

Organization of Arab Petroleum Exporting Countries

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OAPEC

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DIVERSIFICATION OF INCOME SOURCES IN **OAPEC** MEMBER COUNTRIES

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.

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.



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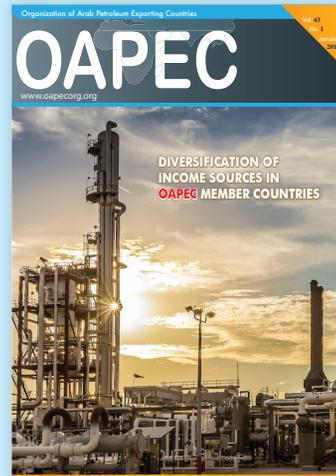


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DIVERSIFICATION OF INCOME SOURCES IN OAPEC MEMBER COUNTRIES

Most OAPEC member countries are accelerating efforts on diversifying their economic structure to move from revenue-generating economy that depends merely on petroleum industry as a single source of income to implementing more comprehensive and diverse economic policies to keep in pace with the rapid changes in the world economy and international energy industry. Member countries believe that it is necessary that national income depends on various sources and avoid focusing on a single source; and that they should develop other sources vital to the economy and revenues in light of the recurrent economic instability across the world due to the world oil market conditions. Moreover, the move is important to avoid potential risks as well as plans of some major energy consuming countries to adopt oil and environment policies that might have negative impacts on the future of the world oil demand.

In the past decade, OAPEC members faced many economic challenges resulting from instability in the oil market, falling oil prices, declining foreign investments in the region, in addition to other factors including: rapid growth of population and immigration for various reasons- whether internal (from countryside to cities) or external- which led to increasing domestic energy consumption, shrinking job opportunities, growing unemployment rates in many countries and expanding public facilities and their needs

of services and power. Moreover, there are challenges emerging from global economic developments like: the slowdown of economic growth rates especially in emerging markets and the Eurozone; drop in basic goods' prices; and some industrial countries' plans to shrink conventional fossil fuel consumption.

Data provided in the Joint Arab Economic Report 2016 mentioned a noticeable decline in the performance of many Arab countries' economies during 2015. Arab countries' GDP in 2015 reached about \$2440 billion compared to \$2773 billion in 2014, representing a drop of 12% and a decline in the output of the Arab extractive industries from \$942.8 billion in 2014 to about \$556.2 billion in 2015. Arab intra-trade performance dropped noticeably in 2015 to reach about \$111.4 billion against about \$120.8 billion in 2014. The drop can be attributed to the declining oil prices that affected in turn most Arab economic indexes.

The trend of executing economic-base-diversification projects is a strategic goal for most OAPEC member countries due to its numerous benefits especially in terms of increasing GDP levels, supporting sustainable development efforts, and reducing risks resulting from relying on a single source of income and full dependence on merchandise import. This ultimately feeds into the most ideal use of the petroleum wealth that is considered the economic cornerstone for OAPEC members. Among the promising

economic sectors for future growth in OAPEC member countries are: industry, agriculture, water, tourism, transportation, commerce (wholesale and retail), services, technology, and renewable energy projects.

The success of the economic diversification in OAPEC members calls for developing all sectors, on top of which investing in human resources since it is the cornerstone for development. Also, a comprehensive economic vision should be adopted including an overall review of economic legislations and current financial and tax policies. It should be aiming at motivating the private sector and foreign investors to take part in the country's economic activities. More should be done to develop the infrastructure especially transportation and power generation sectors.

While keeping a close eye on economic reforms in its member countries, OAPEC Secretariat General lauds the members' efforts in developing their economic systems, and hopes that ultimate benefit is gained from the promising investment opportunities in the Arab petroleum industry in general, especially downstream industries (refining and petrochemicals). The Organisation also hopes that economic cooperation and intra-trade between Arab countries would be improved further, so that in the end of the day they contribute to strengthening our members' economic security.

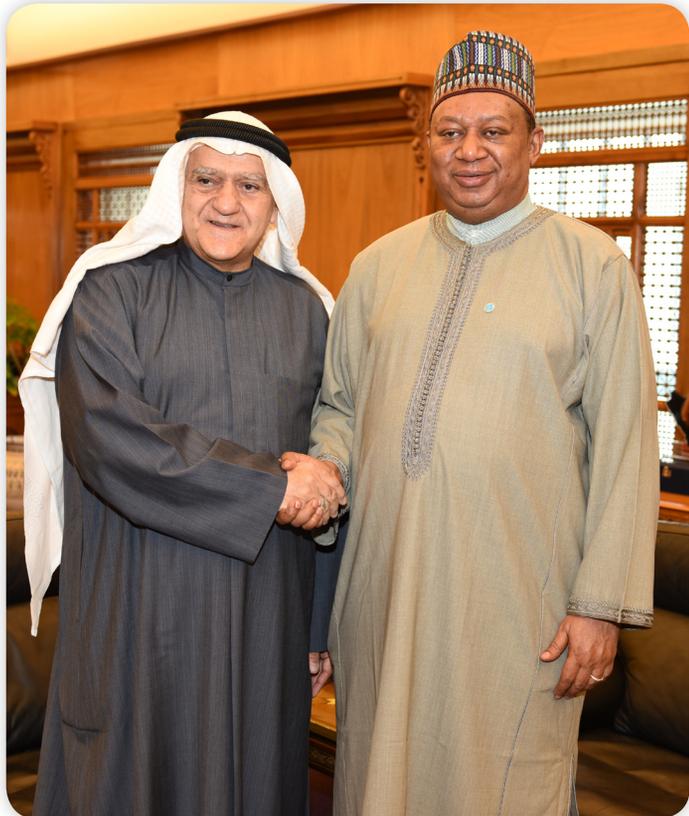


OPEC SECRETARY GENERAL VISITS OAPEC

On 10 January 2017, OAPEC Secretary General HE Abbas Ali Al Naqi received in his office at OAPEC headquarters in Kuwait HE Mohammed Barkindo, OPEC Secretary General, and the accompanying delegation. HE Nawal Al Fuzai', Kuwait's Governor at OPEC, attended the courtesy call.

HE Al Naqi welcomed the visit and hailed the close relations between OAPEC and OPEC. He expressed appreciation for the OPEC Secretariat General and HE Barkindo's coordination efforts between the member countries.

Following the meeting, HE Barkindo made a tour in the building which is a prominent Arab landmark that also houses the permanent headquarters for other Arab Organizations. He was informed about the different halls of the building, as well as, the building's very special and rich Arab architectural features.







UAE

ADNOC SIGNS OIL CONCESSION WITH BP



Abu Dhabi National Oil Company (ADNOC) recently awarded British BP a 10-percent share in an onshore oil concession in a deal worth \$2.2 billion. According to the agreement, BP will acquire a stake of 10 per cent in the Abu Dhabi Company for Onshore Petroleum Operations (ADCO), which operates the concession. The British company will be the technical leader for the group of assets of the Bab onshore field.

The agreement was signed by Emirati Minister of State/ADNOC CEO HE Dr Sultan Al Jaber, and Mr Bob Dudley, BP Group Chief Executive.

The first Abu Dhabi onshore concession had been awarded to a consortium of international oil companies back in 1939 and lasted for 75 years until 2014. In the late 1970s, BP had held a 9.5-percent interest in the onshore concession. A new concession was introduced in January 2015. BP now joins France's Total SA (with a 10% share), Japan's INPEX Corp. (5%), and GS Energy of South Korea (3%) in this concession. ADNOC will continue to seek strategic partners to take on the remaining 12% out of the 40% share allocated for partners.



4TH MIDDLE EAST MAINTENANCE CONFERENCE & EXHIBITION 2016

MAINTENANCE SECTOR DEVELOPMENTS



Bahraini Oil Minister HE Sheikh Mohammed bin Khalifa Al Khalifa said there was a dire need for quality safety equipments to suit the ongoing development in the global oil market and potential changes that might affect the systems and regulations in this important sector. He said that the oil and gas industry is developing continuously; and that it is very encouraging to see more improvement in operational efficiency.

The Minister added in a speech at the opening of the 4th Middle East Maintenance Conference & Exhibition

2016, held on 12 December 2016 in Bahrain, that maintenance played an important role over the past years and contributed actively to the operating of plants, minimizing breakdowns, and extending the lifecycle of equipments. He explained that maintenance is an attractive sector to the young generation.

He also reviewed the current status and future prospects of the global oil market. The Minister referred to OPEC 2016 report projections on increasing energy demand by 40% during the period from 2016 to 2040, which would be led by developing countries.



KSA

HE AL FALIH: SAUDI ARABIA WILL START UNCONVENTIONAL GAS PRODUCTION SOON

Saudi Energy, Industry, and Mineral Resources Minister HE Khalid Al Falih said that energy prices in KSA are among the lowest regionally and globally due to governmental subsidies. This is in spite of the price increases that took place in 2016. He clarified that the liberalization of energy and electricity prices is a priority. This comes as a response to the high directives announced via 2016/2017 budget on adopting comprehensive economic, financial, and structural reforms and strengthening the general finance. These reforms include reviewing and evaluating governmental subsidies, which cover amending subsidies of petroleum products, water, and electricity.

In an interview with “Al Iqtisadiyah” newspaper, the Minister added that price reform policies that have been adopted by KSA in the beginning of 2016 contributed to cutting domestic consumption in the transportation sector by 3% against a growth rate of about 6.5% in the past 5 years. He explained that the energy prices reform programme would guarantee redirecting subsidies to those who deserve them, and would encourage aware and effective energy consumption behaviours.

HE Al Falih pointed out that the Kingdom’s ambition is to develop its mineral resources through a value- added manufacturing chain without relying solely on exporting. He reiterated that KSA has all basic components for achieving the goal of producing 9.5 gigawatts of electricity from renewable resources by 2023.

The Minister revealed that KSA will start producing unconventional gas from “Umm Al Wu’ol” area close to “Wa’ad Al Shamal” project according to pre-planned quantities at a rate of 55 million cubic feet/day in Q4 of 2017. Unconventional gas production would hit 3000 million cubic feet of dry gas per day in 2030 in line with the Kingdom’s “2030 Vision”. Production at Madyan field in Tabuk would start in the beginning of 2017 at a daily rate of 75 million cubic feet and 4500 barrels of condensates to support electrical and industrial power production projects in the area. Also, there are other good promising oil and gas discoveries in the Red Sea under the existing exploration programme that is usually implemented before planning and production programmes.



DR IBRAHIM AL MUHANNA APPOINTED VICE CHAIR OF WORLD ENERGY COUNCIL

The World Energy Council's General Committee approved the appointment of HE Dr Ibrahim Al Muhanna, Advisor to the Saudi Minister of Energy, Industry, and Mineral Resources, as Vice Chair, Special Responsibility for Middle East/GCC States, and member of the Executive Council.

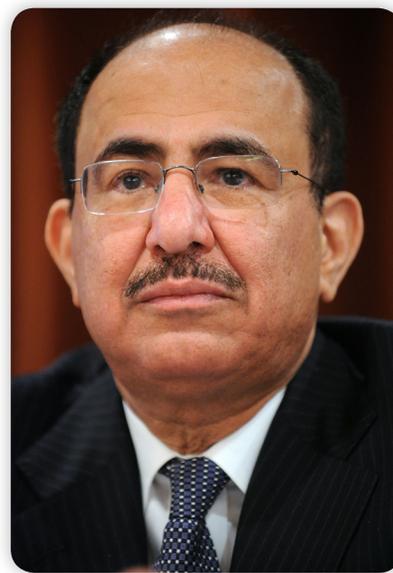
The World Energy Council is a global energy body formed in 1923 that began by discussing energy-related issues, especially supply, consumption, and investment, as well as, reviewing challenges facing the energy sector in general. The Council works through national committees of the member countries; where each country forms a national committee whose members include various local companies and institutions working in the energy sector.

Heads of national committees are members of the Executive Council that convenes annually. The Executive Council is in charge of discussing and endorsing all administrative and financial issues of the World Energy Council. It also approves all technical and research programmes that the member countries want to launch.

Various working groups from the member countries stem from the Council including: Research Studies Group, Technical Programmes Group, Financial Management Group, Regional Activities Group, and other groups. These groups submit periodical reports on their current and future meetings and programmes to the Executive Council for endorsement.

The World Energy Council also hosts the World Energy Congress, which is the world's largest and most influential energy event covering all aspects of the energy agenda and attended by thousands of participants. The World Energy Congress enables dialogue among Heads of State, Ministers, policy makers, CEOs, researchers, and industry experts on critical developments in the energy sector. As the world's premier energy gathering, the Congress offers a unique opportunity for participants to better understand energy issues and solutions from a global perspective.

The position has been previously held by Their Excellencies: **Abbas Ali AL Naqi** (Kuwait), **Taha AL Za'atari** (KSA), and **Dr. Matar AL neyadi** (UAE).





IRAQ - KUWAIT

KUWAITI & IRAQI OIL MINISTERS DISCUSS PETROLEUM ISSUES OF MUTUAL INTEREST



HE Essam Al Marzouk
Oil, Electricity and Water Minister



HE Eng. Jabbar Al Luaibi
Iraqi Oil Minister

As part of petroleum cooperation and coordination between Arab countries, Kuwait's Oil Ministry hosted a delegation from Iraq's Oil Ministry headed by the Iraqi Oil Minister HE Eng. Jabbar Al Luaibi. Kuwait was represented at the meeting by its Oil, Electricity and Water Minister HE Essam Al Marzouk. During the meeting, the implementation of the previously signed MOU between the two countries on exporting Iraqi gas to Kuwait has been discussed. Also, the discussions covered aspects of petroleum cooperation and other relevant issues of mutual interest including encouraging Kuwaiti companies to co-invest in the various petroleum projects announced by the Iraqi Oil Ministry.





QATAR'S RAS LAFFAN 2 LAUNCHES COMMERCIAL OPERATIONS



On 24 December 2016, Qatargas announced the successful launch of commercial operations at Ras Laffan 2 refinery. This is a great achievement in terms of expanding Qatar's refining capacity. It will process 146,000 barrel per day (bpd) of deodorized field condensate (DFC) and low sulphur field condensate to extract mostly naphtha and middle distillates, Jet-A1, ULSD, and Butane, with the highest world specifications and standards for both domestic and global markets' consumption. Ras Laffan Refinery 2, along with Ras Laffan Refinery 1, is considered of great strategic importance in terms of energy production and diversity in the State of Qatar, especially that the facilities will double current production capacity.

QATAR PETROLEUM TO MERGE WITH QATARGAS

Qatar Petroleum (QP) announced integrating Qatargas and RasGas Co. Ltd. under the umbrella of a combined company with the name Qatargas to operate all of the two companies' ventures and facilities.

QPCEOMr Saad AlKaabi said at a press conference that the step aims at creating a unique global operator in terms of size, service, and credibility. The distinguished sources and potentials of the two companies will be combined in one in order to create a higher added value for its shareholders as well as to boost Qatar's competitiveness.

Al Kaabi added that the

transition, which will result in a single company called Qatargas, will take around 12 months to complete. He said the operational side of the plants in the two companies will not be affected as highest priority is given to ensure the sustainability of the business in a secure, swift, and risk-free way. Once the new structure is in place, there will be one large entity "QatarGas" that will manage all LNG operations in Qatar. This will result in a more effective system to serve Qatar's ultimate interests, as well as, the interests of the company's customers and shareholders.

He also emphasized that QP



قطر الفاز
QATARGAS

partners' shares in the two companies' projects will not be affected. The whole point is gathering all operations under one entity. He explained that the merger will result in huge cost cuts with the goal to support operations in a better way.



EL MOLLA: MEGA PETROLEUM PROJECTS TO BE COMPLETED IN EGYPT DURING 2017



The Egyptian Minister of Petroleum and Mineral Resources, HE Tarek El Molla, stated that 2017 will witness a quality transition in Egypt's natural gas production. The transition comes in light of the country's intentions to accelerate development plans of the discovered gas fields to start production under the umbrella of the national natural gas network to meet the domestic market needs of natural gas.

The Minister added that Egypt's current natural gas production is about 4.4 billion cubic feet/day. It is scheduled to add more than 1 billion cubic feet/day in the first phase of Dhahar Field production before the end of 2017, in addition to about ½ billion cubic feet of gas per day from the northern Alexandria concession, and about 870 million cubic feet of gas from Nawras field. Production will increase with the introduction of new wells; which would reduce LNG imports. Currently, around 1.2 billion cubic feet/d of LNG (worth about \$250 million/month) is imported. Savings would be achieved after adding the planned 1.5 billion cubic feet of gas/day (worth \$280 million/day in current prices) to production.

HE El Molla clarified that the original plan was that Egypt would achieve self-sufficiency by 2020-2021; however, current variables indicate that this is achievable before that target date.

The Minister said that the year 2017 will witness the completion of the petrochemical industry evolution that started in 2016, which resulted in the start of production at MOPCO and the Ethylene Complex expansions. It is expected that a number of new projects would be executed in 2017 at estimated investments of about \$1.5 billion including: phase 1 of the ammonia and its products project (about \$175 million of investment); Alexandria's propylene and poly propylene project (about \$1.1 billion of investment); and Kafr El Sheikh resins and medium density fiberboard production project (about \$85 million of investment).

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Petroleum Developments in the World Market and Member Countries*

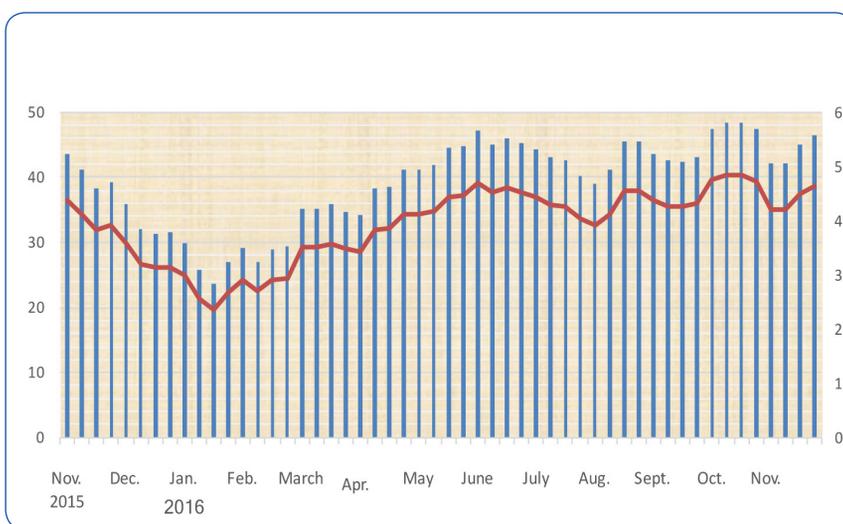
1. Oil Market

1. Prices

1-1 Crude Oil Prices

Weekly average price of OPEC basket decreased during the first week of November 2016, to reach \$42.1/bbl, and continued to raise thereafter, to reach its highest level of \$46.4/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 November 2016, averaged \$43.2/bbl, representing a decrease of \$4.7/bbl or 9.7% comparing with previous month, and an increase of \$2.7/bbl or 6.7% from the same month of previous year. Uncertainty regarding implementation of OPEC agreement which was reached in Algiers that seeks to bring forward market balance, substantial increase in global oil supplies, the surprise result of the US presidential election, and the increase in the US dollar that accompanied it, were major stimulus for the decrease in oil prices during the month of November 2016.

Key Indicators

- In November 2016, **OPEC Reference Basket decreased** by 9.7% or \$4.7/bbl from the previous month level to stand at \$43.2/bbl.
- **World oil demand** in November 2016, **decreased** by 0.8% or 0.8 million b/d from the previous month level to reach 96.6 million b/d.
- **World oil supplies** in November 2016, **decreased** by 0.2% or 0.2 million b/d from the previous month level to reach 99.8 million b/d.
- **US tight oil production** in November 2016, **decreased** by 0.9% to reach about 4.6 million b/d, whereas **US oil rig count increased** by 34 rig from the previous month level to stand at 401 rig.
- **US crude oil imports** in October 2016, **decreased** by 3.6% from the previous month level to reach 7.7 million b/d, and **US product imports decreased** by 4.6% to reach about 2.1 million b/d.
- **OECD commercial inventories** in October 2016 **decreased** by 29 million barrels from the previous month level to reach 3027 million barrels, and **Strategic inventories** in OECD-34, South Africa and China **remained stable** at the same previous month level of 1869 million barrels.
- **The average spot price of natural gas** at the Henry Hub in November 2016 **decreased** by \$0.4/million BTU comparing with the previous month to reach \$2.55/million BTU.
- **The Price of Japanese LNG imports increased** in October 2016 by \$0.1/m BTU to reach \$7.2/m BTU, the **Price of Korean LNG imports increased** by \$0.6/m BTU to reach \$7.3/m BTU, and the **Price of Chinese LNG imports increased** by \$0.6/m BTU to reach \$6.7/m BTU
- **Arab LNG exports to Japan, Korea and China** were about 3.464 million tons in October 2016 (a share of 30.6% 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)

	Nov. 2015	Dec.	Jan. 2016	FEB.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
OPEC Basket Price	40.5	33.6	26.5	28.7	34.7	37.9	43.2	45.8	42.7	43.1	42.9	47.9	43.2
Change From previous Month	-4.5	-6.9	-7.1	2.2	5.9	3.2	5.4	2.6	-3.1	0.4	-0.2	5.0	-4.7
Change from same month of previous Year	-35.1	-25.9	-17.9	-25.3	-17.8	-19.4	-19.0	-14.4	-11.5	-2.4	-1.9	2.8	2.7

* 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. As of July 2016, the basket price includes the Gabonese crude.

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

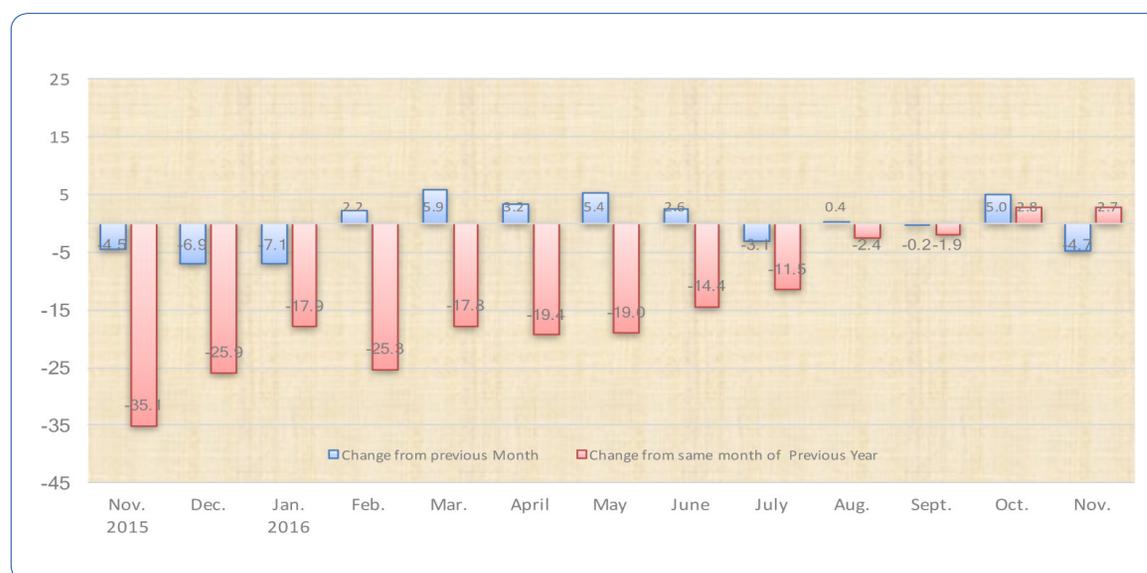


Table (3) in the annex show spot prices for OPEC basket and other crudes for the period 2014-2016.

1-2 Spot Prices of Petroleum Products

- US Gulf

In October 2016, the spot prices of premium gasoline increased by 9.7% or \$6.2/bbl comparing with their previous month levels to reach \$70.3/bbl, spot prices of gas oil increased by 10.4% or \$5.6/bbl to reach \$59.3/bbl, and spot prices of fuel oil increased by 10.4% or \$3.8/bbl to reach \$40.1/bbl.

- Rotterdam

The spot prices of premium gasoline increased in October 2016, by 5.3% or \$3.5/bbl comparing with previous month levels to reach \$70.1/bbl, spot prices of gas oil increased by 10.6% or \$5.9/bbl to reach \$61.8/bbl, and spot prices of fuel oil increased by 11% or \$4.3/bbl to reach \$43.8/bbl.

- Mediterranean

The spot prices of premium gasoline increased in October 2016, by 5% or \$3/bbl comparing with previous month levels to reach \$62.4/bbl, spot prices of gas oil increased by 10.2% or \$5.8/bbl to reach \$62.8/bbl, and spot prices of fuel oil increased by 11.2% or \$4.5/bbl to reach \$44.5 bbl.

- Singapore

The spot prices of premium gasoline increased in October 2016, by 8.6% or \$5/bbl comparing with previous month levels to reach \$63/bbl, spot prices of gas oil increased by 11.8% or \$6.5/bbl to reach \$61.6/bbl, and spot prices of fuel oil increased by 10.3% or \$4.2/bbl to reach \$45.3/bbl.

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

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

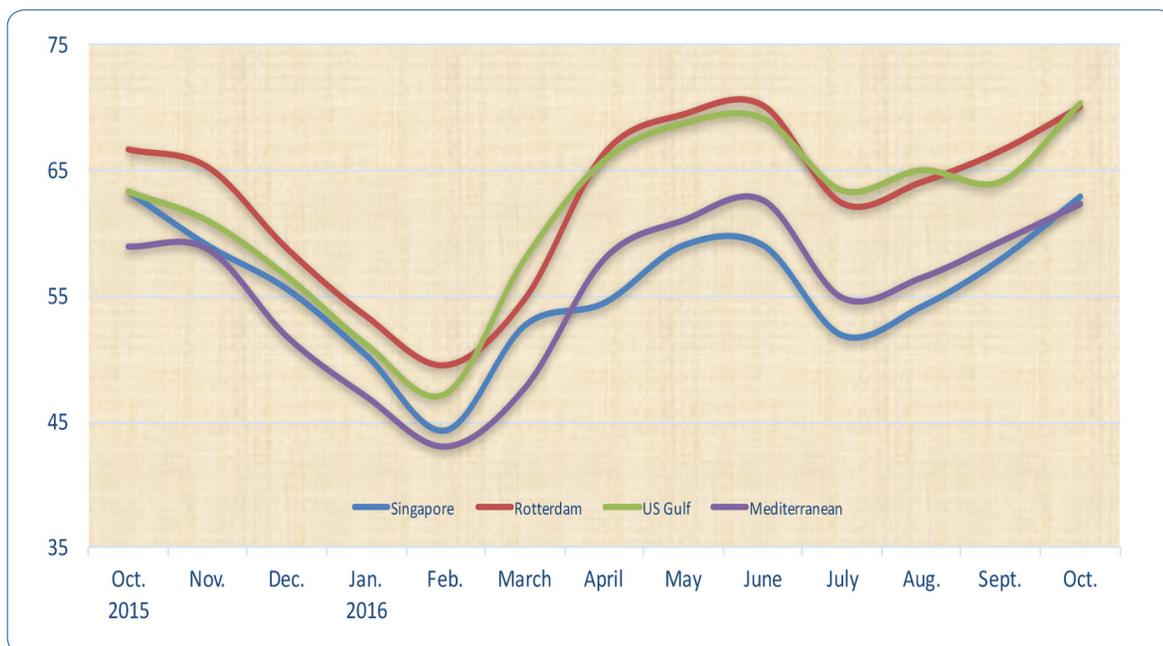


Table (4) in the annex shows the average monthly spot prices of petroleum products, 2014-2016.

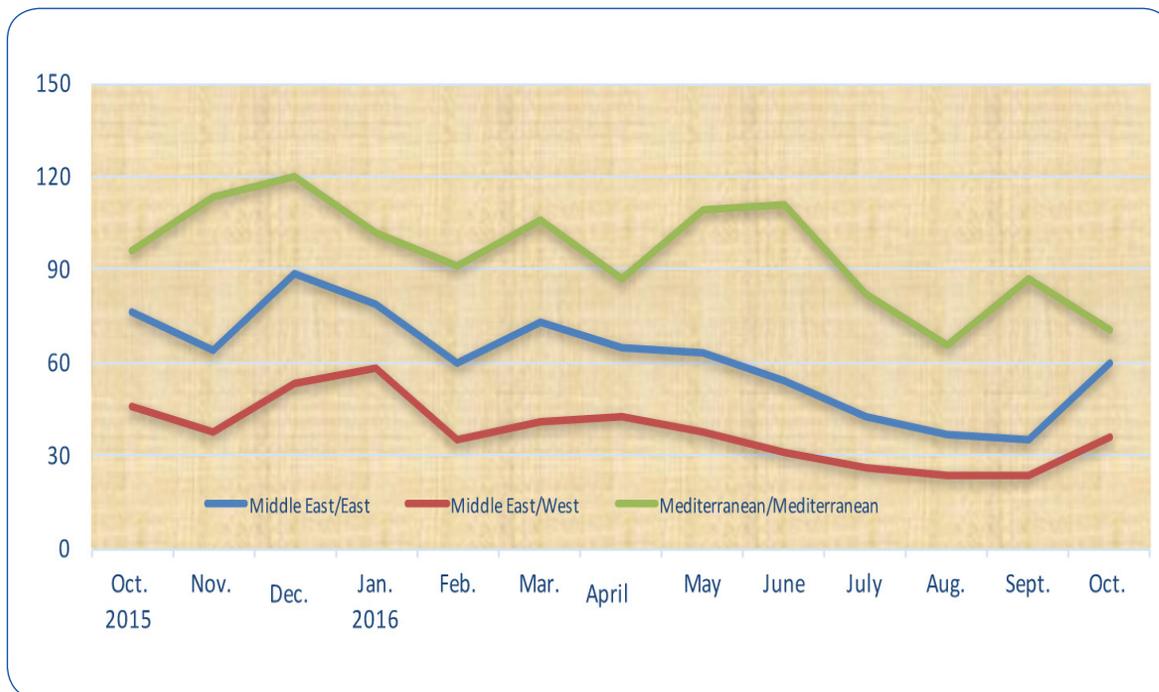
1-3 Spot Tanker Crude Freight Rates

In October 2016, Freight rates for crude oil for tanker size (230-280 thousand deadweight tons (dwt)), leaving Middle Eastern ports to the East, increased by 25 points or 71.4% comparing with previous month to reach 60 points on the World Scale (WS*), and freight rates for crude oil for tanker size (270-285 thousand deadweight tons (dwt)), leaving Middle Eastern ports to the West, increased by 12 points or 50% comparing with previous month to reach 36 points on the World Scale (WS).

Whereas freight rates for inter - Mediterranean for small to medium sized tankers (80-85 thousand deadweight tons (dwt)), decreased by 16 points or 18.4% comparing with previous month to reach 71 points on the World Scale (WS).

Figure (4) shows the freight rates for crude oil to all three destinations from October 2015 to October 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 October 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 4 points, or 4.5% comparing with previous month to reach 85 points on WS.

Whereas freight rates for Petroleum Products across Mediterranean [for tanker size 30-35 thousand deadweight tons (dwt)], increased by 11 points, or 11.1% to reach 110 points on WS, and freight rates for petroleum products [for tanker size 30-35 thousand deadweight tons (dwt)], leaving Mediterranean to North-West Europe increased by 9 points, or 8.3% to reach 117 points on WS.

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

Figure - 5 Monthly Spot Product Tanker Freight Rates, 2015 -2016 (World Scale)

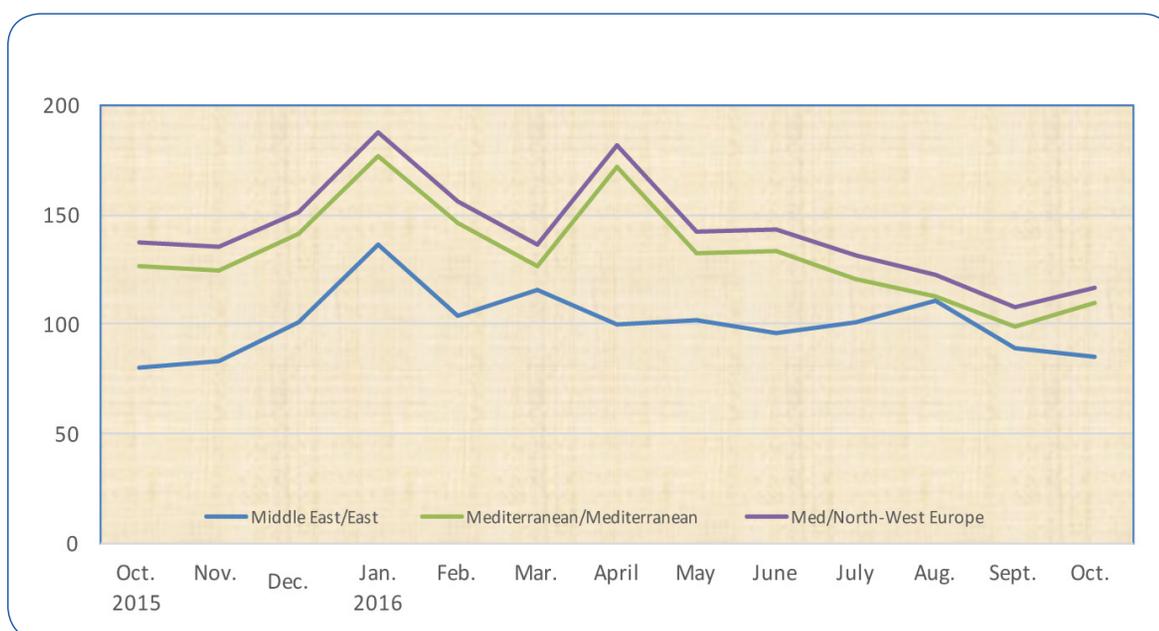


Table (5) and (6) in the annex show crude and products Tankers Freight Rates, 2014-216.

2. Supply and Demand

Preliminary estimates in November 2016 show a decrease in world oil demand by 0.8% or 0.8 million b/d, comparing with the previous month level to reach 96.6 million b/d, representing an increase of 1.8 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 46.7 million b/d, representing an increase of 1 million b/d from their last year level. And demand in Non-OECD countries decreased by 1.2% or 0.6 million b/d comparing with their previous month level to reach 49.9 million b/d, representing an increase of 0.8 million b/d from their last year level.

On the supply side, preliminary estimates show that world oil supplies for November 2016 decreased by 0.2% or 0.2 million b/d, comparing with the previous month to reach 99.8 million b/d, representing an increase of 1.5 million b/d from their last year level.

In November 2016, OPEC crude oil and NGLs/condensates total supplies decreased by 2.4% or 1 million b/d comparing with the previous month level to reach 40.2 million b/d, a level that is 0.4 million b/d higher than last year. Preliminary estimates show that Non-OPEC supplies increased by 1.4% or 0.8 million b/d comparing with the previous month level to reach 57.1 million b/d, a level that is 0.9 million b/d higher than last year.

Preliminary estimates of the supply and demand for November 2016 reveal a surplus of 3.2 million b/d, compared to a surplus of 2.6 million b/d in October 2016 and a surplus of 3.5 million b/d in November 2015, as shown in table (2) and figure (6):

Table 2 World Supply and Demand (Million b/d)

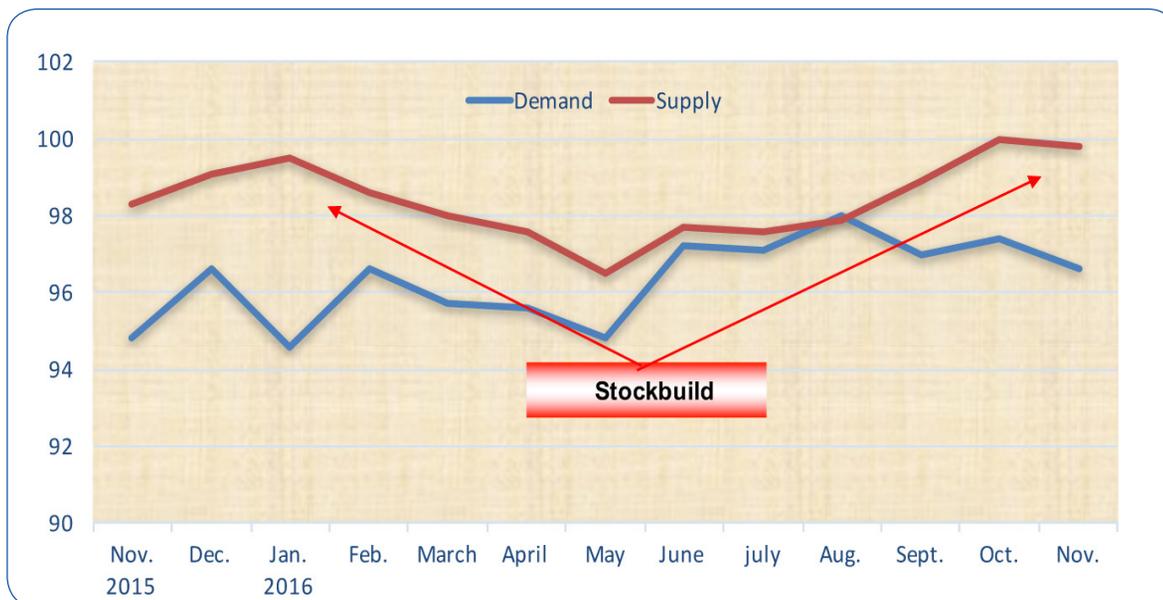
	<i>November 2016</i>	<i>October 2016</i>	<i>Change from October 2016</i>	<i>November 2015</i>	<i>Change from November 2015</i>
<i>OECD Demand</i>	46.7	46.9	-0.2	45.7	1.0
<i>Rest of the World</i>	49.9	50.5	-0.6	49.1	0.8
<i>World Demand</i>	96.6	97.4	-0.8	94.8	1.8
<i>OPEC Supply:</i>	<u>40.2</u>	<u>41.2</u>	<u>-1.0</u>	<u>39.8</u>	<u>0.4</u>
<i>Crude Oil</i>	33.3	34.3	-1.0	33.0	0.3
<i>NGL's & Cond.</i>	6.9	6.9	0.0	6.8	0.1
<i>Non-Opec Supply</i>	57.1	56.3	0.8	56.2	0.9
<i>Processing Gain</i>	2.5	2.5	0.0	2.3	0.2
<i>World Supply</i>	99.8	100.0	-0.2	98.3	1.5
<i>Balance</i>	3.2	2.6		3.5	

Source: Energy Intelligence Briefing December 6, 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 November 2016, US tight oil production decreased by 40 thousand b/d or 0.9% comparing with the previous month level to reach 4.570 million b/d, representing a decrease of 694 thousand b/d from their last year level. The US oil rig count increased by 34 rig comparing with the previous month level to reach 401 rig, a level that is 103 rig lower than last year, as shown in table (3) and figure (7):

Table 3 US* tight oil production

(Million b/d)

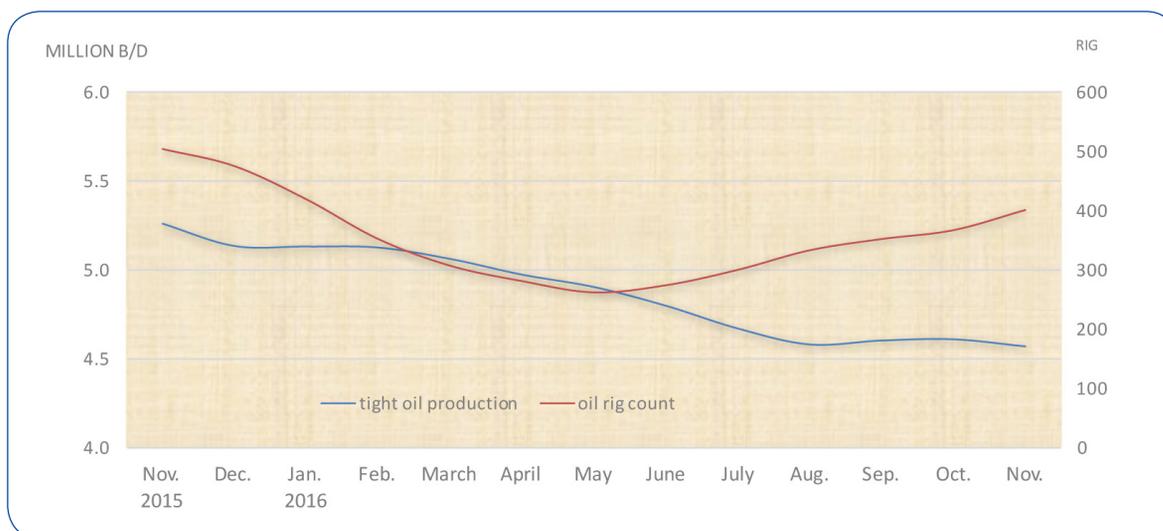
	November 2016	October 2016	Change from October 2016	November 2015	Change from November 2015
tight oil production	4.570	4.610	-0.040	5.264	-0.694
Oil rig count (rig)	401	367	34	504	-103

Source: EIA, Drilling Productivity Report for key tight oil and shale gas regions, December 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 October 2016, US crude oil imports decreased by 284 thousand b/d or 3.6% comparing with the previous month level to reach 7.7 million b/d, and US oil products imports decreased by 99 thousand b/d or 4.6% to reach about 2.1 million b/d.

On the export side, US crude oil exports decreased by 54 thousand b/d or 11% comparing with the previous month level to reach about 435 thousand b/d, and US products exports decreased by 681 thousand b/d or 14.5% to reach 4 million b/d. As a result, US net oil imports in October 2016 were 351 thousand b/d or nearly 7.1% higher than the previous month, averaging 5.3 million b/d.

Canada remained the main supplier of crude oil to the US with 41% of total US crude oil imports during the month, followed by Saudi Arabia with 16%, then Venezuela with 10%. OPEC Member Countries supplied 41% of total US crude oil imports.

Japan

In October 2016, Japan’s crude oil imports decreased by 182 thousand b/d or 6% comparing with the previous month to reach 3.1 million b/d. Whereas Japan oil products imports increased by 7 thousand b/d or 1.6% comparing with the previous month to reach 440 thousand b/d.

On the export side, Japan’s oil products exports decreased in October 2016, by 169 thousand b/d or 25.5% comparing with the previous month, averaging 493 thousand b/d. As a result, Japan’s net oil imports in October 2016 decreased by 7 thousand b/d or 0.2% to reach 3 million b/d.

Saudi Arabia was the big supplier of crude oil to Japan with a share of 41% of total Japan crude oil imports, followed by UAE with 23% and Qatar with 7% of total Japan crude oil imports.

China

In October 2016, China's crude oil imports decreased by 1.3 million b/d or 16% to reach 6.8 million b/d, and China's oil products imports decreased by 200 thousand b/d or 14% to reach 1 million b/d.

On the export side, China's crude oil exports reached 70 thousand b/d. And China's oil products exports decreased by 97 thousand b/d or 8% to reach 1.1 million b/d. As a result, China's net oil imports reached 6.6 million b/d, representing a decrease of 16.3% comparing with the previous month level.

Russia was the big supplier of crude oil to China with 17% of total China's crude oil imports during the month, followed by Saudi Arabia with 14%, and Iraq with 13%.

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

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

	Crude Oil			oil Products		
	October 2016	September 2016	Change from September 2016	October 2016	September 2016	Change from September 2016
USA	7.260	7.491	-0.231	-1.944	-2.526	-0.582
Japan	3.055	3.236	-0.181	-0.053	-0.229	-0.174
China	6.728	7.961	-1.233	-0.083	-0.023	-0.060

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

4. Oil Inventories

In October 2016, OECD commercial oil inventories decreased by 29 million barrels to reach 3027 million barrels – a level that is 72 million barrels higher than a year ago. It is worth mentioning that during the month, commercial crude inventories in OECD increased by 8 million barrels to reach 1179 million barrels, whereas commercial oil products inventories decreased by 37 million barrels to reach 1848 million barrels.

Commercial oil inventories in Americas decreased by 13 million barrels to reach 1603 million barrels, of which 634 million barrels of crude and 969 million barrels of oil products. Commercial oil Inventories in Europe decreased by 14 million barrels to reach 976 million barrels, of which 342

million barrels of crude and 634 million barrels of oil products. Commercial oil inventories in Pacific increased by 2 million barrels to reach 448 million barrels, of which 203 million barrels of crude and 245 million barrels of oil products.

In the rest of the world, commercial oil inventories decreased by 49 million barrels to reach 3040 million barrels, and the Inventories at sea decreased by 9 million barrels to reach 1206 million barrels.

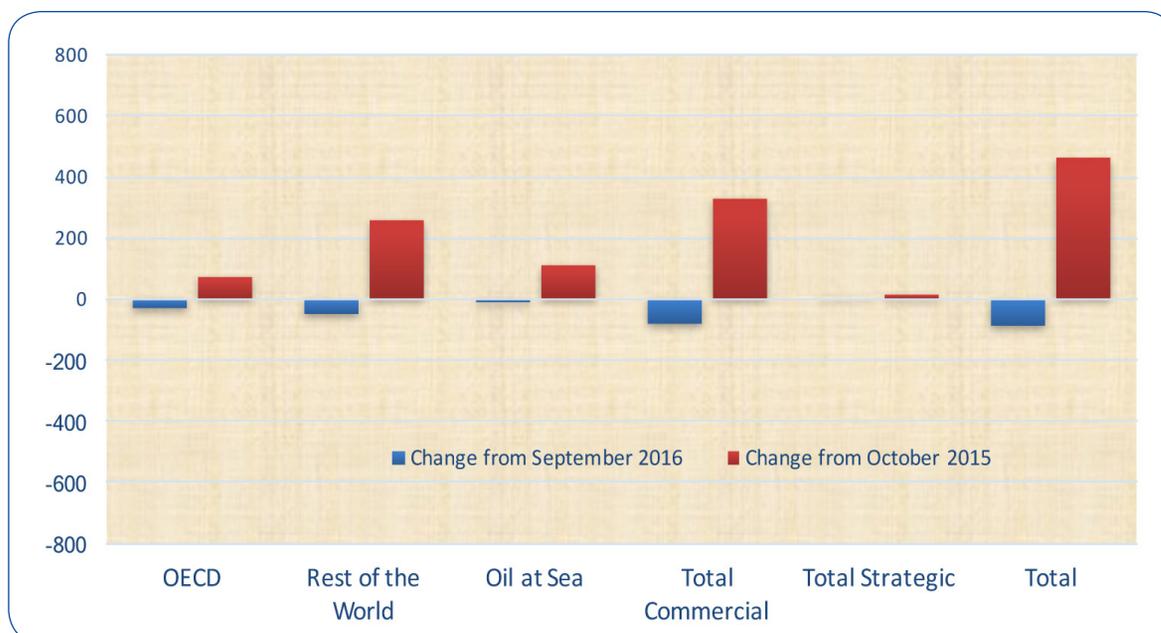
As a result, Total Commercial oil inventories in October 2016 decreased by 78 million barrels comparing with the previous month to reach 6067 million barrels – a level that is 332 million barrels higher than a year ago.

Strategic inventories in OECD-34, South Africa and China remained stable at the same previous month level of 1869 million barrels – a level that is 17 million barrels higher than a year ago.

Total world inventories, at the end of October 2016 were at 9142 million barrels, representing a decrease of 87 million barrels comparing with the previous month, and an increase of 463 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 October 2016.

Figure - 8 Changes in Global Inventories at the End of October 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 November 2016 decreased by \$0.4/million BTU comparing with the previous month to reach \$2.55/ million BTU.

The comparison, shown in [table \(5\)](#), between natural gas prices and the WTI crude reveal differential of \$5.3/ 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)

	Nov. 2015	Dec.	Jan. 2016	Feb.	Mar.	Apr. 2016	May	June	July	Aug.	Sep.	Oct.	Nov.
Natural Gas ⁽²⁾	2.1	1.9	2.3	2.0	1.7	1.9	1.9	2.6	2.8	2.8	2.8	3.0	2.6
WTI Crude ⁽³⁾	7.4	6.4	5.4	5.2	6.5	7.1	8.1	8.4	7.7	7.7	7.8	8.6	7.9

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 October 2016, the price of Japanese LNG imports increased by \$0.1/ million BTU comparing with the previous month to reach \$7.2/ million BTU, the price of Korean LNG imports increased by \$0.6/million BTU comparing with the previous month to reach \$7.3/ million BTU, and the price of Chinese LNG imports increased by \$0.6/million BTU comparing with the previous month to reach \$6.7/ million BTU.

2.2. LNG Imports

Total Japanese, Korean and Chinese LNG imports from various sources, decreased by 1.1% or 127 thousand tons from the previous month level to reach 11.307 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
August	7656	1971	2257	11884	6.7	6.3	6.0
September	6671	2236	2527	11434	7.1	6.8	6.1
October	6282	3187	1838	11307	7.2	7.3	6.7

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 3.452 million tons or 30.5% of total Japan, Korea and China LNG imports in October 2016, followed by Qatar with 23.6% and Malaysia with 14%.

The Arab countries LNG exports to Japan, Korea and China totaled 3.464 million tons - a share 30.6% 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 \$6.15/million BTU at the end of October 2016, followed by Indonesia with \$6.06/million BTU then Australia and Malaysia with \$6.01/million BTU. And LNG Qatar's netback reached \$5.84/million BTU, and LNG Algeria's netback reached \$5.52/million BTU.

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

Table7 LNG Exporter Main Countries To Japan, Korea and China, And Their Netbacks At The End Of October 2016

	Imports (thousand tons)				Spot LNG Netbacks at NE Asia Markets (\$/million BTU)
	Japan	Korea	China	Total	
Total Imports, of which:	6282	3187	1838	11307	
Australia	1873	522	1057	3452	6.01
Qatar	1180	1179	311	2670	5.84
Malaysia	902	495	183	1580	6.01
Indonesia	493	367	133	993	6.06
Russia	657	191	-	848	6.15

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



Tables Annex

