cent of the total financing required for the project from external lenders, while the



remaining 30 per cent will be financed from KNPC's own funds.

The loan has a maturity period of 10 years. Eleven banks, including five Islamic lenders, took part in the first tranche.

The first tranche would be a multiple-tranche funding administered by Watani Brokerage for KNPC. The agreement has been divided into two tranches; the first in Kuwaiti dinar, while the second will be in US dollar and worth \$6 billion. The details of the second tranche will be announced shortly. It will be signed with a group of international banks from Japan, Korea, Italy, and the UK.

KUWAIT & QATAR INK LNG AGREEMENT

Kuwait Petroleum Corporation (KPC) and Qatar Liquefied Gas Company Limited (2) (Qatargas 2) have executed an agreement to supply half a million tonnes of Liquefied Natural Gas (LNG) to Kuwait over the next four years, starting from March 2016.

According to the agreement, the LNG will be

sourced from Qatargas 2, a joint venture between Qatar Petroleum, ExxonMobil and Total which started production in 2009, and will be delivered onboard Q-Flex LNG Vessels, chartered by Qatargas, to KPC's Mina Al Ahmadi LNG receiving terminal in southern Kuwait.

Kuwait's LNG delivery season typically would start

from March and extend to November of each year, to meet Kuwait's growing demand for power during peak summer months. Qatargas has been supplying Kuwait with the majority of its LNG requirements for the past five years through both direct sales to KPC and through third parties who have made deals with both Qatargas and KPC.



MINISTERIAL MEETING OF OIL PRODUCING COUNTRIES IN DOHA

FURTHER CONSULTATIONS TO FOLLOW



Qatar's Energy and Industry Minister HE Dr Mohammed bin Saleh Al Sada said that the participants of Doha ministerial meeting on 17 April 2016 need to conduct further consultations to adopt a unified mechanism towards oil markets.

In a speech during a press conference held after ministers of oil-producing countries met in Doha, HE the Minister of Energy and Industry said that 18 countries met to discuss how to move ahead with what was previously proposed in a meeting held in February 2016 in Doha, participants reached an agreement to freeze oil production at January 2016 levels. Al Sada said, many scenarios were put forward in order to reach an agreement for a production freeze, but "we understand the desire for further consultations expressed by the participants of the meeting who have their own views." He said, the participants agreed that the current situation of oil markets is better than it was in February, and that the oil market have seen an improvement that contributed to the recovery of oil prices after falling during the previous period, a matter which raised fears of a decline in oil production due to falling prices.

He pointed out that oil prices are on the right track now, and that more time is needed to track how long it will take until the price correction is complete.

On the possibilities of convening another meeting on

the matter. HE the Minister said that it will be decided after the talks and discussions between the participating countries and will also be depending on the oil market movement. HE stressed that communication channels between the participating countries remain open, considering the meeting, which was held in Doha in February, to have been a good platform for opening communication channels between these countries and to remove any misunderstanding between them concerning the mechanism of freezing production.

Under the patronage of His Royal Highness Prince Khalifa bin Salman Al Khalifa Prime Minister of the Kingdom of Bahrain BAHRAIN INTERNATIONAL EXHIBITION AND CONVENTION CENTRE



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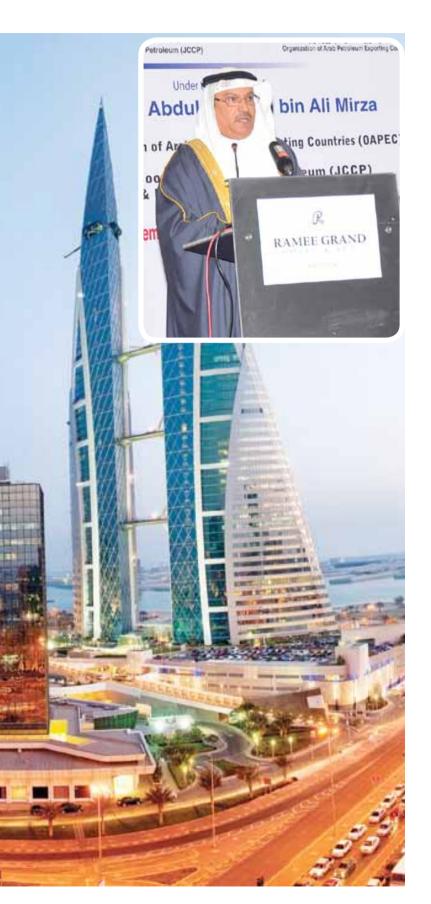




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CONFERENCE ON "LATEST ADVANCEMENTS IN REFINING AND PETROCHEMICALS INDUSTRIES"







The conference aims at creating opportunities to exchange expertise among participants in applying the latest advanced technologies and optimisation of solutions in the downstream industry to improve its operational and economic performances.

Delegated by Minister of Energy His Excellency Dr. Abdul Hussain bin Ali Mirza, Dr Ahmed Ali Al Sharyan, the Secretary General of the National Oil and Gas Authority (NOGA) opened the conference.

Dr Al Sharyan made a speech on the occasion, where he welcomed the participants to Bahrain. He stressed the importance of holding the conference in light of the exceptional circumstances in the refining and petrochemicals industry due to the falling prices of petrochemicals in the region. He said the conference provided an excellent opportunity to shed light on the experiences of a number of companies operating in the region and their adaptation to low prices through cutting costs and increasing production efficiency.

Then, **HE Kiyoshi Asako**, Japan's Ambassador to Bahrain, spoke praising Japan's strong ties with the Arab oil exporting countries and stressed the importance of cooperation to develop the petroleum industry to enable them achieve their goals.

On his part, **Mr Eiji Hiraoka**, Senior Executive Director of Japan Cooperation Centre Petroleum (JCCP), made a speech in which he referred to the fruitful cooperation between the Arab oil exporting countries and JCCP. He stressed the necessity of continued cooperation to serve the interests of the two sides

HE Abbas Ali Al Naqi, Secretary General of the Organization of Arab Petroleum Exporting Countries (OAPEC), gave a speech in which he welcomed the participants and referred to the



most important developments in the refining and petrochemicals OAPEC industries in member countries, and their role in boosting the petroleum and petrochemicals production in line with the latest international criteria. HE Al Naqi also talked about the member countries' keenness on cooperating with international oil companies that have advanced technology through ioint ventures and coordination in scientific research and development activities.

Experts in the oil refining industries from OAPEC member countries, JCCP, and some Japanese and Arab companies, as well as, Arab and international research centres participated in the conference.

The conference included 5 technical sessions on the first and second days. 22 technical papers were presented covering the following topics:

- An overall review of the current state and future prospects of the refining and petrochemicals industries
- Challenges facing the refining and petrochemicals industries
- Refining and petrochemicals industries' technological developments
- Conversion technology for maximizing refineries' production of light petroleum products of high value, and boosting production of cleaner petroleum fuel
- Modern trends in the integration between refining and petrochemical industries.

- Improving performance and profitability programmes, ways to rationalize and improve energy efficiency, corrosion management, improved maintenance operations, strategies to reduce costs, and management of health, safety and environment, and dealing with other crude oils and feedstock challenges.
- Role of research and development to improve performance.
- Successful case studies and new projects.

The Secretariat General presented 3 technical papers tackling the conference main themes as follows:

- A paper at the opening session presented by Dr Samir Al Qaraish, Director of the Technical Affairs Department, OAPEC. It covered the conference goals, importance, main themes of the technical sessions and the challenges facing the refining and petrochemicals industry worldwide.
- · A paper entitled "Oil Refining Performance Improvement Progarmmes in the Arab Countries" by Engineer Emad Mekki, Senior Refining Expert, Technical Affairs Department. The paper introduced general information on the refining industry in the Arab countries, factors influencing its operational and economic performance, the most important performance and profitability efficiency improvement programmes, and boosting Arab oil refineries' competitiveness in the world markets.

A paper on the "Developments of the Petrochemicals Industry in OAPEC Member Countries" by Dr Yasser Baghdadi, Oil Industries' Expert, Technical Affairs Department. The paper covered the most important developments and challenges in the petrochemicals industry worldwide. It then gave a thorough explanation on the development of the petrochemicals production at OAPEC member countries and the future projections of the production rates of the most important petrochemical products in these countries.

Participants in the closing session reviewed the most important outcomes and recommendations of the papers and discussions during the conference as follows:

- Modern technology is one of the most important factors that enable the refining and petrochemicals industries face challenges and boost their performances
- Field experiments indicate that refineries adopting performance improvement programmes improve their competitiveness significantly at the world markets
- Regular maintenance and preemptive programmes for the petroleum industry equipments contribute to reducing emergency stops that lead to production losses
- Modern technology and inventions contribute to production efficiency improvement
- The importance of boosting cooperation, coordination, and expertise exchange in performance and productivity improvement at oil refineries, Arab and international research centres, and national and international oil companies.
- Distinction means there are always improvement opportunities

On the third day of the conference, participants went on a field visit to the Gulf Petrochemical Industries Company (GPIC), a joint venture between Bahrain, KSA, and Kuwait. The participants were introduced to the company's production stages, the level of used technology, and the preemptive measures on environmental incidents.













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3RD SESSION OF THE UNECE GROUP OF EXPERTS ON GAS

Upon an invitation by the United Nations Economic Commission for Europe (UNECE), Committee on Sustainable Energy, to the 3rd Session of the UNECE Group of Experts on Gas in Geneva, Switzerland on 21 - 22 April 2016, a delegation from OAPEC Secretariat General headed by the Secretary General HE Abbas Ali Al Nagi, with Engineer Wael Abdul Moati, Gas Industries Expert, as member, took part in the event. A large number of UNECE representatives, European and international organizations including ESCWA, International Gas Union, Eurogas, the Greek Energy Forum, NGV-Global, SIGTTO, as well as private sector, researchers, and academics participated in the discussion. The event took place over two days including 6 sessions covering the following:

- 1.Natural gas sustainability credentials
- 2. Activities of international institutions and organizations in the natural gas industry
- 3.Best practice guidance in reducing gas leaks along the gas value chain
- 4.Best practice guidance for liquefied natural gas
- 5.Recommendations on removing barriers to the use of natural gas as a transportation fuel
- 6.Best practice guidance on the role of natural gas in increasing the uptake of renewable energy

The Secretary General took part in the opening session discussing the "Sustainability Credentials of Natural Gas".

HE Al Naqi began his speech by indicating that OAPEC member countries account for about 27% of the world's total proven natural gas reserves. They also provide about 4% of the total LNG supplies. He said that the current debate on energy tackles methods on balancing and meeting the increasing demand for energy, while considering potential issues and commitments





relevant to climate change. Most of the future energy scenarios point out to gas as a pivotal player in this regard not just for being a clean and environment-friendly fuel but also for the abundance of its resources worldwide. He highlighted the potential role of gas in meeting the United Nations Sustainable Development Goals including the achievement of 3 clear goals by 2030 which are: securing modern energy services for all, doubling the world average on energy efficiency, increasing the share of renewable energy in the world's energy mix, in addition to how gas can play a vital role in some sectoral businesses of the world's action plan on this initiative, like electricity, housing, and transportation.

He concluded by stressing that the advantages of using natural gas in the various consumption sectors will pave the way for achieving the sustainable development goals. It will make gas a major component of the environment-friendly systems but that means doubling efforts on investment, creativity, energy policies, and giving more focus on technological development to support natural gas.

In the second session, the Secretariat General participated with a paper presented by Eng A. Moati on "Natural Gas Role in Sustainable Development: a case study on Arab countries".

The paper included 3 pivotal points; the first on natural gas reserves, natural gas development and consumption, and natural gas share in the primary energy mix in the Arab countries between 20014-2014. The second point discussed the role of natural gas in achieving sustainable development goals and Arab efforts in this regard. While the third point tackled ongoing and planned development projects that are projected to add about 180 billion cubic meters of gas per annum. The paper stressed the importance of natural gas in meeting the Arab region's energy needs and its role in achieving sustainable development goals.

The meeting came out with a number of remarks and recommendations including:

- Natural gas is becoming an ever more important part of the global energy mix.
- More clarification needed on the role of gas in sustainable energy systems and its influence on sustainable development's economic, social, and environmental aspects.
- More support should be given to the global methane initiative especially on methane emissions along the natural gas value chain.
- Supporting cooperation and integration between interlockers in the natural gas industry (government, companies, research centers, etc)



"Re-Refining of Used Lubricating Oils and its Economic & Environmental Implications"

Deadline Extended for "OAPEC Award for Scientific Research 2016"

OAPEC Secretariat General announces the extension of the deadline for receiving works submitted for participation in the "OAPEC Award for Scientific Research 2016" for two weeks ending on 15 June 2016 instead of the end of May 2016.





FIFTH COORDINATING MEETING FOR OAPEC DATABANK COMMUNICATIONS OFFICERS

OAPEC Secretariat General held its Fifth Coordinating Meeting for OAPEC Databank Communications Officers on 27 and 28 April 2016 at the organization's headquarters in Kuwait. The opening session on the first day was attended by Mr Abdul Fattah Dandi, Director, Economic Affairs Department, and Mr Abdul Karim Ayed, Director, Media and Library Department.

On behalf of OAPEC Secretary General HE Abbas Ali Al Naqi, who attended part of the second day's activities, Mr Dandi inaugurated the meeting with a speech welcoming the participants to Kuwait and wishing them success. He pointed out to the results of executing the recommendations of earlier meetings. He also spoke about steps taken by the Secretariat

General to develop the databank work. Eight communications officers from the UAE, Algeria, KSA, Iraq, Kuwait, Libya and Egypt participated in the meeting.

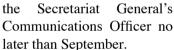
The meeting aimed following up and reviewing earlier recommendations issued previous coordinating meetings, evaluating **OAPEC** member countries data flow mechanism, discussing the system's earlier technical stages gaps and statistical shortages, as well as, hearing remarks and future visualizations on developing the system's application to meet the member countries' needs.

During the meeting, a briefing was given to the new communications officers attending for the first time on: the Secretariat General's databank establishment and development, the structure of the energy data collection form, and the system's mechanism via the Secretariat General electronic website. The meeting provided an opportunity for all participants to exchange views on methods for developing and activating even further the Secretariat General's system. The meeting came up with a number of recommendations, most important of which are:

- Continuing to provide the Secretariat General with oil, natural gas, and other energy resources data and statistics while working on overcoming any obstacles preventing smooth access to these statistics.
- Sending the energy data collection form prepared by the Secretariat General in the beginning of April to all member countries. The form should be returned to







- Every Communications Officer should revise their country's sent data by entering to the Secretariat General's oracle database via website. Any remarks should be reported to the Secretariat General following being notified of the completion of their country's data entry by the Secretariat General's Communications Officer.
- Observing specified deadlines to ensure data flow to and from the Secretariat General as required. It is important to cover all aspects of the energy data collection form.
- OAPEC member countries should provide the Secretariat







General with any latest statistical publications on renewable energy, which are issued by official authorities in the respective countries.







Mr Fuad Al Dawoud, Senior Economic Researcher, and Mr Mohammed Jihad Amer, IT Programmer, represented the Secretariat General at this meeting.

UNCONVENTIONAL OIL AND NATURAL GAS INDUSTRY OUTSIDE NORTHERN AMERICA AND ITS FUTURE PROSPECTS

OAPEC Secretariat General has recently issued a study entitled the "Unconventional Oil and Natural Gas Industry outside Northern America and its Future Prospects". The study basically aims at shedding the light on the unconventional oil and natural gas industry in countries outside Northern America and its future prospects.

The study consists of 7 chapters as follows:

- 1. An overview on unconventional oil and natural gas resources and their importance worldwide.
- 2. Shale oil and gas reserves worldwide.
- 3. Future perspectives of the shale oil and gas production worldwide.
- 4. The future of the shale oil and gas industry in some countries around the world.
- 5. Extra heavy crude oils in Venezuela.
- 6. Oil shale production worldwide.
- 7. Gas and coal conversion into liquids.
- 8. Future perspectives of unconventional oil and gas and their implications for OAPEC member countries.
 - The study made the following conclusions:
- Generally, it is expected that the global oil and gas mix would witness more diversity and an increasing importance of the different kinds of unconventional oil and gas resources on varied degrees.
- Following the USA's success in exploiting its shale oil and gas resources to increase its production massively in a relatively short time, many countries worldwide are looking into the possibility of exploiting their domestic unconventional resources, especially shale oil and gas.
- Due to the nature of challenges and obstacles facing the unconventional oil and gas industry outside Northern America, it is unlikely to achieve big and fast steps in the shale oil and gas production in these countries as happened in the USA, which means it is difficult to mimic the US example on a wider scale.
- The shale oil and gas industry outside Northern America is still in its initial stages. Also, relevant data remain rare, which makes it difficult to predict the future of the said industry at these countries.
- There is consensus that Russia has emerged as an important country for the future of the shale oil production outside Northern America due to its huge number of shale oil resources as well as the exhaustion of its aging conventional oilfields. Also, there are other important producers like Argentina and China.
- Some consider China a strong candidate to repeat the US's shale oil example since it tops the world in terms of having such resources, in addition to China's increasing demand for gas. There are other candidates like Argentina and Mexico.
- In light of the relatively high costs of unconventional oil and gas projects, the current low oil prices have negatively affected their economics, however; it is still too early to know exactly and precisely their future impact.
- Most unconventional oil and gas resources suffer from various challenges and obstacles, especially from the environmental side, which make them vulnerable to the world measures and policies on climate change more than conventional resources.



ASRY'S 41ST GENERAL ASSEMBLY MEETING APPROVED FINANCIAL STATEMENTS



Arab Shipbuilding and Repair Yard Company (ASRY) held its 41st ordinary General Assembly Meeting on Thursday, 5 May at the Company's Head Office in Bahrain. The meeting was attended by representatives of the shareholding states—Bahrain, the United Arab Emirates, Saudi Arabia, Qatar, Kuwait, Iraq and Libya.

At the outset of the meeting, the Chairman of the General Assembly, Shaikh Daij bin Salman Al Khalifa, welcomed the representatives of the member states and thanked them for attending the meeting.

He delivered a speech at the meeting covering the status quo of the company from financial, business, and operational aspects under current local, regional and international economic conditions. He also highlighted the difficult competition faced by the company in various operations and activities both regionally and globally. Shaikh Duaij expressed endeavours of the Board of Directors and ASRY's Management to improve the situation during this and the coming years.

The general meeting approved the Board's 41st Annual Report on ASRY's

operations during 2015, and ratified the audited financial statements as on 31 December 2015. Sales amounted to \$151 million, which are 7.3% less than those of 2014 (\$163 million). The number of vessels repaired during the year was 243 ships and 10 drilling rigs, against 176 ships and 13 rigs in 2014.

The General Assembly also reviewed the company's results for the first three months of 2016 during which, sales amounted to \$41 million, from 1January to 31 March. KPMG was reappointed as the external auditors for 2016 for the company and its branch in Saudi Arabia. The General Assembly also discharged the Board Members from liability of management responsibility for the year 2015, and approved membership of the new Board Members for the current session.

At the end of the meeting, the Chairman of the General Meeting thanked all members of the General Meeting, representatives of the shareholding states, to the company's customers and contractors, to the Board of Directors and the Executive Management, and to all company employees for their dedicated and loyal efforts in serving the company.

243 SHIPS REPAIRED AND 10 DRILLING RIGS IN 2014

Q1 SALES AMOUNTED TO \$61 MILLION The Arab Petroleum Investments Corporation (APICORP), a multilateral development bank established by the member states of the Organization of Arab Petroleum Exporting Countries (OAPEC), has announced its full year consolidated financial results for the period ending 31st December 2015.

APICORP continued to perform strongly, with total income increasing to \$162.04 million in 2015 compared with \$156.28 million in 2014 and net profit before provisions growing to \$124.38 million from \$118.51 million for the previous year.

The company maintained its prudent approach, setting aside an investment provision of \$16.78 million, which was slightly higher than in 2014 and reflects continuing geopolitical and economic uncertainty in several parts of the MENA region. This resulted in an adjusted net profit of \$107.60 million for 2015, compared with \$105.03 million in the previous year.

As of 31st December 2015, total assets were \$5.65 billion and shareholders' equity increased to \$1.91 billion.

During the year, APICORP

continued to implement its strategy of rebalancing its lending and equity investment portfolios, through increasing the level of equity investments. This saw APICORP make a significant investment in Saudi Mechanical Industries (SMI), in addition to APICORP's participation in TAQA's capital increase. Total direct equity investments, were \$922.53 million as of 31 December 2015, 6.5 per cent higher than 12 months previously.

The year 2015 also witnessed the establishment of a \$3 billion Sukuk programme, followed by the successful placement of a five year \$500 million Sukuk in October 2015. Becoming a regular issuer of Sukuk in global markets represents a significant strategic step for APICORP, and positions the company's credit alongside its multilateral development banks peers.

In February 2015, APICORP participated in a successful \$200 million refinancing arrangement for National Petroleum Services Group (NPS) – APICORP's stake is 29 per cent in conjunction with HSBC, Emirates NBD and Al Hilal Bank.

Net interest income for the year

came in at \$44.91 million, 12 per cent higher than in 2014, a better yield and better return on capital, testimony to a highly effective management of the loan book and a reduction in funding costs.

APICORP's balance sheet remains robust, with significant liquidity of \$995 million and a very healthy capital adequacy ratio of 28.65 per cent. This was supported by a report issued by Moody's in October 2015, which pointed to APICORP's strong capital adequacy, which is well above regulatory requirements, and which stated that its relatively low leverage, solid track record of profitability, and increasingly diverse equity investments, all contribute to the agency's view on APICORP's "high intrinsic financial strength".

In recognition of this financial strength and to reflect its long-term confidence in the growth prospects, company's APICORP's Extraordinary General Assembly, held on 10 April 2016, has approved to increase the company's subscribed share capital to \$2 billion. It also declared a dividend payable to the company's shareholders of \$40 million in respect of 2015.

MORE THAN 170 COUNTRIES SIGN PARIS AGREEMENT ON CLIMATE CHANGE



On 22 April 2016, the UN headquarters in New York hosted the signing ceremony of the Paris Agreement on Climate Change. Heads of States and Governments, and senior officials from more than 170 countries attended the ceremony, including a number of OAPEC members, civil society organizations, and youth.

Countries have endorsed the text of the Paris Agreement at the COP21 on 12 December 2015. It was considered a historical moment that sealed years of negotiations on having a global approach to combat climate change. Countries that gathered in Paris managed to reach a mutual understanding of the agreement clauses with the need to take some necessary measures before putting it into effect.

Signing the agreement is the first step and a sign by the countries to show their will to take the required measures to endorse and implement the agreement on a local level. The agreement will



enter into force after 55 countries that account for at least 55% of global emissions have deposited their instruments of ratification. Once completed, governments will officially deposit the agreement at the UN Secretary General.

This condition has to be met through calculating this percentage according to the latest data provided by the UNFCCC parties on or before the agreement's date of endorsement. The UNFCCC Secretariat has made this data available (which should only be used for the purpose of defining the conditions of the start of efficacy) on its website, and in the Paris COP21 report upon the conference request. A one-year time span has been given to countries to sign

the agreement, after which they can endorse, accept, or approve it. Countries that have not signed the agreement can join it by depositing their instrument of ratification at the Secretary General.

For the agreement to take effect, one or two of the major countries responsible for CO2 emissions (USA, China, EU, Russia, and India) should endorse it. China and the USA promised to endorse it during this year.

Separate sessions to give national statements have been held following the signing ceremony. Also, a lunch banquet has been given at which discussions have taken place on boosting funding flow to implement climate measures. 2030 sustainable development plan, and the Paris Agreement. Later on, an open dialogue has been held to look into the mechanisms by which various sectors of the society can contribute to implementing the agreement.

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Petroleum Developments in the World Market and Member Countries*

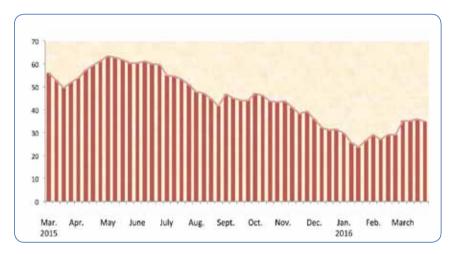
1. Oil Market

1. Prices

1-1Crude Oil Prices

Weekly average price of OPEC basket increased during the first week of March 2016, to reach \$35.1/bbl, and continued to raise thereafter, to reach its highest level of \$35.8/bbl during the third week. During the fourth week, weekly average price declined to \$34.8/bbl, as shown in figure 1:

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



On monthly basis, OPEC Reference Basket in March 2016. averaged \$34.7/bbl. representing an increase of \$5.9/bbl or 20.6% comparing with previous month, and a decrease of \$17.8/bbl or 33.9% from the same month of previous year. The efforts of major producers to trim output, expected decreasing US production, declining non-OPEC production in several regions in Asia and Latin America, and ongoing strategic stockpiles in China an US, were major stimulus for the increase in oil prices during the month of March 2016.

Key Indicators

- In March 2016, **OPEC Reference Basket increased** by 20.6% or \$5.9/bbl from the previous month level to stand at \$34.7/bbl.
- World oil demand in March 2016, decreased by 0.9% or 0.9 million b/d from the previous month level to reach95.7 million b/d.
- World oil supplies in March 2016, increased by 0.4% or 0.4 million b/d from the previous month level to reach 99 million b/d.
- US tight oil production in March 2016, decreased by 1.5% to reach 5 million b/d, and US oil rig count decreased by 45 rig from the previous month level to stand at 307 rig.
- US crude oil imports in February 2016, decreased by 2.2% from the previous month level to reach 7.8 million b/d, and US product imports decreased by 3.1% to reach about 2 million b/d.
- OECD commercial inventories in February 2016 increased by 7 million barrels from the previous month level to reach 3060 million barrels, and Strategic inventories in OECD-34, South Africa and China remained stable at the same previous month level of 1863 million barrels.
- The average spot price of natural gas at the Henry Hub in March 2016 decreased by \$0.26/million BTU from previous month level to reach \$1.73/million BTU.
- The Price of Japanese LNG imports increased in February 2016 by \$0.1/m BTU to reach \$8/m BTU, whereas the Price of Korean LNG imports decreased by \$0.2/m BTU to reach \$7.8/m BTU, and the Price of Chinese LNG imports decreased by \$0.4/m BTU to reach \$6.9/m BTU.
- Arab LNG exports to Japan, Korea and China were about 3.915 million tons in February 2016 (a share of 32.2% 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:

Table 1	Change in Price of the OPEC Basket of Crudes, 2015-2016	(\$/bbl)
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	Mar. 2015	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan. 2016	FEB.	Mar.
OPEC Basket Price	52.5	57.3	62.2	60.2	54.2	45.5	44.8	45.0	40.5	33.6	26.5	28.7	34.7
Chamge From previous Month	-1.6	4.8	4.9	-2.0	-6.0	-8.7	-0.6	0.2	-4.5	-6.9	-7.1	2.2	5.9
Change from same month of previous Year	-51.7	-47.0	-43.3	-47.7	-51.4	-55.3	-51.2	-40.0	-35.1	-25.9	-17.9	-25.3	-17.8

^{*} 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)

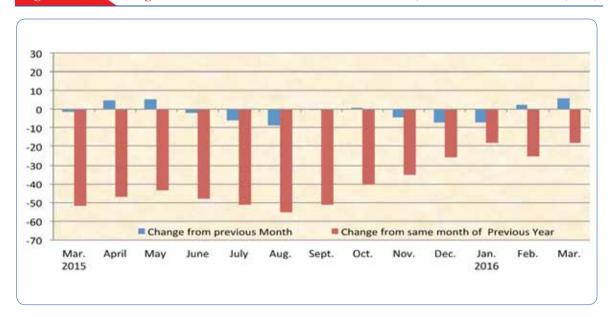


Table (3) in the annex show spot prices for OPEC basket and other crudes for the period 2014-2016.

1-2 Spot Prices of Petroleum Products

- US Gulf

In February 2016, the spot prices of premium gasoline decreased by 7.6% or \$3.9/bbl comparing with their previous month levels to reach \$47.3/bbl, and spot prices of gas oil decreased by 0.3% or \$0.1/bbl to reach \$37/bbl, whereas spot prices of fuel oil increased by 7.9% or \$1.5/bbl to reach \$20.6/bbl.

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- Rotterdam

The spot prices of premium gasoline decreased in February 2016, by 7.3% or \$3.9/bbl comparing with previous month levels to reach \$49.5/bbl, whereas spot prices of gas oil increased by 6% or \$2.3/bbl to reach \$40.4/bbl, and spot prices of fuel oil increased by 8% or \$1.6/bbl to reach \$21.5/bbl.

- Mediterranean

The spot prices of premium gasoline decreased in February 2016, by 8.5% or \$4/bbl comparing with previous month levels to reach \$43/bbl, whereas spot prices of gas oil increased by 6.1% or \$2.4/bbl to reach \$41.9/bbl, and spot prices of fuel oil increased by 6.1% or \$1.3/bbl to reach \$22.5 bbl.

- Singapore

The spot prices of premium gasoline decreased in February 2016, by 11.9% or \$6/bbl comparing with previous month levels to reach \$44.3/bbl, and spot prices of fuel oil decreased by 3.4% or \$0.9/bbl to reach \$25.9/bbl, whereas spot prices of gas oil increased by 7.2% or \$2.7/bbl to reach \$40.1/bbl.

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



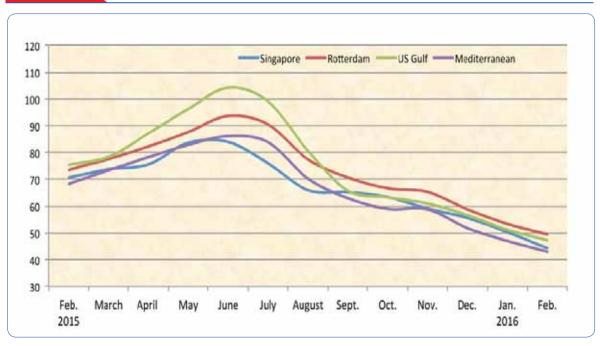


Table (4) in the annex shows the average monthly spot prices of petroleum products, 2014-2016.

1-3 Spot Tanker Crude Freight Rates

In February 2016, Freight rates for crude oil for tanker size (230-280 thousand deadweight tons (dwt)), leaving Middle Eastern ports to the East, decreased by 19 points or 24.1% comparing with previous month to reach 60 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 23 points or 39.7% comparing with previous month to reach 35 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 11 points or 10.8% comparing with previous month to reach 91 points on the World Scale (WS).

Figure (4) shows the freight rates for crude oil to all three destinations from February 2015 to February 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 February 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, decreased by 32 points, or 23.5%

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comparing with previous month to reach 104 points on WS, freight rates for Petroleum Products across Mediterranean [for tanker size 30-35 thousand deadweight tons (dwt)], decreased by 31 points, or 17.5% to reach 146 points on WS, and freight rates for petroleum products [for tanker size 30-35 thousand deadweight tons (dwt)], leaving Mediterranean to North-West Europe also decreased by 32 points, or 17% to reach 156 points on WS.

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

Figure - 5 Monthly Spot Product Tanker Freight Rates, 2015 -2016

(World Scale)

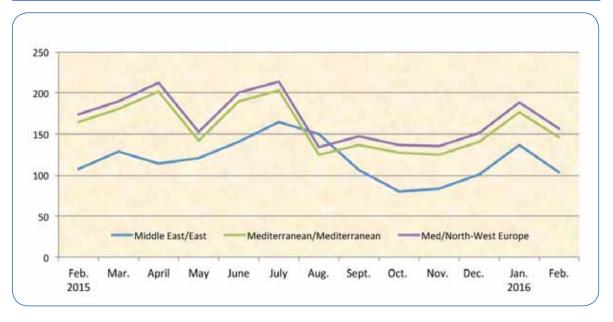


Table (5) and (6) in the annex show crude and products Tankers Freight Rates, 2014-216.

2.Supply and Demand

Preliminary estimates in March 2016 show a *decrease* in **world oil demand** by 0.9% or 0.9 million b/d, comparing with the previous month to reach 95.7 million b/d, representing an increase of 2.1 million b/d from their last year level.

Demand in **OECD** countries *decreased* by 2.1% or 1 million b/d comparing with their previous month level to reach 46.5 million b/d, representing an increase of 0.3 million b/d from their last year level. Whereas demand in **Non-OECD** countries *increased* by 0.2% or 0.1 million b/d comparing with their previous month level to reach 49.2 million b/d, representing an increase of 1.8 million b/d from their last year level.

On the supply side, preliminary estimates show that world oil supplies for March 2016 *increased* by 0.4% or 0.4 million b/d comparing with the previous month level to reach 99 million b/d, a level that is 1.9 million b/d higher than last year.

In March 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 39.7 million b/d, a level that is 1.1 million b/d higher than last year. And preliminary estimates show that **Non-OPEC** supplies increased by 0.2% or 0.1 million b/d comparing with the previous month level to reach 59.3 million b/d, a level that is 0.8 million b/d higher than last year.

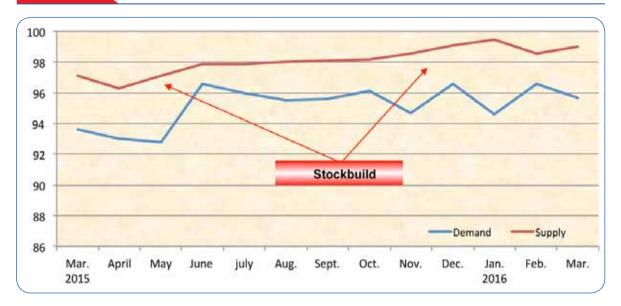
Preliminary estimates of the supply and demand for March 2016 reveal a surplus of 3.4 million b/d, compared to a surplus of 2 million b/d in February 2016 and a surplus of 3.5 million b/d in March 2015, as shown in table (2) and figure (6):

Table 2 World Supply and Demand

(Million b/d)

	March 2016	February 2016	Change from February 2016	March 2015	Change from March 2015
OECD Demand	46.5	47.5	-1.0	46.2	0.3
Rest of the World	49.2	49.1	0.1	47.4	1.8
World Demand	95.7	96.6	-0.9	93.6	2.1
OPEC Supply:	39.7	39.3	0.4	38.6	<u>1.1</u>
Crude Oil	33.1	32.7	0.4	32.0	1.1
NGL's & Cond.	6.6	6.6	0.0	6.6	0.0
Non-Opec Supply	57.0	56.9	0.1	56.2	0.8
Processing Gain	2.3	2.3	0.0	2.3	0.0
World Supply	99.0	98.6	0.4	97.1	1.9
Balance	3.4	2.0		3.5	

Source: Energy Intelligence Briefing April 8, 2016.



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

US tight oil production

In March 2016, US tight oil production decreased by 78 thousand b/d or 1.5% comparing with the previous month level to reach 5.049 million b/d, representing a decrease of 443 thousand b/d from their last year level. The US oil rig count decreased by 45 rig comparing with the previous month level to reach 307 rig, a level that is 453 rig lower than last year, as shown in table (3) and figure (7):

Table 3

US* tight oil production

(Million b/d)

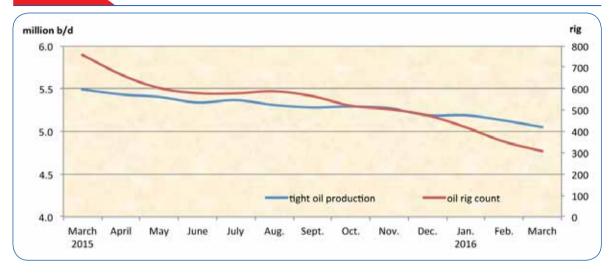
	March 2016	February 2016	Change from February 2016	March 2015	Change from March 2015
tight oil production	-0.443	5.492	-0.078	5.127	5.049
Oil rig count (rig)	-453	760	-45	352	307

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

^{*} focusing on the seven most prolific areas, which are located in the Lower 48 states. These seven regions accounted for 95% of domestic oil production growth during 2011-2013 (Bakken, Eagle Ford, Haynesville, Marcellus, Niobrara, Permian, Utica)

Figure - 7 US tight oil production and oil rig comt

(Million b/d)



3.Oil Trade

USA

In February 2016, US crude oil imports decreased by 174 thousand b/d or 2.2% comparing with the previous month level to reach 7.8 million b/d, and US oil products imports decreased by 66 thousand b/d or 3.1% to reach about 2 million b/d.

On the export side, US crude oil exports decreased by 54 thousand b/d or 12% comparing with the previous month level to reach about 396 thousand b/d, whereas US products exports increased by 166 thousand b/d or 4% to reach 4.1 million b/d. As a result, US net oil imports in February 2016 were 353 thousand b/d or nearly 6.2% lower than the previous month, averaging 5.4 million b/d.

Canada remained the main supplier of crude oil to the US with 45% of total US crude oil imports during the month, followed by Saudi Arabia with 14%, then Venezuela with 9%. OPEC Member Countries supplied 37% of total US crude oil imports.

Japan

In February 2016, Japan's crude oil imports increased by 60 thousand b/d or 2% comparing with the previous month to reach 3.5 million b/d, the highest level since December 2015. Whereas Japan oil products imports decreased by 130 thousand b/d or 18.6% comparing with the previous month to reach 568 thousand b/d.

On the export side, Japan's oil products exports increased in February 2016, by 99 thousand b/d or 17.9% comparing with the previous month, averaging 653 thousand b/d. As a result, Japan's net oil imports in February 2016 decreased by 169 thousand b/d or 4.7% to reach 3.4 million b/d.

Saudi Arabia was the big supplier of crude oil to Japan with a share of 32% of total Japan crude oil imports, followed by UAE with 22% and Qatar with 12% of total Japan crude oil imports.

China

In February 2016, China's crude oil imports increased by 1.7 million b/d or 27% to reach 8 million b/d, and China's oil products imports increased by 202 thousand b/d or 18.9% to reach 1.3 million b/d.

On the export side, China's crude oil exports reached 20 thousand b/d,

and China's oil products exports increased by 53 thousand b/d or 6.2% to reach 872 thousand b/d. As a result, China's net oil imports reached 8.4 million b/d, representing an increase of 28.7% comparing with the previous month.

Saudi Arabia was the big supplier of crude oil to China with 17% of total China's crude oil imports during the month, followed by Angola with 15% and Russia with 12%.

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

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

		Crude O	il	oil Products			
	February 2016	January 2016	Change from January 2016	February 2016	January 2016	Change from January 2016	
USA	-0.232	-1.802	-2.034	-0.121	7.509	7.388	
Japan	-0.229	0.144	-0.085	0.060	3.402	3.462	
China	0.149	0.252	0.401	1.728	6.278	8.006	

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

4. Oil Inventories

In February 2016, **OECD commercial oil inventories** increased by 7 million barrels to reach 3060 million barrels – a level that is 296 million barrels higher than a year ago. It is worth mentioning that during the month, **commercial crude inventories in OECD** increased by 19 million barrels to reach 1230 million barrels, whereas **commercial oil products inventories** decreased by 12 million barrels to reach 1830 million barrels.

Commercial oil inventories in Americas increased by 5 million barrels to reach 1619 million barrels, of which 675 million barrels of crude and 944 million barrels of oil products. **Commercial oil Inventories in**

Europe increased by 4 million barrels to reach 1018 million barrels, of which 357 million barrels of crude and 661 million barrels of oil products. **Commercial oil inventories in Pacific** decreased by 2 million barrels to reach 423 million barrels, of which 198 million barrels of crude and 225 million barrels of oil products.

In the rest of the world, commercial oil inventories increased by 24 million barrels to reach 2947 million barrels, and the **Inventories at sea** increased by 6 million barrels to reach 1180 million barrels.

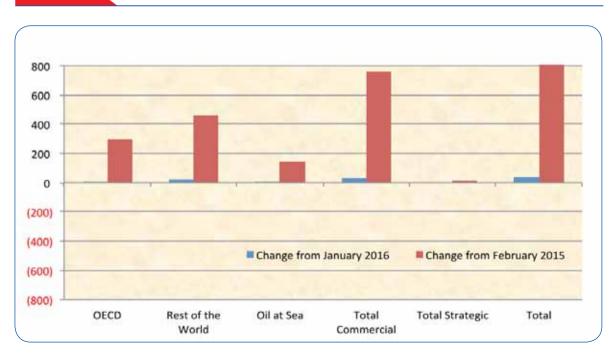
As a result, **Total Commercial oil inventories** in February 2016 increased by 31 million barrels comparing with the previous month to reach 6007 million barrels – a level that is 759 million barrels higher than a year ago.

Strategic inventories in OECD-34, South Africa and China remained stable at the same previous month level of 1863 million barrels – a level that is 17 million barrels higher than a year ago.

Total world inventories, at the end of February 2016 were at 9050 million barrels, representing an increase of 37 million barrels comparing with the previous month, and an increase of 922 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 February 2016.





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 March 2016 decreased by \$0.26/million BTU comparing with the previous month to reach \$1.73/ million BTU.

The comparison, shown in table (5), between natural gas prices and the WTI crude reveal differential of \$4.8/ million BTU in favor of WTI crude.

Table 5	Henry	Hub Nat	ural Gas	, WTI Ci	rude Ave	rage, and	Low Su	lfur Fuel	Oil Spot	Prices, 2	015-2016	(Mil	llion BTU ¹)
	Mar. 2015	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan. 2016	Feb.	Mar.
Natural Gas (2)	2.8	2.6	2.9	2.8	2.8	2.8	2.7	2.3	2.1	1.9	2.3	2.0	1.7
WTI Crude (3)	8.2	9.4	10.2	10.3	8.8	7.4	7.8	8.0	7.4	6.4	5.4	5.2	6.5

^{1.} British Thermal Unit.

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 February 2016, the price of Japanese LNG imports increased by \$0.1/million BTU comparing with the previous month to reach \$8/million BTU, whereas the price of Korean LNG imports decreased by \$0.2/million BTU comparing with the previous month to reach \$7.8/million BTU, and the price of Chinese LNG imports decreased by \$0.4/million BTU comparing with the previous month to reach \$6.9/million BTU.

2.2. LNG Imports

Total Japanese, Korean and Chinese LNG imports from various sources, decreased by 6.7% or 878 thousand tons from the previous month level to reach 12.169 million tons.

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

^{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.

Table6

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

			oorts nd 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

 ${\bf Source: World\ Gas\ Intelligence\ various\ issues.}$

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2.3. Sources of LNG imports

Australia was the big supplier of LNG to Japan, Korea and China with 2.809 million tons or 23.1% of total Japan, Korea and China LNG imports in February 2016, followed by Qatar with 21% and Malaysia with 18.2%.

The Arab countries LNG exports to Japan, Korea and China totaled 3.915 million tons - a share 32.2% of total Japanese, Korean and Chinese LNG Imports during the same month.

2.4. LNG Exporter Netbacks

With respect to the Netbacks at NE Asia markets, Russia ranked first with \$4.73/million BTU at the end of February 2016, followed by Indonesia with \$4.64/million BTU then Australia with \$4.60/million BTU. And LNG Qatar's netback reached \$4.46/million BTU, and LNG Algeria's netback reached \$4.17/million BTU.

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

Table7

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

		Imp		Spot LNG Netbacks at NE Asia Markets	
	Japan	Korea	China	Total	(\$/million BTU)
Total Imports, of which:	<u>7370</u>	<u>2998</u>	<u>1801</u>	<u>12169</u>	
Qatar	1644	588	577	2809	4.60
Australia	1117	995	439	2551	4.46
Malaysia	1457	370	385	2212	4.59
Indonesia	670	422	188	1280	4.64
Russia	364	64	_	428	4.73
Nigeria	258	-	_	258	4.17
Algeria	71	63	_	134	5.03

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



Tables Annex



Pursuant to its policy of encouraging scientific research by awarding two prizes on a biennial basis (First Prize KD 7000, Second Prize KD 5000, equivalent to USD \$24000 and USD \$17000), upon the resolution number 1/139 of OAPEC Executive Bureau at its meeting dated 12/10/2014. The Organization of Arab Petroleum Exporting Countries (OAPEC) is pleased to announce that the research topic selected for the "OAPEC Award for Scientific Research for the Year 2016" is:

"Re-Refining of Used Lubricating Oils and its Economic & Environmental Implications"

Research Theme

OAPEC members' increasing interest in re- refining of used lubricating oils comes in line with their efforts to improving the performance of oil industry, seizing the added value opportunities, and maximizing the utilization of their natural resources, in addition to enhance their compliance with the requirements of the legislation related to environment protection.

The following main issues are suggested for the research, to which the researcher is encouraged to add other suitable aspects:

- 1- Historical overview of used lube oils re-refining processes.
- 2- Sources and evaluation of used lube oils.
- 3- Types of used lube oils re-refining processes.
- 4- Environmental implications of re-refining of used lube oils.
- 5- Economic viability of the re-refining process and its role in improving the added value of oil industry and natural resources conservation.
- 6- Examples and case studies of used oils re-refining projects worldwide and in Arab countries.
- 7- Conclusions and recommendations.

Conditions for Submitting the Research

- 1- The research may be submitted by one or more author(s). Institutions and organizations are excluded.
- 2- The research submitted must be new and original, and has not been granted an award previously.
- 3- The author(s) shall agree in advance to give OAPEC the right to print and publish the research in case his/her/their win one of the prizes. A signed statement to this effect must be submitted with the research (sample provided below). The author(s) will maintain all other rights, including patent rights (if applicable). OAPEC shall not exercise its right to publish the winning research for a period of six months commencing with the date of advising the winning author (s) with the decision of the Award Committee.

- 4- A statement by the author(s), attesting that the research is original. Segments fully or partially adopted from other sources should be properly cited. A detailed list of all references used must also be attached.
- 5- Four hard copies and a digital copy of the research (either in Arabic or English) should be submitted, along with the Curriculum Vitae of each researcher, to the Organization of Arab Petroleum Exporting Countries.
- 6- The deadline for submitting the research is 31st May, 2016. No submission will be accepted after that date.
- 7- Prizes are awarded to individuals of all nationalities advised of the Award Committee's decision.
- 8- The award will not be presented twice consecutively to the same recipient.
- 9- Any research that does not fulfill the above conditions shall be disregarded.

Researchers will be notified by OAPEC Secretariat of the Award Committee's decision. The winners will be officially announced at the end of the OAPEC's Ministerial Council in 2016.

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Organization of Arab Petroleum Exporting Countries (OAPEC)
OAPEC AWARD FOR SCIENTIFIC RESEARCH FOR THE YEAR 2016

TOPIC

"Re-Refining of Used Lubricating Oils and its Economic and Environmental Implications"

Environmental implications	
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