

# OAPEC

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## CRUDE OIL DEVELOPMENTS 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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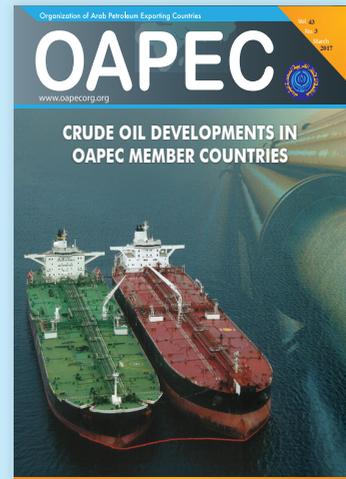


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# CRUDE OIL DEVELOPMENTS IN OAPEC MEMBER COUNTRIES

The global energy industry witnessed significant developments in the past two decades represented mainly in the growing energy demand in China and other Asian countries and the growing oil production and recovery in the USA. These factors together contributed to making noticeable changes in the global oil trade patterns in terms of exports and imports; in addition to the ongoing transformation in the structure of exports and imports and their distribution between crude oil or petroleum products.

Other factors have also contributed to changing the global trade pattern including: technological advancement in oil exploration, production, and recovery; economic developments in some developing countries like China, India, and South Korea; and the dropping oil demand in Europe and Japan.

These developments have had their direct impact on OAPEC members since they are among major oil and gas exporting countries. A recent study by OAPEC Secretariat General titled the “Development of Crude Oil and Petroleum Products Trade Pattern Worldwide” indicated that the oil trade in OAPEC members witnessed significant changes in the past two decades. These changes are represented mainly in a

drop in the volume of some traditional partners' imports while keeping 3 basic partners: Japan, South Korea, and the USA, as well as, 8 major European importing countries.

The study draws the attention to the increase in OAPEC total crude oil exports at a rate of 1.8% per annum during the period (2000-2015). Exports were nearing 19.4 million b/d in 2015 compared to 14.8 million b/d in 2000. Among OAPEC members, there were 4 countries with considerable volume of exports in 2015, namely: KSA, UAE, Iraq, and Kuwait; and 5 members with considerable volume of petroleum products: KSA, Kuwait, Qatar, Algeria, and UAE. Their exports represent about 91.6% of the members' total petroleum products exports.

The study clarified that the MENA region topped the world's oil trade movement in 2015 in terms of petroleum products exports that reached 20.6 million b/d, or 33.7% of the total global exports. It is followed by Russia, Asia/Pacific, and the USA.

The study concluded that: A) OAPEC oil exports will maintain their current status for the next two decades which is the main prevailing global oil trade pattern; B) OAPEC members will

maintain their current position among the countries with significant oil supplies surplus with the ability to make up for any oil shortage on a global level.

The study came out with a number of important recommendations including: a call to build more oil refineries and upgrade their operational capacities across OAPEC members due to the increasing importance of petroleum products trade globally and to meet the increasing domestic demand. The study also called for working on developing petroleum products trade infrastructure in the Arab countries in order to achieve intra-Arab oil trade integration.

While observing the oil trade current developments in its member countries, OAPEC Secretariat General fully appreciates its member countries' efforts in this vital sector. It stresses the presence of real opportunities to develop oil and gas cooperation among Arab countries in general, OAPEC members in particular. Based on the data provided by the above study on the current situation and future prospects of the member countries, the foreseeable future embraces success and good outcome for the oil and gas trade in OAPEC member countries. This would reflect positively on strengthening the member countries' economies.



## HE AL NAQI: DISCOVERING MORE NEW AND RENEWABLE ENERGY SOURCES IS REQUIRED AND COMPLEMENTARY TO THE TRADITIONAL ENERGY

OAPEC Secretary General HE Abbas Ali Al Naqi lauded the OPEC and non-OPEC members deal on curbing oil output. He said he had full confidence in the efforts of these countries, including Arab countries, to rebalance the global oil market.

In an interview with “Markets and Business Show” on ON LIVE TV, HE Al Naqi stressed that OAPEC encourages the discovery and use of more new and renewable energy resources as complementary to conventional energy (oil and gas), especially in electricity and petrochemicals sectors. He explained that global demand for oil and gas would continue to lead energy demand for long decades to come.

He added that OAPEC is an Arab organisation specialised in the petroleum industry and works to promote petroleum cooperation between its member countries in line with its establishment agreement. HE Al Naqi clarified that OAPEC was not involved in pricing and production which came under the jurisdiction of OPEC.

Answering a question by his host on Egyptian petroleum developments, Al Naqi said that Egypt spared no effort in developing the petroleum industry along with other energy resources. He praised the great achievements of the petroleum sector in Egypt in terms of oil and gas discoveries,



adding that “Egypt is on the right track with regards to the petroleum sector.” He explained that “Dhahar” gas discovery would contribute to supporting the Egyptian economy in the short-run because it contained gas reserves of about 32 trillion cubic feet. Al Naqi also hailed the good investment climate and recent economic achievements including the opening of the New Suez Canal, which is an addition to the Egyptian economy and is reflecting positively on encouraging more foreign companies to invest in Egypt.

HE Al Naqi also tackled the issues of environment, climate change, and UNFCCC developments explaining that Arab countries are in line with this agreement and are sparing no effort to have a planet free of pollutants. He added that these countries encourage using all technologies that help in cutting GHG emissions including CCS technology.



## THE 20<sup>TH</sup> INTERNATIONAL CONFERENCE ON PETROLEUM, MINERAL RESOURCES AND DEVELOPMENT **CALLS FOR ESTABLISHING ARAB PETROLEUM RESEARCH COUNCIL IN COLLABORATION WITH OAPEC**

OAPEC Secretary General HE Abbas Al Naqi took part in the 20th International Conference on Petroleum, Mineral Resources and Development held in Cairo on 20-22 February 2017. The event was organized by the Egyptian Petroleum Research Institute (EPRI) under the auspices and presence of Egypt's Higher Education and Scientific Research Minister HE Dr. Khaled Abdul Ghaffar and Petroleum and Mineral Resources Minister HE Eng. Tarek Al Molla. Petroleum industry experts participated in the conference, which discussed a variety of issues relevant to the petroleum industry developments.

HE OAPEC Secretary General delivered a speech at the opening of the conference in which he reviewed current developments and future prospects of the oil and gas industry in the Arab countries.

The conference recommended establishing a specialized council for Arab petroleum research under the name the "Arab Petroleum Research Council" similar to the "World Petroleum Council," in coordination and collaboration with HE OAPEC Secretary General. The goals of the new council are exchanging expertise and preparing a new generation of Arab oil, gas, and environment researchers. EPRI proposed to host the council's headquarters and administer the first conference gathering Arab researchers in this vital field.

The conference called for paying more attention to all aspects of energy research whether petroleum, new and renewable energies, or environment.





## OAPEC TAKES PART IN THE WORLD OIL & GAS SUMMIT IN BAKU

OAPEC took part in the Oil & Gas Summit held in Baku, Azerbaijan, on 16 and 17 March 2017. Over 150 oil and gas experts from 22 countries and specialized organizations, as well as, the European LPG Association took part in the event. The Secretariat General was awarded a certificate of the Best Oil Organization participating in the conference.

OAPEC Secretariat General was represented by Dr. Samir Baghdadi, Petroleum Industries' Expert at the Technical Affairs Department. He chaired the Summit's opening session and presented a keynote paper titled the "Reality and Future of the Petrochemicals Industry in OAPEC

Member Countries." The paper reviewed the role of petrochemicals in increasing the added value of oil and gas and their role in providing feedstock for the industry's development. It also highlighted the development of the petrochemicals industry in the member countries during the past 3 decades on international level in spite of the severe competition with major international producers.

The paper also tackled the most important challenges facing the petrochemicals industry in the member countries and the important role of modern technology, especially bio-technology, as one of the challenges in the near future.

**24<sup>th</sup> Forum on Fundamentals  
of Oil & Gas Industry**

**Kuwait 9-13 April 2017**



**24**

## 4<sup>TH</sup> MEETING OF THE UNECE GROUP OF EXPERTS ON GAS

Upon an invitation by the Sustainable Energy Department at the UN Economic Commission for Europe (UNECE), OAPEC took part in the 4th Meeting of the Group of Experts on Gas held in the UN headquarters in Geneva, Switzerland.

Representatives from the Economic Commission for Europe, IEA, ESCWA, IGU, GECF, Eurogas, NGVA Europe, OSCE, SIGTTO, and some international oil companies took part in the event.

There were 6 sessions beside the opening session where OAPEC Secretary General HE Abbas Ali Al Naqi gave a keynote speech expressing thanks and appreciation for the kind invitation to participate in this prestigious forum to exchange views on important energy issues. He added that the meeting gathered those in the field to find the best solutions and mechanisms that would contribute to gas sustainability in the industry's value chain. He then reviewed some important indicators explaining that OAPEC member countries account for about 55% of the world's total proven oil reserves and about 27% of the world's total proven gas reserves.

HE Al Naqi also tackled the historic importance of the European market for Arab gas exports. He explained that the total gas exports via pipelines to Europe reached about 27 billion cubic metres, or 7%, of Europe's total gas imports via pipelines in 2015. As for LNG, he stressed the distinguished status of Arab countries in the global market explaining that Europe imports more 80% of its LNG from Qatar and Algeria.

He concluded that the deep-rooted ties between the Arabs and Europeans would push towards achieving energy (demand and Supply) security for both sides.

The Secretariat General took part also in the session allocated for international



organisations on gas industry developments. Eng. Wael Abdul Mo'oti, Gas Industries Experts at OAPEC, presented a paper on the "Developments of Natural Gas Industry in Arab Countries and their Potential Implications for Europe." The session included speakers from IEA and the EU.

The paper included 4 pivotal points: most significant natural gas industry indices in Arab countries; Arab exports representing 18.5% of the total world trade (74% of which in LNG form); ongoing and planned developmental projects (expected to add 200 billion cubic metres of gas/annum with more than \$120 billion of investments); and the European market's reliance on gas exports to meet its needs by 49% eligible to increase in the future in light of declining domestic production. Therefore, injecting European investments in developing Arab gas fields would contribute to increasing production levels, which in turn would help increasing gas exports to Europe by using the existing infrastructure to benefit both sides.



UAE

## UAE TO CUT OIL OUTPUT IN MARCH/APRIL

The UAE plans to reduce oil production in March and April due to regular maintenance activities. UAE production cut for March and April will be more than 139,000 b/d, which means more than 100 percent compliance with the recent OPEC deal. The UAE has delivered a smaller portion of its pledged reduction earlier, based on its own figures and government agencies estimates.

According to the OPEC deal, the UAE was to cut output to 2.874 million b/d. however, it informed OPEC that it produced 3.06 million b/d in January 2017. In the same vein, ADNOC informed its customers of cuts in crude allocations for March and April 2017 in line with the OPEC deal.



## HE DR. AL SADA: NO ONE WINS WITH LOW OIL PRICES



Qatar's Minister of Energy and Industry HE Dr Mohamed bin Saleh Al Sada stressed that the energy sector is the core of global economy and that it will continue to play its pivotal role in supporting it in a major way in the future.

In a speech at the opening of the 'Energy and Economic Diversification Policies' roundtable, organised by the Qatar Leadership Centre (QLC) and Rice University's Baker Institute in cooperation with the Ministry of Energy and Industry and Qatar University, HE Al Sada said that fossil fuel would contribute to meeting about 75% of global energy needs by 2040. He added that oil would have the largest share of the energy sector in the few coming decades and that natural gas demand would grow at a faster pace than other types of fuel to replace coal as the second largest source of energy worldwide. He said that a study prepared by the Gas Exporting Countries Forum showed that the natural gas share in meeting the world's gas demand would grow from 21% in 2015 to 25% in 2040.

The Minister highlighted the great importance of the GCC countries in terms of the world's energy industry thanks to their huge oil and gas reserves. He also tackled the current developments in the oil market and their implications for the oil exporting countries. HE Al Sada said no one wins with low oil prices referring to economists' views saying that a healthy oil industry leads to a better global economy.

He warned that some consuming countries' concerns over reducing fossil fuel impact on environment, boosting energy efficiency, and endeavouring to increase renewables' share should not endanger energy security or aggravate climate change measures.

The Minister also highlighted the active role Qatar played in 2016 during its presidency of OPEC and the Gas Exporting Countries Forum. He said his country played a responsible role in dealing with global energy needs and oil market disturbances, as well as, seeking the best means to rebalance the global oil market.



KSA



## SAUDI & RUSSIAN ENERGY MINISTERS' MEETING COMMITMENT TO OPEC DEAL HAILED

Saudi Arabia's Energy Minister HE Eng. Khalid Al Falih met with his Russian counterpart HE Alexander Novak on 7 March 2017 in Houston, USA, on the margins of the annual CERAWEEK conference.

During the meeting, the international petroleum market conditions have been discussed. The two ministers expressed their relief on the level of cooperation between OPEC member countries and the 11 non-OPEC countries committed to the recent OPEC deal. They hailed the strong compliance of most of these countries in terms of curbing their production in line with the OPEC deal concluded in Vienna end of 2016. The two ministers reiterated the importance of the compliance of all countries with the deal which would reflect positively on the oil market.





HE AL KHALIFA:

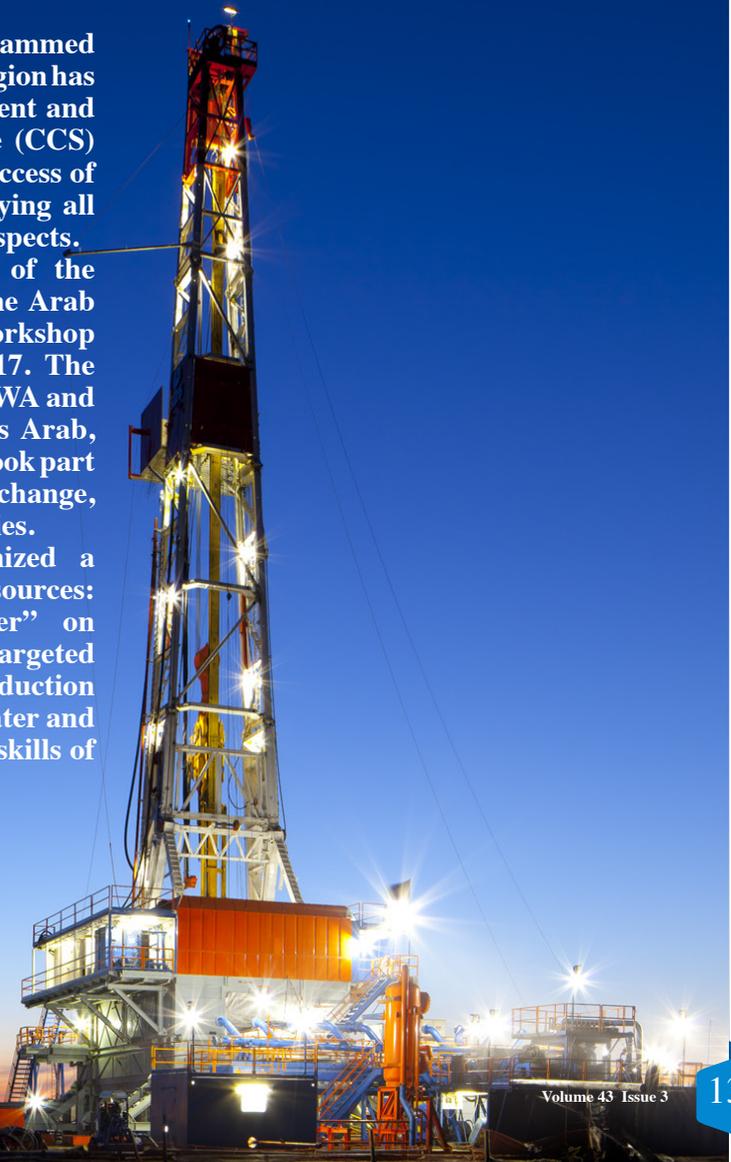
## PROMISING OPPORTUNITIES TO IMPLEMENT CCS TECHNOLOGIES IN THE ARAB REGION



Bahrain's Oil Minister HE Sheikh Mohammed bin Khalifa Al Khalifa said that the Arab region has many promising opportunities to implement and spread the Carbon Capture and Storage (CCS) technology. He added that securing the success of the use of such technology requires studying all technical, economic, and environmental aspects.

This has been said at the opening of the "Carbon Capture, Use and Storage in the Arab region, Challenges and Opportunities" workshop in Bahrain on Sunday 19 February 2017. The Event was co-organized between UNESCWA and NOGA. A group of experts from various Arab, regional, and international organisations took part in the event. Discussions tackled climate change, environmental issues, and CCS technologies.

UNESCWA and NOGA also organized a workshop titled "Efficient use of resources: correlation between energy and water" on 20 and 21 February 2017. The event targeted improving the efficiency of resources production and consumption, as well as, providing water and energy services, and improving technical skills of staff working in this field.



# GROWING ROLE OF ARAB WOMEN IN THE PETROLEUM INDUSTRY

For long decades, the petroleum industry has always been labelled as a tough man's job that needs special physical power to bear severe climate conditions from sizzling hot summer to severe cold winter. In the past two decades, these concepts have gone through major changes and women started to join the petroleum industry in significant numbers. Women now constitute about 23% of the world's total workforce in the petroleum industry; and they have proved their ability to contribute to the petroleum industry's progress in its various aspects whether exploration, production, refining, or marketing. Arab women, especially from OAPEC member countries, had their share in these changes. Working in the petroleum in



dustry is gaining increasing popularity among Arab women, which resulted in the rise of many important names of Arab women in this field who assumed senior leading positions in major Arab petroleum companies. This brief report sheds the light on the most significant achievements of

Arab women in the petroleum industry and the most important challenges facing them in the field.

## Big names

A long list of names of Arab women who work in the

petroleum industry could be put together here, however; we could only mention a few examples:

### **Engineer Sara Akbar (Kuwait):**

Her name came to front pages in 1991 when she was part of the team that put out the Kuwaiti oil wells fire at the time. She is now leading a private oil company.



Engineer Huda Al Ghosun



Engineer Badriya Abdul Raheem

**Engineer Nihad Al Kurdi (Egypt):**

Chairperson and Managing Director at Egypt's United Gas Derivatives Company (UGDC).

**Engineer Huda Al Ghosun (KSA):**

Staff Relations and Training Executive Officer at Saudi ARAMCO. She is the first

Saudi woman to assume a senior leading position in the company.

**Engineer Nabeela Al Tounsi (KSA):**

Senior Engineer at Saudi ARAMCO.

**Engineer Badriya Abdul Raheem (Kuwait):**

Deputy CEO for North Kuwait at Kuwait Oil Company (KOC).

**Ms. Husniyyah Hashim (Kuwait):**

Deputy CEO for Olefins and Aromatics at the Petrochemical Industries Company (KSC).

**Dr. Mina Maarafi (Kuwait):**

**Women account for 25% of Egypt's petroleum sector's workforce**

**Ambitious programmes empowering Arab women to work in the petroleum industry**

Executive Director at Kuwait Institute for Petroleum Research.

Having mentioned the above names, it is worth noting that there are many other important women who are sparing no effort to contribute to the development of the petroleum industry.

Moreover, Arab women have significant contributions to various sectors in the Arab petroleum companies including: petroleum economics, petroleum research, media, public relations, corporate social responsibility programmes, cultural activities, translation, accounting, finances, management, and administrative work.

**Women's Growing Role**

An important indication of the growing role of Arab women in the petroleum industry is represented in Egypt's Petroleum and Mineral Resources Minister HE Eng. Tarek Al Molla's statement that women now represent about 25% of the total workforce of the Egyptian petroleum industry. He explained that this figure is expected to go up in the future in the light of the Egyptian woman's good performance in the petroleum industry. Women represent 10% of the UAE's ADNOC staff. In Kuwait, women represent



Engineer Sara Akbar

## Big names of women who excelled in the Arab petroleum industry

### Allocating “Oil & Gas Woman of the Year Award” at ADIPEC

about 75% of the graduates of the Petroleum Engineering Department at Kuwait University.

#### Motivational Policies

In order to encourage more women to join work in the petroleum industry, some OAPEC member countries have endorsed a number of motivational policies to empower women and



guarantee gender equality in terms of opportunities. A good example is the UAE’s ADNOC Petroleum Institute that designed a programme for women on engineering and scientific studies. The programme aims at providing support and motivating female students.

ADNOC has also launched the “Oil & Gas Woman of the Year Award” at Abu Dhabi International Petroleum Exhibition and Conference (ADIPEC) to honour distinguished women in the industry. The company has also dedicated special events

at ADIPEC to discuss women empowerment in the oil and gas sector. Pioneer women took part in these discussions, as well as, a group of experts and those interested from around the world.

Also, ARAMCO has set up a department for women development and diversification in 2012. The department aims at launching different programmes to develop women’s careers and help them build up their leading skills. Moreover, ARAMCO has launched a number of initiatives to bridge the gap between the two genders at workplace, including “Science Education” programme designed to help women

develop in science, technology, engineering, and mathematics at the early stages of schooling and university through social media platforms prior to joining work.

In Kuwait, a pilot programme has been launched to increase the number of Kuwaiti female engineers working in refining operations at Kuwait National Petroleum Company (KNPC) refineries as part of the efforts to empower women in the Kuwaiti oil sector. In Egypt, the Opportunity Equality Department has been established at the Petroleum and Mineral Resources Ministry specialized in preparing regular statistics on the numbers of female and male staff working for the Egyptian petroleum sector to identify women's representation in the sector.

### Positive Sides

An article stressing the positive aspects of women's contribution in the petroleum industry has been posted on ADNOC's website. It stated that global studies and research proved that appointing women in senior leading and managerial positions increases a company's influence on society in terms of attracting new generations, and leaves a positive impact on these companies' business success. The article goes on saying that companies with female members in their board of directors achieved 15% increase in their revenues compared to companies without female members, which means that there is a relation between women representation and increasing profitability and financial success.

Building on her long career in the petroleum sector, Ms. Huda Al Ghosun sees 5 important characteristics that help women

## A woman's keys to success: commitment, efficiency, cooperation, contribution, and character

improve their work progress: commitment, efficiency, cooperation, contribution, and character. Ms. Al Ghosun said in a speech at one of the conferences "although women work climate needs studying on company level, it is a woman's responsibility to take the initiative with regards to her career; in other words, she has to be proactive in participating in initiatives to bridge the gap between the two genders and help other women in achieving their aspirations and success."

### Continuous Challenges and Obstacles

A number of specialized reports show that women's progress in the energy sector is developing in a slow but stable pace. A study by NIC, a company specialised in recruiting talented people, conducted in 2014 covering 272 female engineers showed that 75% of the sample felt they were welcomed to work in the oil and gas sector, while 50% said they did not feel appreciated in the same way their male peers did.

Engineer Sara Akbar sees various obstacles facing women in the oil and gas sector on an international level. She called upon all companies operating

in the petroleum sector to start removing these obstacles as the current stage is witnessing a transitional period with the rise of many women that succeeded in assuming senior leading positions. This makes transferring their knowledge and ideas invaluable.

### Finally

A number of OAPEC member countries' move towards motivating Arab women to work in the petroleum sector stems from the belief in the importance of the participation of all members of the society in achieving a country's economic and social development goals and future plans through the best use of economic resources and the recruitment of the best qualified and trained human resources, whether men or women.

The challenge of the increasing energy demand, both on domestic and global levels, in the future as projected by specialized international agencies is met by another challenge of no less importance that is relevant to the continuation of oil exporting countries in their policies to develop national human resources working for the Arab petroleum industry including women.



## 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 January 2017, to reach \$53.1/bbl, and continued to decline thereafter, to reach \$52.1/bbl in the second and third weeks. During the fourth week, weekly average price raised to \$52.5/bbl, as shown in figure 1:

Figure - 1 Weekly Average Spot Price of the OPEC Basket of Crudes 2016 - 2017 (\$/bbl)



On monthly basis, OPEC Reference Basket in January 2017, averaged \$52.4/bbl, representing an increase of \$0.7/bbl or 1.4% comparing with previous month, and an increase of \$25.9/bbl or 97.7% from the same month of previous year. OPEC agreement concerning curtail oil production, which was reached during OPEC 171st Meeting in Vienna, and OPEC and non-OPEC joint deal to cut production, as of the first of January 2017, were major stimulus for the increase in oil prices during the month of December 2016, to reach its highest level since July 2015, although concerns about rising US crude production, and weak Chinese trade data.

#### Key Indicators

- In January 2017, **OPEC Reference Basket** increased by 1.4% or \$0.7/bbl from the previous month level to stand at \$52.4/bbl.
- **World oil demand** in January 2017, decreased by 2.3% or 2.3 million b/d from the previous month level to reach 96 million b/d.
- **World oil supplies** in January 2017, decreased by 0.5% or 0.5 million b/d from the previous month level to reach 98.8 million b/d.
- **US tight oil production** in January 2017, decreased by 0.1% to reach about 4.8 million b/d, whereas **US oil rig count** increased by 44 rig from the previous month level to stand at 498 rig.
- **US crude oil imports** in December 2016, increased by 0.6% from the previous month level to reach 7.8 million b/d, whereas **US product imports** decreased by 16% to reach about 1.9 million b/d.
- **OECD commercial inventories** in December 2016 decreased by 36 million barrels from the previous month level to reach 2986 million barrels, and **Strategic inventories** in OECD-34, South Africa and China remained stable at the same previous month level of 1882 million barrels
- **The average spot price of natural gas** at the Henry Hub in January 2017 decreased by \$0.3/million BTU comparing with the previous month to reach \$3.30/million BTU.
- **The Price of Japanese LNG imports** in December 2016 remained stable at the same previous month level of \$7.1/m BTU, the **Price of Korean LNG imports** decreased by \$0.2/m BTU to reach \$7.3/m BTU, whereas **the Price of Chinese LNG imports** increased by \$0.3/m BTU to reach \$7.1/m BTU
- **Arab LNG exports to Japan, Korea and China** were about 4.496 million tons in December 2016 (a share of 29.4% 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, 2016-2017 (\$/bbl)

	Jan. 2016	FEB.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan. 2017
OPEC Basket Price	26.5	28.7	34.7	37.9	43.2	45.8	42.7	43.1	42.9	47.9	43.2	51.7	42.4
Change From previous Month	-7.1	2.2	5.9	3.2	5.4	2.6	-3.1	0.4	-0.2	5.0	-4.7	8.5	0.7
Change from same month of previous Year	-17.9	-25.3	-17.8	-19.4	-19.0	-14.4	-11.5	-2.4	-1.9	2.8	2.7	18.1	25.9

\* 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. As of Jan. 2017, the basket excludes the Indonesian crude.

**Figure - 2** Change in the Price of the OPEC Basket of Crudes, 2016-2017 (\$/bbl)

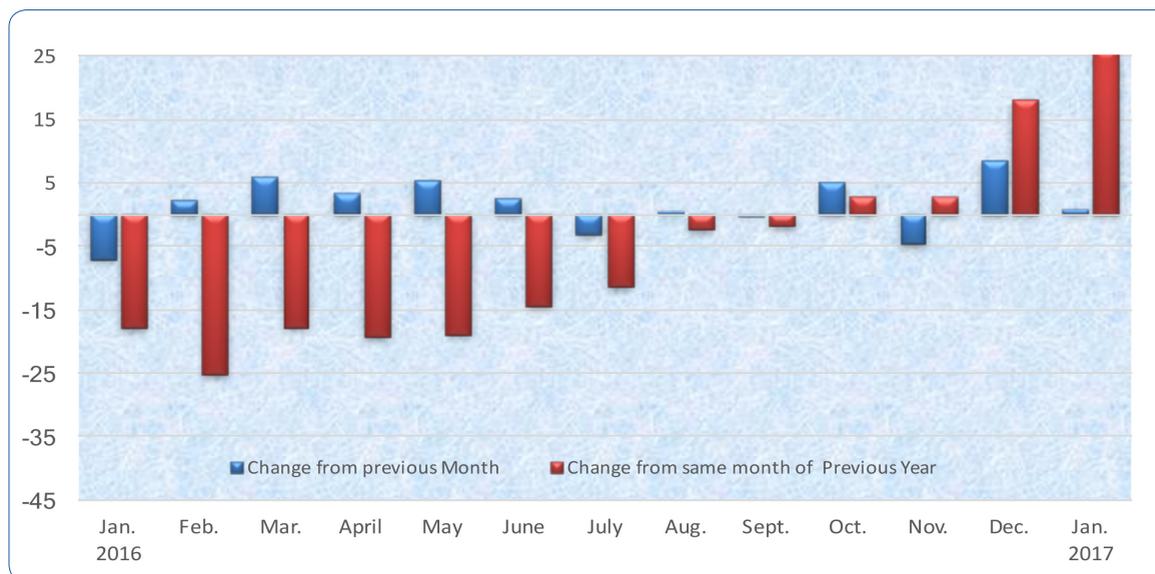


Table (3) in the annex show spot prices for OPEC basket and other crudes for the period 2015-2017.

## 1-2 Spot Prices of Petroleum Products

### - US Gulf

In January 2017, the spot prices of premium gasoline increased by 1.4% or \$1/bbl comparing with their previous month levels to reach \$72.8/bbl, spot prices of gas oil increased by 2.5% or \$1.5/bbl to reach \$62.5/bbl, and spot prices of fuel oil increased by 2.9% or \$1.3/bbl to reach \$46.8/bbl.

**- Rotterdam**

The spot prices of premium gasoline increased in January 2017, by 3.4% or \$2.4/bbl comparing with previous month levels to reach \$73.8/bbl, spot prices of gas oil increased by 0.3% or \$0.2/bbl to reach \$65.1/bbl, and spot prices of fuel oil increased by 8.4% or \$3.9/bbl to reach \$50.6/bbl.

**- Mediterranean**

The spot prices of premium gasoline increased in January 2017, by 3.2% or \$2.1/bbl comparing with previous month levels to reach \$67/bbl, spot prices of gas oil increased by 1.7% or \$1.1/bbl to reach \$66.5/bbl, and spot prices of fuel oil increased by 7% or \$3.4/bbl to reach \$52.2 bbl.

**- Singapore**

The spot prices of premium gasoline increased in January 2017, by 4.2% or \$2.8/bbl comparing with previous month levels to reach \$69.5/bbl, spot prices of gas oil increased by 2.8% or \$1.8/bbl to reach \$65.9/bbl, and spot prices of fuel oil increased by 6.6% or \$3.4/bbl to reach \$55.1/bbl.

Figure (3) shows the price of Premium gasoline in all four markets from January 2016 to January 2017.

**Figure - 3** Monthly Average Spot Prices of Premium Gasoline, 2016-2017 (\$/bbl)

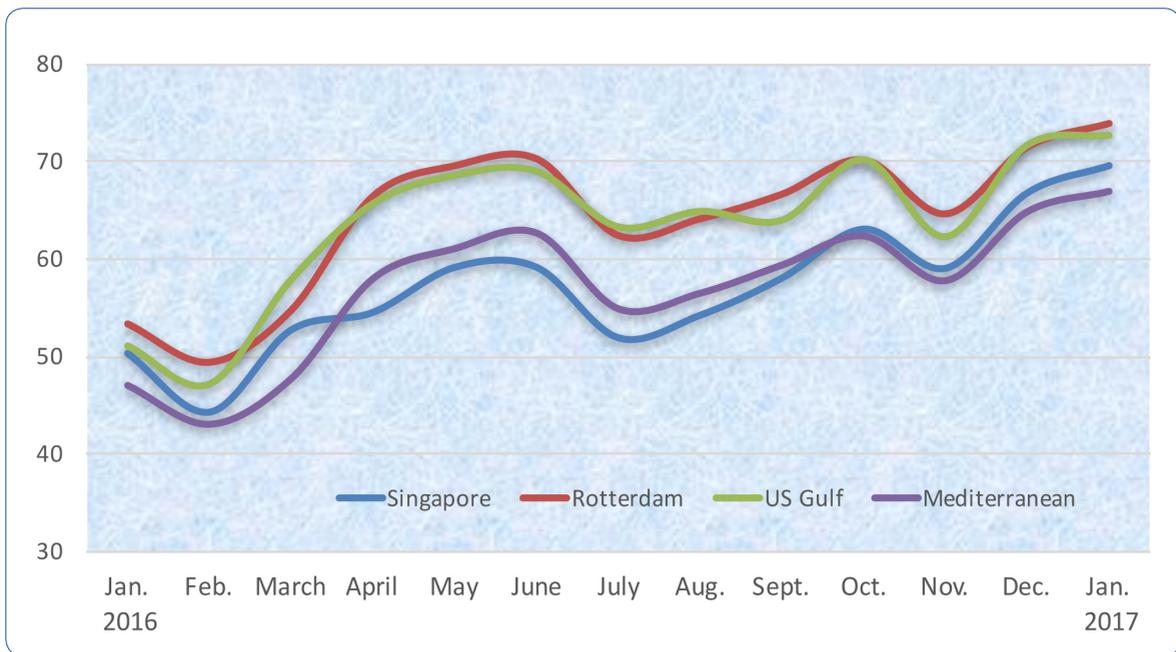


Table (4) in the annex shows the average monthly spot prices of petroleum products, 2015-2017.

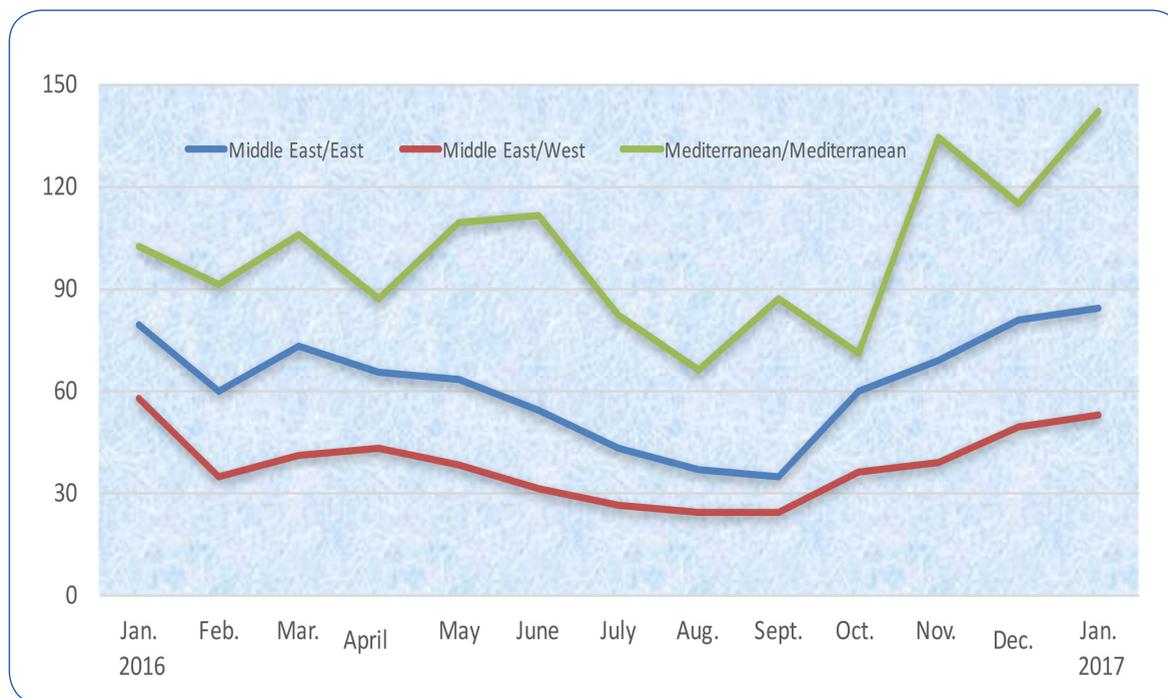
### 1-3 Spot Tanker Crude Freight Rates

In January 2017, Freight rates for crude oil for tanker size (230-280 thousand deadweight tons (dwt)), leaving Middle Eastern ports to the East, increased by 3 points or 3.7% comparing with previous month to reach 84 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 4 points or 8.2% comparing with previous month to reach 53 points on the World Scale (WS).

And freight rates for inter - Mediterranean for small to medium sized tankers (80-85 thousand deadweight tons (dwt)), increased by 27 points or 23.5% comparing with previous month to reach 142 points on the World Scale (WS).

Figure (4) shows the freight rates for crude oil to all three destinations from January 2016 to January 2017.

**Figure - 4** Monthly Spot Crude Oil Tanker Freight Rates, 2016 -2017 (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 January 2017, monthly spot Tanker freight rates for petroleum products [for tanker size 30-35 thousand deadweight tons (dwt)], leaving Middle Eastern ports to the East, increased by 35 points, or 39.3% comparing with previous month to reach 124 points on WS.

freight rates for Petroleum Products across Mediterranean [for tanker size 30-35 thousand deadweight tons (dwt)], increased by 10 points, or 5.8% to reach 183 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 15 points, or 8.2% to reach 198 points on WS.

Figure (5) shows the freight rates for oil products to all three destinations from January 2016 to January 2017.

Figure - 5

Monthly Spot Product Tanker Freight Rates, 2016 -2017

(World Scale)

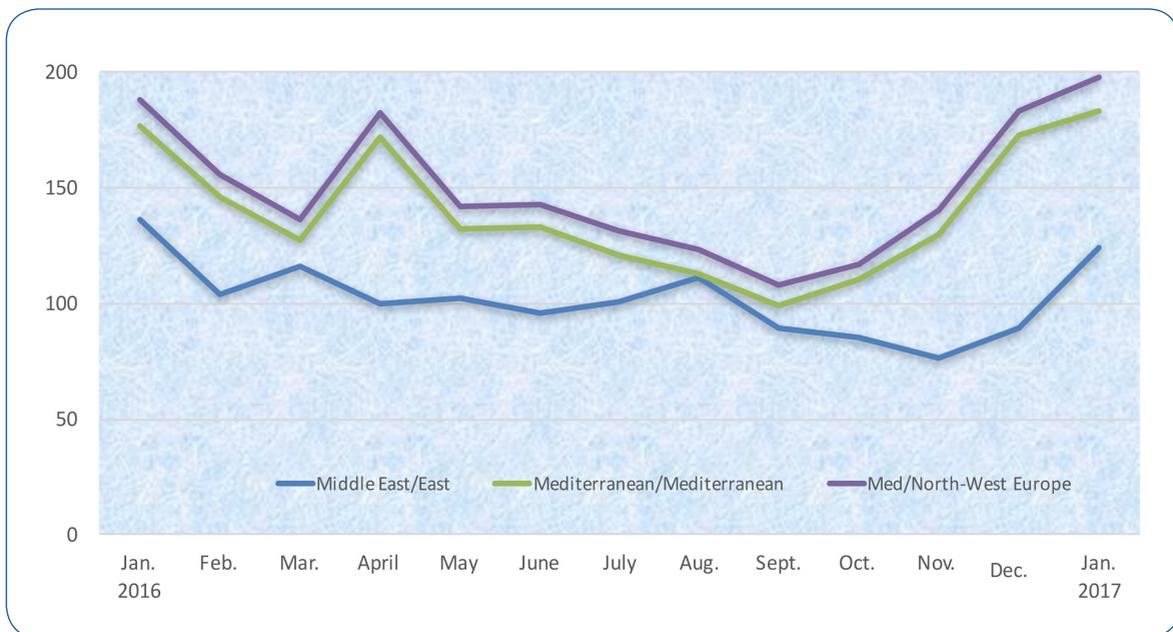


Table (5) and (6) in the annex show crude and products Tankers Freight Rates, 2015-2107.

## 2. Supply and Demand

Preliminary estimates in January 2017 show a decrease in world oil demand by 2.3% or 2.3 million b/d, comparing with the previous month level to reach 96 million b/d, representing an increase of 1.4 million b/d from their last year level.

Demand in OECD countries decreased by 3.2% or 1.5 million b/d comparing with their previous month level to reach 46 million b/d, representing an increase of 0.5 million b/d from their last year level. And demand in Non-OECD countries decreased by 1.6% or 0.8 million b/d comparing with their previous month level to reach 50 million b/d, representing an increase of 0.9 million b/d from their last year level.

On the supply side, preliminary estimates show that world oil supplies for January 2017 decreased by 0.5% or 0.5 million b/d, comparing with the previous month to reach 98.8 million b/d, representing an increase of 0.8 million b/d from their last year level.

In January 2017, OPEC crude oil and NGLs/condensates total supplies decreased by 2% or 0.8 million b/d comparing with the previous month level to reach 38.9 million b/d, a level that is 0.2 million b/d higher than last year. Preliminary estimates show that Non-OPEC supplies increased by 0.7% or 0.4 million b/d comparing with the previous month level to reach 59.9 million b/d, a level that is 0.7 million b/d higher than last year.

Preliminary estimates of the supply and demand for January 2017 reveal a surplus of 2.8 million b/d, compared to a surplus of 1 million b/d in December 2016 and a surplus of 3.4 million b/d in January 2016, as shown in [table \(2\)](#) and [figure \(6\)](#):

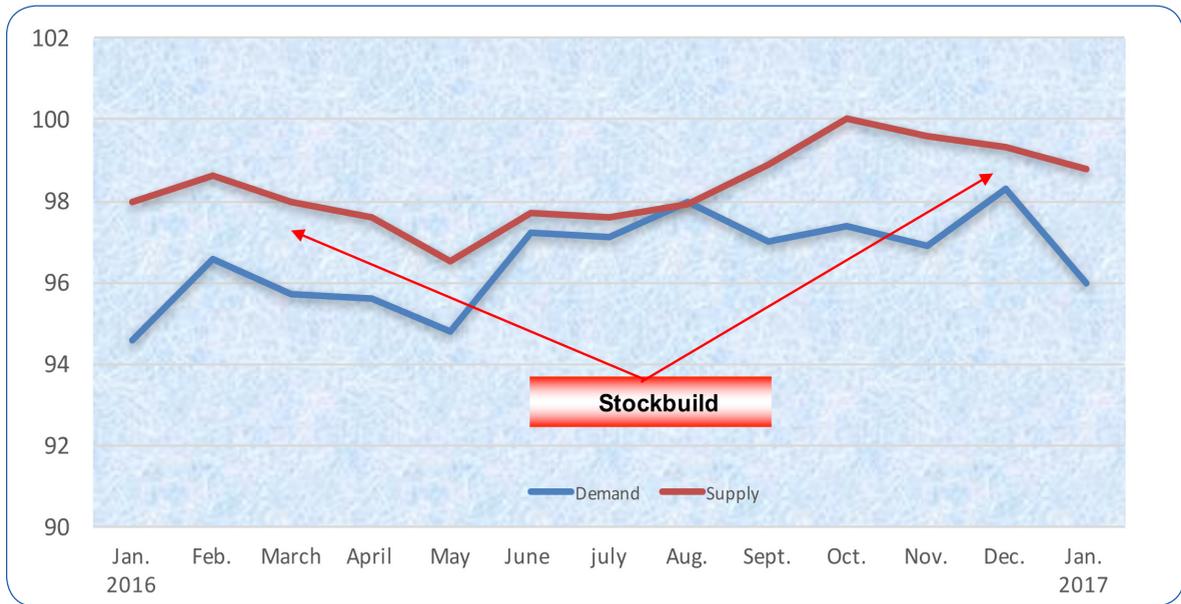
	January 2017	December 2016	Change from December 2016	January 2016	Change from January 2016
<i>OECD Demand</i>	46.0	47.5	-1.5	45.5	0.5
<i>Rest of the World</i>	50.0	50.8	-0.8	49.1	0.9
<i>World Demand</i>	<b>96.0</b>	<b>98.3</b>	<b>-2.3</b>	<b>94.6</b>	<b>1.4</b>
<i>OPEC Supply:</i>	<u>38.9</u>	<u>39.7</u>	<u>-0.8</u>	<u>38.7</u>	<u>0.2</u>
<i>Crude Oil</i>	32.1	33.0	-0.9	32.1	0.0
<i>NGL's &amp; Cond.</i>	6.8	6.7	0.1	6.6	0.2
<i>Non-Opec Supply</i>	57.4	57.1	0.3	56.8	0.6
<i>Processing Gain</i>	2.5	2.4	0.1	2.4	0.1
<i>World Supply</i>	<b>98.8</b>	<b>99.3</b>	<b>-0.5</b>	<b>98.0</b>	<b>0.8</b>
<i>Balance</i>	<b>2.8</b>	<b>1.0</b>		<b>3.4</b>	

Source: Energy Intelligence Briefing February 15, 2017.

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 January 2017, US tight oil production decreased by 5 thousand b/d or 0.1% comparing with the previous month level to reach 4.753 million b/d, representing a decrease of 374 thousand b/d from their last year level. The US oil rig count increased by 44 rig comparing with the previous month level to reach 498 rig, a level that is 79 rig higher than last year, as shown in table (3) and figure (7):

**Table 3 US\* tight oil production**

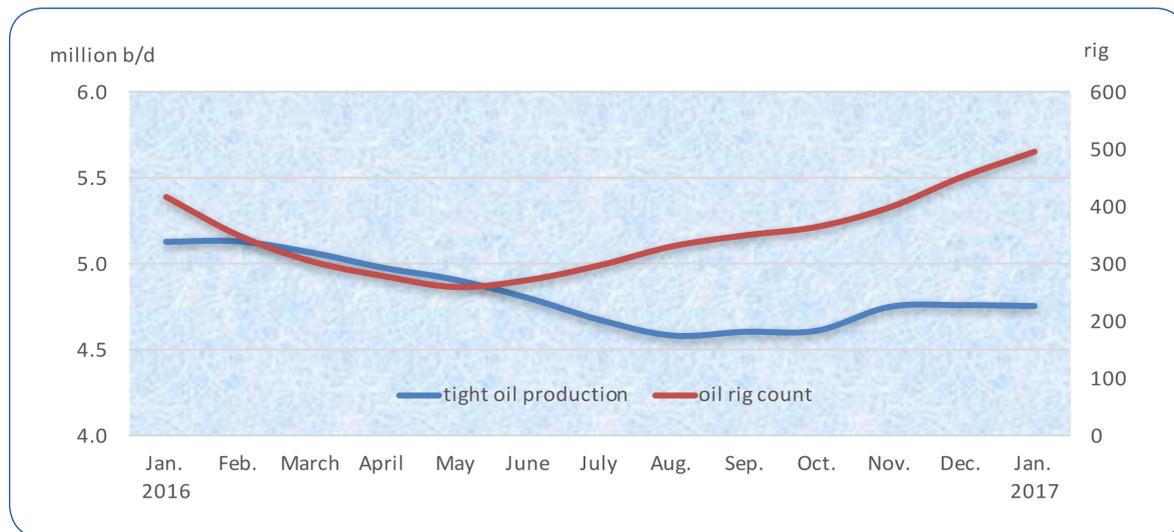
(Million b/d)

	January 2017	December 2016	Change from December 2016	January 2016	Change from January 2016
<b>tight oil production</b>	<b>4.753</b>	<b>4.758</b>	<b>-0.005</b>	<b>5.127</b>	<b>-0.374</b>
<b>Oil rig count (rig)</b>	<b>498</b>	<b>454</b>	<b>44</b>	<b>419</b>	<b>79</b>

Source: EIA, Drilling Productivity Report for key tight oil and shale gas regions, February 2017.  
 \* 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 comt**

(Million b/d)



### 3.Oil Trade

#### USA

In December 2016, US crude oil imports increased by 48 thousand b/d or 0.6% comparing with the previous month level to reach 7.8 million b/d, whereas US oil products imports decreased by 367 thousand b/d or 16% to reach about 1.9 million b/d.

On the export side, US crude oil exports increased by 130 thousand b/d or 28.4% comparing with the previous month level to reach about 589 thousand b/d, and US products exports increased by 699 thousand b/d or 15.4% to reach 5.2 million b/d. As a result, US net oil imports in December 2016 were 1.1 million b/d or nearly 22.8% lower than the previous month, averaging 3.9 million b/d.

Canada remained the main supplier of crude oil to the US with 44% of total US crude oil imports during the month, followed by Saudi Arabia with 13.1%, then Venezuela with 10%. OPEC Member Countries supplied 40% of total US crude oil imports.

#### Japan

In December 2016, Japan's crude oil imports increased by 473 thousand b/d or 15.2% comparing with the previous month to reach 3.6 million b/d. And Japan oil products imports increased by 62 thousand b/d or 11.1% comparing with the previous month to reach 622 thousand b/d.

On the export side, Japan's oil products exports increased in December 2016, by 18 thousand b/d or 3.3% comparing with the previous month, averaging 557 thousand b/d. As a result, Japan's net oil imports in December 2016 increased by 517 thousand b/d or 16.4% to reach 3.7 million b/d, the highest level seen since February 2016.

Saudi Arabia was the big supplier of crude oil to Japan with a share of 40% of total Japan crude oil imports, followed by UAE with 23% and Qatar with 10% of total Japan crude oil imports.

### China

In December 2016, China's crude oil imports increased by 697 thousand b/d or 9% to reach 8.6 million b/d, whereas China's oil products imports decreased by 20 thousand b/d or 1.7% to reach 1.2 million b/d.

On the export side, China's crude oil exports reached 81 thousand b/d. And China's oil products exports increased by 140 thousand b/d or 11.1% to reach 1.4 million b/d. As a result, China's net oil imports reached 8.3 million b/d, representing an increase of 6.5% comparing with the previous month level.

Russia was the big supplier of crude oil to China with 14% of total China's crude oil imports during the month, followed by Oman with 10%, and Saudi Arabia with 10%.

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

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

	Crude Oil			oil Products		
	December 2016	Novemder 2016	Change from November 2016	December 2016	Novemder 2016	Change from November 2016
<b>USA</b>	<b>7.207</b>	<b>7.289</b>	<b>-0.082</b>	<b>-3.324</b>	<b>-2.257</b>	<b>-1.067</b>
<b>Japan</b>	<b>3.613</b>	<b>3.140</b>	<b>0.473</b>	<b>0.065</b>	<b>0.021</b>	<b>0.044</b>
<b>China</b>	<b>8.509</b>	<b>7.848</b>	<b>0.661</b>	<b>-0.253</b>	<b>-0.093</b>	<b>-0.160</b>

Source: OPEC Monthly Oil Market Report, various issues 2016 and 2017.

## 4. Oil Inventories

In December 2016, OECD commercial oil inventories decreased by 36 million barrels to reach 2986 million barrels – the same level of a year ago. It is worth mentioning that during the month, commercial crude inventories in OECD decreased by 11 million barrels to reach 1169 million barrels, and commercial oil products inventories decreased by 25 million barrels to reach 1817 million barrels.

Commercial oil inventories in Americas decreased by 10 million barrels to reach 1613 million barrels, of which 646 million barrels of crude and 967 million barrels of oil products. Commercial oil Inventories in Europe decreased

by 11 million barrels to reach 958 million barrels, of which 330 million barrels of crude and 628 million barrels of oil products. Commercial oil inventories in Pacific decreased by 15 million barrels to reach 415 million barrels, of which 193 million barrels of crude and 222 million barrels of oil products.

In the rest of the world, commercial oil inventories increased by 1 million barrel to reach 3036 million barrels, and the Inventories at sea increased by 21 million barrels to reach 1250 million barrels.

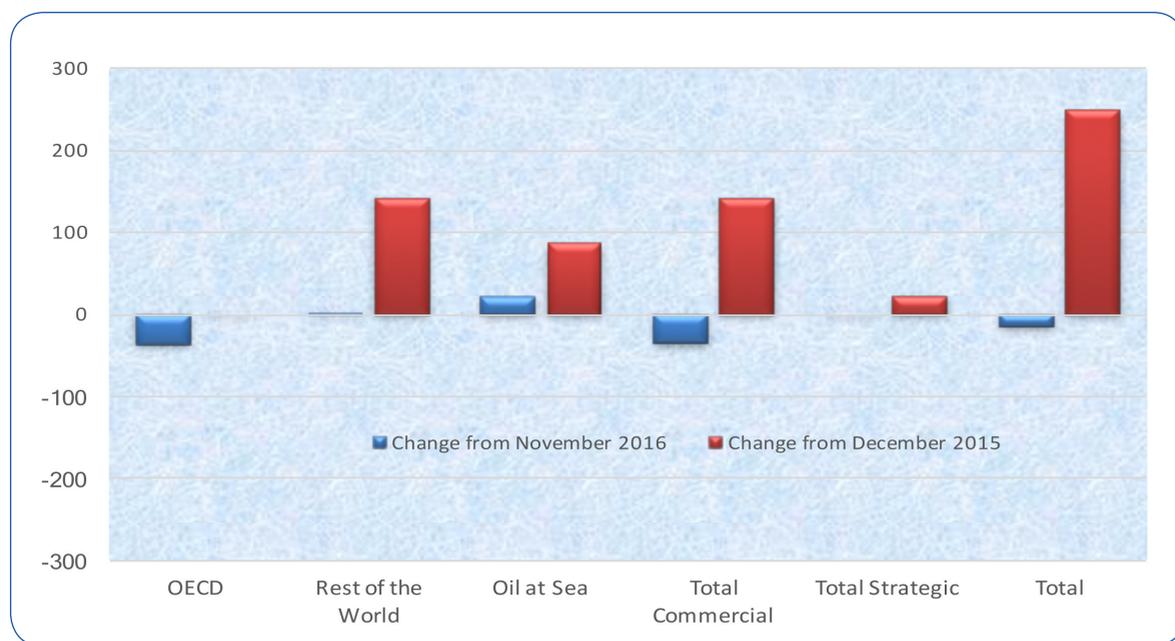
As a result, Total Commercial oil inventories in December 2016 decreased by 35 million barrels comparing with the previous month to reach 6022 million barrels – a level that is 141 million barrels higher than a year ago.

Strategic inventories in OECD-34, South Africa and China remained stable at the same previous month level of 1882 million barrels – a level that is 22 million barrels higher than a year ago.

Total world inventories, at the end of December 2016 were at 9153 million barrels, representing a decrease of 15 million barrels comparing with the previous month, and an increase of 248 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 December 2016.

**Figure - 8** Changes in Global Inventories at the End of December 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 January 2017 decreased by \$0.3/million BTU comparing with the previous month to reach \$3.30/ million BTU.

The comparison, shown in table (5), between natural gas prices and the WTI crude reveal differential of \$5.8/ 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 BTU<sup>1</sup>)

	Jan. 2016	Feb.	Mar.	Apr. 2016	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Jan. 2017
Natural Gas <sup>(2)</sup>	2.3	2.0	1.7	1.9	1.9	2.6	2.8	2.8	2.8	3.0	2.6	3.6	3.6
WTI Crude <sup>(3)</sup>	5.4	5.2	6.5	7.1	8.1	8.4	7.7	7.7	7.8	8.6	7.9	9.0	9.0

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 December 2016, the price of Japanese LNG imports remained stable at the same previous month level of \$7.1/ million BTU, the price of Korean LNG imports decreased by \$0.2/million BTU comparing with the previous month to reach \$7.3/ million BTU, whereas the price of Chinese LNG imports increased by \$0.3/million BTU comparing with the previous month to reach \$7.1/ million BTU.

#### 2.2. LNG Imports

Total Japanese, Korean and Chinese LNG imports from various sources, increased by 12.3% or 1.682 million tons from the previous month level to reach 15.308 million tons.

Table (6) shows the prices and quantities of LNG imported by Japan, South Korea, and China for the period 2015-2016.

Table6

## LNG Prices and Imports: Korea, Japan, and China 2015-2016

	Imports (thousand tons)				Average Import Price (\$/million BTU)		
	Japan	Korea	China	Total	Japan	Korea	China
<b>2015</b>	<b>84850</b>	<b>33141</b>	<b>19606</b>	<b>137597</b>	<b>10.2</b>	<b>10.6</b>	<b>8.6</b>
<b>January 2015</b>	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
<b>January 2016</b>	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
November	7545	3422	2659	13626	7.1	7.5	6.8
December	7549	4026	3733	15308	7.1	7.3	7.1

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 4.159 million tons or 27.2% of total Japan, Korea and China LNG imports in December 2016, followed by Qatar with 22.1% and Malaysia with 14.4%.

The Arab countries LNG exports to Japan, Korea and China totaled 4.496 million tons - a share 29.4% 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 \$8.66/million BTU at the end of December 2016, followed by Indonesia with \$8.55/million BTU then Malaysia and Australia with \$8.50/million BTU. And LNG Qatar's netback reached \$8.32/million BTU, and LNG Algeria's netback reached \$7.97/million BTU.

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

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

	Imports (thousand tons)				Spot LNG Netbacks at NE Asia Markets (\$/million BTU)
	Japan	Korea	China	Total	
<b>Total Imports, of which:</b>	<b>7549</b>	<b>4026</b>	<b>3733</b>	<b>15308</b>	
Australia	2104	547	1508	<b>4159</b>	<b>8.50</b>
Qatar	1108	1308	974	<b>3390</b>	<b>8.32</b>
Malaysia	1388	652	160	<b>2200</b>	<b>8.50</b>
Indonesia	595	376	256	<b>1227</b>	<b>8.55</b>
Russia	789	255	—	<b>1044</b>	<b>8.66</b>

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



## Tables Annex

