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Department of Economics



BACHELOR THESIS

**The EU dependency on the crude oil from the Middle East, case study of
Middle East crude oil**

Author: Nina Dvořáková

Supervisor: Ing. Mansoor Maitah, Ph.D.

Prague 2009 ©

Declaration

I declare that I have worked on the Bachelor thesis “The dependency of EU on crude oil, case study of the Middle East oil” on my own and I have used only the sources mentioned in the references.

Prague, April 30, 2009

.....

Nina Dvořáková

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**The dependency of EU on crude oil,
case study of the Middle East oil**

**Závislost Evropské unie na ropě
Blízkého východ**

Souhrn

Ropa se během druhé poloviny devatenáctého století stala nepostradatelnou surovinou a moderní společnost je na ní zcela závislá. Bez přístupu k ropě za rozumnou cenu by zkolabovala současná globální ekonomika i každodenní život. Vzhledem k faktu, že spotřeba ropy států Evropské unie mnohonásobně přesahuje její vlastní produkci, je potřeba importu ropy nevyhnutelná. V dnešní době je Evropská unie závislá z 52 % na dovozu ropy ze států bývalého Sovětského svazu a z 23 % na ropě z Blízkého východu. [BP 2007] Největší světové zásoby ropy se nacházejí na Blízkém východě, Saudská Arábie je jejím největším producentem. Vzájemná spolupráce mezi EU a GCC se proto jeví jako výhodná. Vztahy mezi GCC a Evropskou unií jsou důležité pro vzájemnou spolupráci nejen k zajištění aktuálních i budoucích dodávek ropy, ale také pro oboustranný rozvoj. Samozřejmě by bylo lepší, kdyby Evropa nebyla závislá na dodávkách ropy z cizích zemí, ale to se nikdy nemůže stát. Důvodem je jak zmíněná mnohonásobně vyšší spotřeba než produkce ropy ve státech EU, tak i fakt, že produkce ropy ve státech EU již dosáhla kolem roku 2000 svého možného maxima a tudíž její produkce bude v budoucnosti klesat. [EWG 2007]

Klíčová slova: ropa, EU, Blízký východ, zásoby ropy, GCC, závislost na ropě,

Summary

The crude oil has become the indispensable raw material during the second half of the 19th century and modern society is fully dependent on it. Without free access to oil at reasonable prices, the global economy and the lifestyle of almost everyone would collapse. Nowadays the EU is from 52 % dependent on crude oil supply from the states of Former Soviet Union and from 23 % dependent on Middle East's oil supply. [BP 2007] The Middle East has the biggest crude oil reserves in the world and Saudi Arabia is the biggest oil producer. The relations between two regional blocks, the GCC and the EU are very important for further cooperation and crude oil supply. However, it would be much better if Europe (EU) would not be dependent on crude oil supplies from foreign states. But this will never happen. The reason is that Europe has much higher consumption than production and fact that oil production in European states has already peaked in 2000 and thus its production will continuously decrease. [EWG 2007]

Keywords: crude oil, EU, Middle East, oil reserves, GCC, oil dependency

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1. Introduction

Crude oil is clearly the most important energy source in a global perspective. The major part of the world's primary energy consumption (35 %) is supplied by oil, followed by coal (25 %) and natural gas (21 %). [WEO, 2006] Transport relies to well over 90 percent on oil, be it transport on roads, by ships or by aircrafts. Since crude oil is the most important energy carrier at a global scale, since all kinds of transport rely almost absolutely on oil and since substitution of oil by other fossil or renewable energy sources is at least very difficult at the moment, the future availability of crude oil is of paramount interest.

Because of the undeniable importance of crude oil, I will mention some basic information of this non-renewable resource such as history of oil (with interest of Gulf Cooperation Council- GCC countries) and oil price development. In the Middle East there are the world's largest oil reserves, mainly in Saudi Arabia, which is a member of the GCC. This integration associates six states in Persian Gulf and it is very important for international trade and commerce with the rest of the world. That is why the EU-GCC relation has been established.

This thesis is describing issues of crude oil supplies, mainly the problems related to European region (the European Union). The EU has no significant crude oil reserves and thus the production can never satisfy the EU's quite high consumption. That is why Europe is heavily dependent on imported crude oil from foreign countries, primarily from Russia and Middle East. So the aim of this work is to find out how much is the EU dependent on crude oil supplies from the Middle East region.

2. Objectives of thesis and methodology

The aim of this thesis is to deal with the problems of the EU dependency on crude oil originating from Middle East countries integrated within the Gulf Cooperation Council.

The major objectives are to clarify main characteristics of the Middle East crude oil, to qualify and explain the Gulf Cooperation Council, to define the GCC member states and their tribute to global crude oil production and to demonstrate how far is the EU dependent on crude oil imported from GCC integration.

In this thesis was used the quantitative method which helped the author to identify patterns and relationship in the data used. The analysis of dependence is based primarily on secondary data which are easily observed and are more reliable than the reserve data. These data were collected through published researches, literature and Internet articles. There were also used the author's own calculations which are based on various books and several Internet sources. The predictions are based also on the observed results and few dependence indicators.

3. Literature overview

3.1 Middle East crude oil (GCC)

3.1.1 History of crude oil¹

People were searching for the proper use of crude oil for thousands of years and during that time they have used it for a variety of purposes. 4000 years ago was a tar-like asphalt used to fortify walls and towers in ancient Babylon and Jericho (mentioned also in The Bible too) and ancient Persians used petroleum for medicine and light. Petroleum was also exploited by Ancient Romans in province of Dacia (now Romania).

Old Chinese in 4th century were the first to drill wells to collect it, the oil was burned to evaporate brine and produce salt. The wells were dug using bits attached to bamboo poles and they were up to 240m deep. By the 10th century oil wells and salt springs were connected by extensive bamboo pipelines. That time the first streets of Baghdad were paved with tar, derived from petroleum accessible from natural fields in the region. Oil fields near Baku, Azerbaijan originally exploited in the 9th century were described in 13th century by Marco Polo in his book The Million. He depicted the output of those wells as hundreds of shiploads.

The modern history of petroleum began in the middle of 19th century, precisely in 1846 with the discovery of the process of refining kerosene from coal by Canadian Abraham Pineo Gesner. In 1852 Ignacy Łukasiewicz improved his method to develop means of refining kerosene from more readily available „rock-oil“ (petr-oleum) seeps. The first rock mine oil was built in Bóbrka in Poland 1853. One year after Benjamin Siliman at Yale University in New Heaven was the first one to fractionate petroleum by distillation. The first Russian refinery in the oil fields in Baku built in 1861 produced about 90% of the world's oil. The first oil well in North America was Oil Springs in Ontario, Canada dug in

¹ http://americanhistory.suite101.com/article.cfm/history_of_crude_oil

1858. The US petroleum industry began with Edwin Drake's 21m deep oil well on Oil Creek in Pennsylvania in 1859.

Whole industry was growing through the 1800s, driven by the demand for kerosene and oil lamps (instead of whale oil). With Edison's invention of an electric light-bulb in 1878 came the industry in the U.S. into the recession, because the demand for kerosene was eliminated. Soon afterwards oil burners for steam engines were used to power machines and later locomotives. In 1886 Karl Benz and Gottlieb Daimler introduced first gasoline-powered automobiles in Europe leading to increased demand that has largely sustained the industry to this day. Prior to the automobile, gasoline was a cheap solvent produced as a by-product of kerosene distillation.

At the end and in the beginning of the 19th century significant oil fields had been discovered in Dutch East Indies (Sumatra, 1885), Iran (Masjed Soleiman, 1908), Canada (province Alberta, 1910), Peru, Venezuela and Mexico. During World War II, oil facilities were a major strategic asset and were extensively bombed.

Even until the mid-1950s coal was still the world's foremost fuel, but oil quickly took over. Following the 1973 energy crisis and the 1979 energy crisis, there was significant interest about oil supply levels. This brought to light the concern that oil is a limited resource that will eventually run out. At the time, the most common and popular predictions were quite dire. However, a period of increased production and reduced demand caused an oil glut in the 1980s.

Today, about 90% of vehicular fuel needs are met by oil. Petroleum's worth as a portable, dense energy source powering the vast majority of vehicles and as the base of many industrial chemicals makes it one of the world's most important commodities. Access to it was a major factor in several military conflicts of the late twentieth and early twenty-first century, including World War II the Persian Gulf Wars (Iran-Iraq War, Operation Desert Storm and the Iraq War).

3.1.2 History of crude oil in the Middle East (GCC)

There is a basic overview when the crude oil was found and has been produced in the member states of GCC integration. [Maitah, 2004]

United Arab Emirates

- first discovered: in 1958 (beneath the coastal waters of Abu Dhabi), onshore petroleum was found in 1960
- beginning of production: in 1962

Saudi Arabia

- first discovered: in 1938 (Dammam number 7)
- beginning of production: in 1938

Bahrain

- first discovered: in 1932 (first in the Persian Gulf)
- beginning of production: in 1934

Qatar

- first discovered: in 1940 (Dukhan Field)
- beginning of production: in 1940 (Qatar was the fourth after Bahrain, Saudi Arabia and Kuwait to begin production)

Kuwait

- first discovered: in 1938
- beginning of production: 1946

Oman

- first discovered: 1960, 1964 (Yibal and neighboring Fahud)
- beginning of production: in 1960 (was unable to export oil until 1967)

3.1.3 World crude oil prices [Maitah, 2004]

The price of petroleum as quoted in the news generally refers to a spot price of either WTI/Light Crude as traded on the New York Mercantile Exchange (NYMEX) for delivery in Cushing, Oklahoma, or of Brent as traded on Intercontinental Exchange (ICE) for delivery at Sullom Voe (Shetland, Scotland).

The price of a barrel of oil is highly dependent on both its grade, determined by factors such as its specific gravity or API (American Petroleum Institute) gravity (is a measure of how heavy or light a petroleum liquid is compared to water) and its sulphur content, and its location. The vast majority of oil is not traded on an exchange but on an over-the-counter basis. Other important benchmarks include Dubai, Tapis, and the OPEC basket. The Energy Information Administration (EIA) uses the imported refiner acquisition cost, the weighted average cost of all oil imported into the US, as its "world oil price".

The demand for oil is highly dependent on global macroeconomic conditions. According to some economists, high oil prices generally have a large negative impact on the global economic growth. Others argue that the run-up in oil prices over the past few years actually led to the acceleration in global growth. The huge surpluses built up by oil exporting countries were recycled through sovereign wealth funds and the banking system and (through the money multiplier) greatly increased investments in emerging markets and helped hold down interest rates in the U.S.

The Organization of the Petroleum Exporting Countries (OPEC) was formed to control the price of oil, and essentially worked as a cartel.

Oil price has undergone a significant decrease since the record peak it reached in July 2008. On December 23, 2008, WTI crude oil spot price fell to US\$30.28 a barrel, the lowest since the global financial crisis began, and has been trading between US\$35 a barrel and US\$50 a barrel in 2009.

3.1.4 World crude oil reserves

The crude oil reserves are defined as “quantities of petroleum claimed to be commercially recoverable by application of development projects to known accumulations under defined conditions”². All reserves are divided into two groups, such as proven reserves and unproven reserves according to the relative degree of uncertainty (see Chart 1).

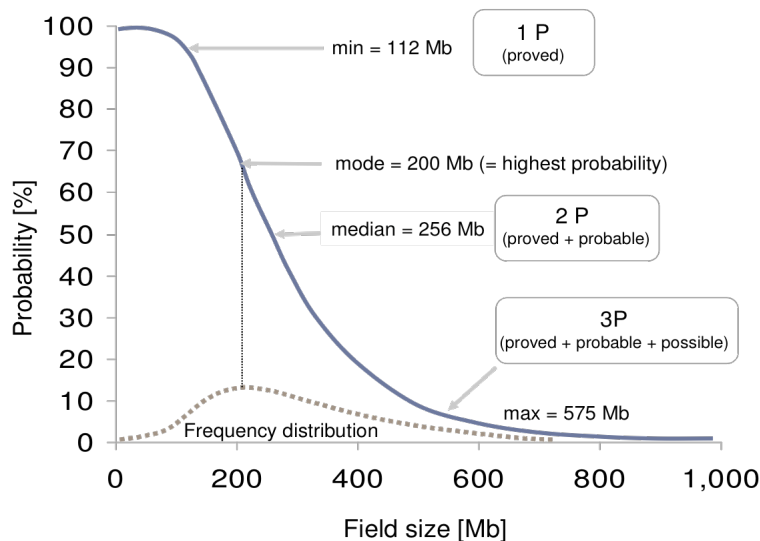


Chart No.1: Reserve assessment of the recoverable crude oil
Source: Petroconsultants, 1995

- Proven reserves (P90, P1)³: are those that “have a 90 % of confidence to be recoverable under existing political and economic conditions and using existing technology”⁴. These are only ones that are allowed to oil companies to give them to investors according to the US Securities and Exchange Commission. It has been estimated the current proven crude oil reserves in 2009 (see Chart 2).

² Petroleum Resources Management System, Society of Petroleum Engineers, 2007, page 3.

³ , "Glossary of Terms Used in Petroleum Reserves/Resources" (PDF). Society of Petroleum Engineers. 2005., page 10.

⁴ "Glossary of Terms Used in Petroleum Reserves/Resources" (PDF). Society of Petroleum Engineers. 2005, page 10.

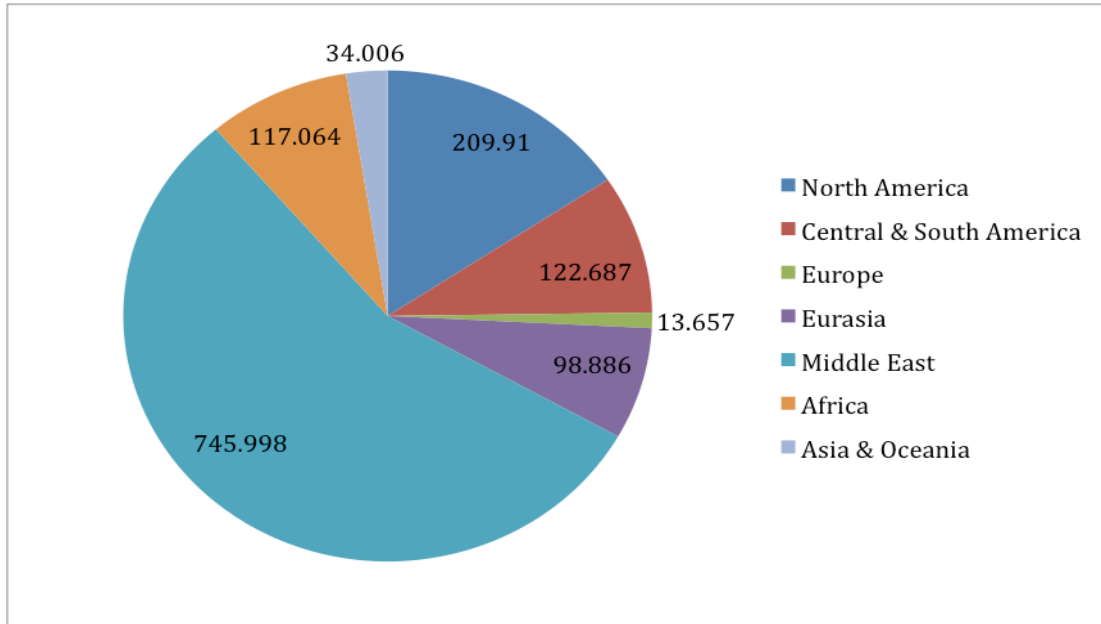


Chart No.2: World Proven Oil Reserves in 2009 Estimates (billion barrels)

Source: EIA/ own chart

According to the topic of this thesis I also added the most discussed oil reserves in Middle East- concretely those in the GCC integration (Chart 3).

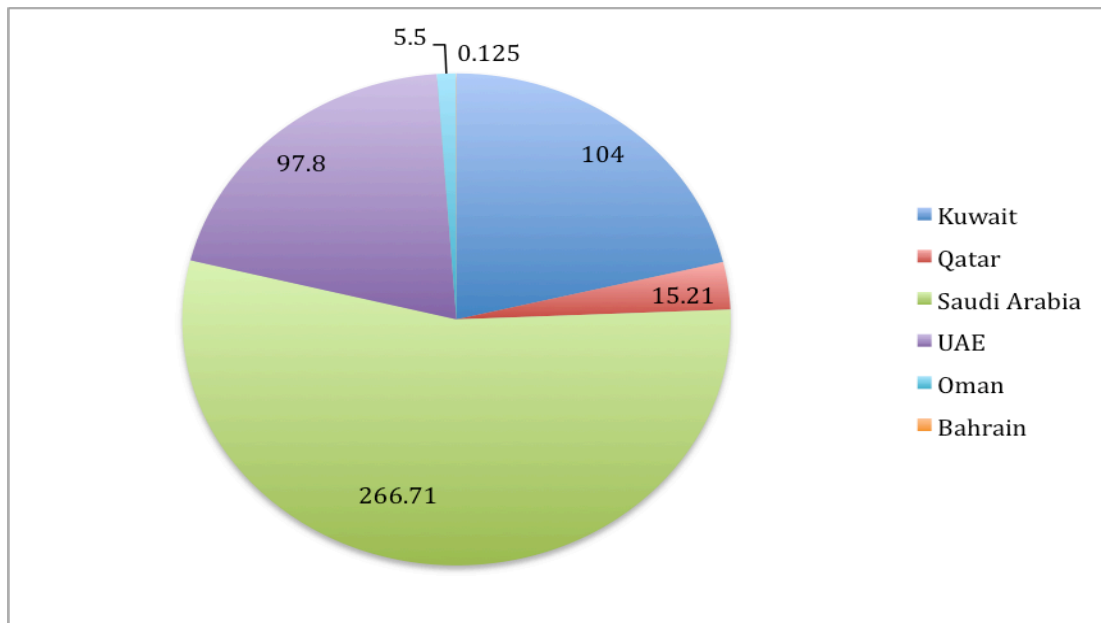


Chart No.3: GCC Proven Oil Reserves in 2009 Estimates (billion barrels)

Source: EIA/ own chart

- Unproven reserves:
 - Probable (P50, P2)⁵: these reserves have 50 % of confidence of recovery.
 - Possible (P10, P3)⁶: are those that have at least 10 % of confidence that they will be produced. This group is used to be more specific about future reserves and methods.
- There exist also the strategic reserves, which are not included in proven reserves but these are used by many countries to control their reserves, and thus their national security. At present, the strategic reserves are 4.1 billion barrels (EIA).

⁵ "Glossary of Terms Used in Petroleum Reserves/Resources" (PDF). Society of Petroleum Engineers. 2005, page 9.

⁶ "Glossary of Terms Used in Petroleum Reserves/Resources" (PDF). Society of Petroleum Engineers. 2005, page 8.

3.1.5 Production of crude oil

Production of crude oil refers to how much crude oil is extracted from proven reserves.

Mentioned above, the Middle East countries have the largest crude oil reserves in the world. It is approximately 56 % of all reserves. In comparison, Europe including Former Soviet Union has overall share of 22 % (see Chart 4).

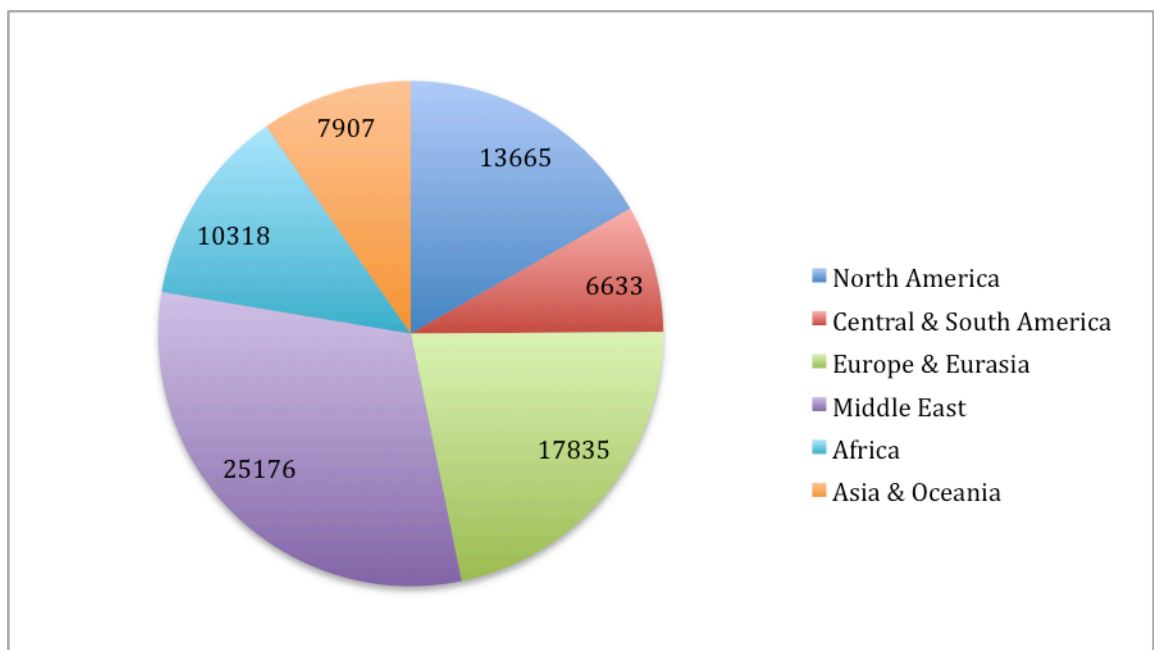


Chart No.4: World Oil Production in 2007 (thousands barrels daily)

Source: BP, 2008/ own chart

So it means that Europe even with Russia (the second biggest crude oil producer) possesses only the half of Middle East production per day. Thus, this is the reason to see Middle East as the number one oil producers of all. There are two states out of top five oil producers from the Middle East region. These are namely Saudi Arabia with the biggest share of 28 % and second one is Iran with 23 % (see Chart 5).

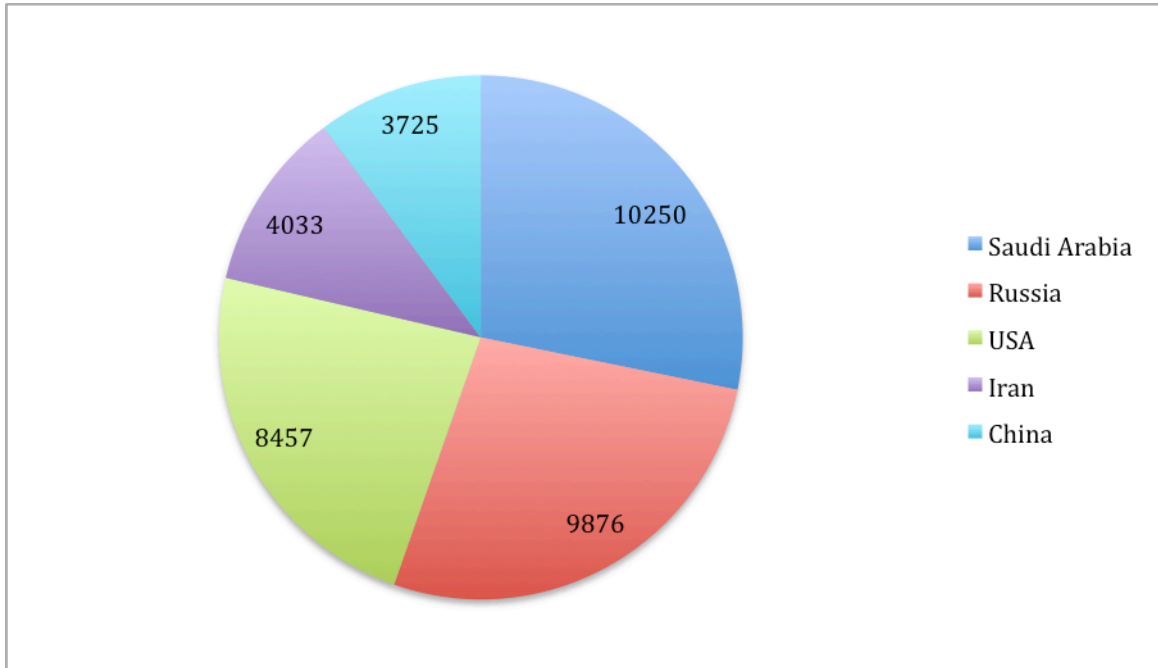


Chart No.5: Top 5 Producers in 2007 (thousands barrels daily)
 Source: CIA/ own chart

With the interest on the GCC countries we can observe that the GCC share of the Middle East production has reached almost $\frac{3}{4}$ which is in numbers 18,596 thousands bbl per day (see Chart 6). All the six GCC states are important oil producers with minimum oil consumption of course.

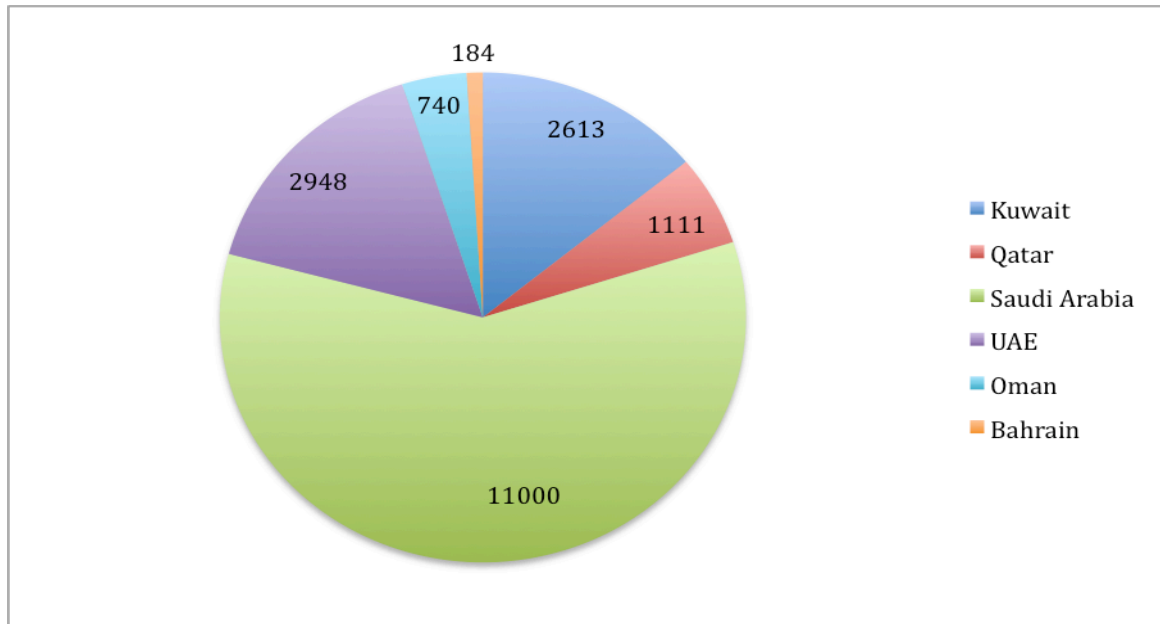


Chart No.6: GCC Oil Production in 2007 (thousands barrels daily)

Source: CIA/ own chart

According to the BP Statistical review 2008, the global oil production fell by 0.2 %, the first decline since 2002. OPEC production dropped by 350,000bl/d due to the cumulative impact of production cuts implemented in November 2006 and February 2007. Among the 10 members participating in production cuts, crude oil output fell by 900,000bl/d. Saudi Arabia's output dropped by 440,000bl/d, the largest decline in the world last year. Oil production growth outside OPEC remained weak, rising by 230,000bl/d in 2007. Production in both Norway and Mexico declined by more than 200,000bl/d. Former Soviet Union output rose by nearly 500,000bl/d.

3.1.6 Crude oil consumption

Crude oil has the biggest share on in world energy consumption with 35 % it is followed by coal with 25 % and natural gas with 21 %. [WEO 2006] Oil consumption is noticeable and it grows rapidly. Why? One possible reason may be that the oil is liquid and it is easily produced and transported. And it has been still the cheapest transportation fuel of all that is why it is the people's most used fuel ever.

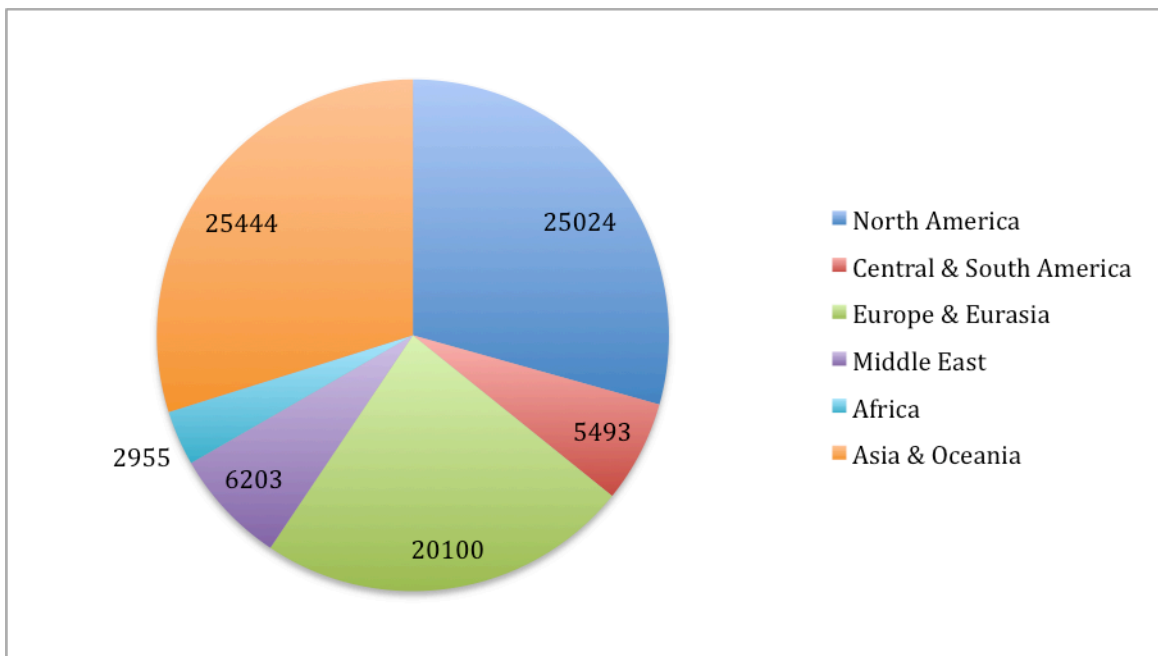


Chart No.7: World Oil Consumption in 2007 (thousands barrels daily)

Source: BP/ own chart

The world oil consumption grows every year by approximately 1.2 %. In 2007 oil consumption grew by 1.1 % (1 million bbl). The total world oil consumption was 85,220 thousands bbl/day in 2007 (see Chart 7 above) from which the US, the biggest oil consumer, has a 25 % share and the EU being on the second place with 14,390 thousands bbl/day and China is with 7,578 thousands bbl/day on the third place. Fourth and fifth place belongs to Japan and Russia following by India (Chart 8).

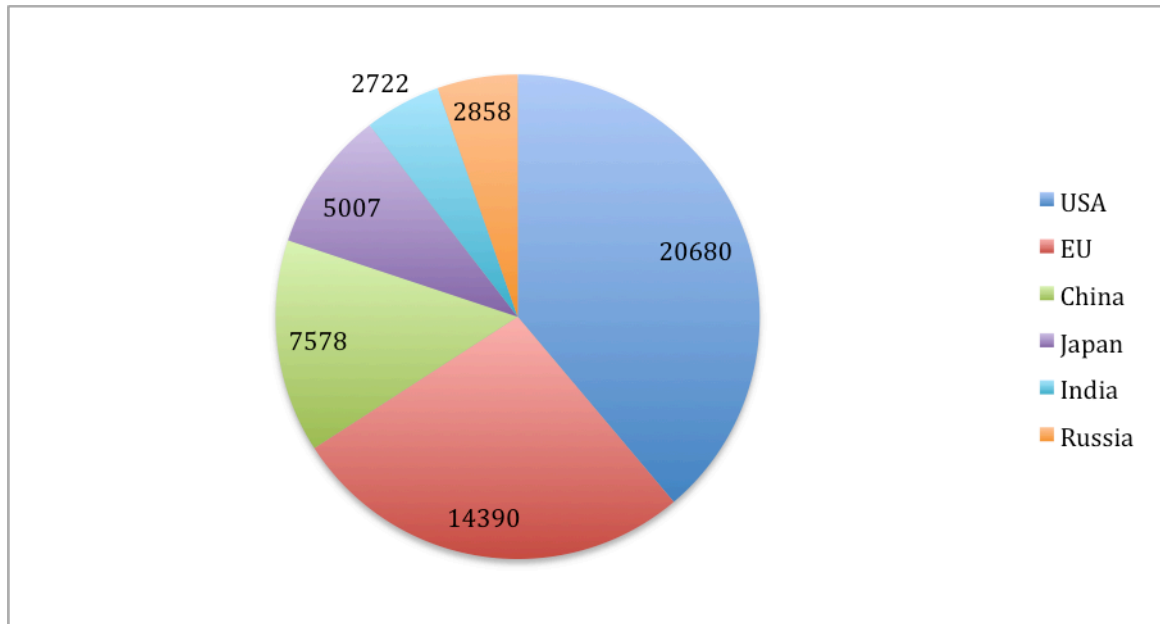


Chart No.8: Top 6 Oil Consumers in 2007 (thousands barrels daily)

Source: The World Factbook/ own chart

In percentage, the US decreased their oil consumption by 0.1 % and the EU declined the consumption by 2.6 % that is for sure made by significant decline in Germany's oil consumption by 9 % which is the largest oil consumption decline in the world together with Switzerland. Unfortunately Switzerland does not belong to the EU. On the other hand, Slovak Republic increased its oil consumption by 10.3 % in 2007 and also Middle East oil consumption rose by 4.4 % in 2007. [BP 2008]

Concerning future oil consumption we can expect further rising because as it was already mentioned the crude oil is the cheapest transportation fuel and there is no chance to transform it into alternative fuel. "It will be possible only if we will produced enough corn, make enough ethanol, collect enough biomass and after that we can forget about importing oil but this is nonsense."⁷

⁷ Flynt Leverett, Institute of Technology, 2007, page 2.

3.2 The Gulf Cooperation Council⁸

The Gulf Cooperation Council is made up of six Arab states: Saudi Arabia, Kuwait, Bahrain, Oman, Qatar and the United Arab Emirates. It is a trade bloc created on May 25, 1981 in Abu Dhabi. Not all of the “Gulf states” are members of the council. Iran and Iraq are excluded. Yemen is under negotiations for GCC membership and it seems to join by 2016. “It was the time of sharp confrontation between two super-powers - the USSR and the USA. The main goal of the leadership of the Gulf States, which took the decision to develop cooperation and coordination of the policy, was their eagerness to avoid the danger to be involved in this confrontation. In the GCC documents member-states declared that they would like to defend themselves, and to ensure that the region would not be turned into an area of struggle between the superpowers with their immense means of mass destruction”⁹

The GCC was established to its Charter, “effect coordination, integration and inter-connection among the Member States in all fields, formulating similar regulations in various fields such as economy, finance, trade, customs, tourism, legislation, administration in order to achieve unity” and stress “the special relations, common qualities and similar systems founded on the creed of Islam, faith in a common destiny and sharing one goal” defined by the Arab identity¹⁰

⁸ <http://www.gcc-sg.org/eng/index.php?action=Sec-Show&ID=1>, http://www.fatf-gafi.org/document/9/0,3343,en_32250379_32236869_34438857_1_1_1_1,00.html.

⁹ Kuwait News Agency. Special Dossier, Al-Kuwait, 1984, page 21.

¹⁰ <http://www.gcc-sg.org/eng/index.php?action=Sec-Show&ID=3>

3.2.1 The GCC Objectives¹¹ (The Charter- article 4)

The basic objectives and aims of the Gulf Cooperation Council are:

- To effect coordination, integration and inter-connection among Member states in all fields in order to achieve unity among them
- To deepen and strengthen relations, links and areas of co-operation now prevailing among their people in various fields:
 - Economic and financial affairs
 - Commerce, customs and communications
 - Education and culture
 - Social and health affairs
 - Informational and tourism
 - Legislative and administrative affairs
- To stimulate scientific and technological progress in the fields of industry, mining, agriculture, water and animal resources, to establish scientific research, to establish joint ventures and encourage co-operation by the private sector for the good of their people

Among other objectives is establishing a common currency called Khaleeji by 2010. The term “Khaleeji” means in Arabic “of the gulf” but there is not an official name yet. It would be the sole legal tender in Kuwait, Bahrain, Saudi Arabia, UAE and Qatar, but Oman has announced that they will not be able to adopt the new currency. And Yemen will become a member in 2016. According to Nasser al-Kaud, deputy assistant general for economic affairs at the GCC, admitted on March 24, 2009 that “the currency deadline for establishment of the monetary union would not be met on time due to the financial crisis and a lack of sufficient co-operation between the member countries”¹².

¹¹ <http://www.gcc-sg.org/eng/index.php?action=Sec-Show&ID=1>

¹² Robin Wigglesworth, Financial Times (<http://www.ft.com/cms/s/0/3058b2f2-1898-11de-bec8-0000779fd2ac.html>)

3.2.2 The GCC structure¹³ (The Charter, article 6-16)

First of all, the Supreme Council is the GCC highest authority, which is formed of the Heads of member states. The presidency changes every year according to the Arabic alphabetical order of the names of member states. In 1998 the Supreme Council set up one consultative meeting between two summits every year. These meetings are valid if two-thirds of the member states are present.

The Consultative Commission is composed of thirty GCC citizens, so that five from each state. They are chosen in order to their qualification and rich experiences for three years. The Supreme Council has created the Commission for the Settlement of Disputes for solving of special cases that can happen.

Second, the Ministerial Council is formed of the Ministers of Foreign Affairs. Presidency is ensured by the member state that is currently presided the Supreme Council. The meetings are held every three months and they are valid if two-thirds of member states are present.

The Ministerial Council is accredit to submit policies, formulate recommendations and manage all of the activities, which already exist in all its sectors. Other important acts such as the Supreme's Council meetings and agenda are also assured with the Ministerial Council. The voting procedures are very similar to that of the Supreme Council.

Thirdly, the Secretariat-General is entrusted with preparing projects that are related to coordination, cooperation and integration for collective work. It is also charged with preparation of periodic reports of the GCC work, as well as preparation of reports and studies on request of the Supreme Council or the Ministerial Council. Furthermore, it prepares all the agenda and meetings for the Ministerial Council. The head of this Secretariat is called Secretary-General, who is appointed by the Supreme Council for the three-year period renewable only once. The Secretary-General nominates five Assistants Secretaries-General, who are appointed by the ministerial Council for the renewable three-

¹³ <http://www.gcc-sg.org/eng/index.php?action=Sec-Show&ID=1>

year period, for political, economic, Human and Environment, Security, military Affairs. The organizational body of the Secretariat-General also includes Directors-General and other staff.

The administrative structure of the Secretariat-General include many sectors, such as Office of the Secretary-General, Political Affairs, Military Affairs, Legal Affairs, Administrative and Finance Affairs, Human and Environment Affairs, Patent Bureau, Administrative Department Unit, Internal Auditing Unit, Information Centre and also the GCC permanent delegation in Brussels (headed by the Ambassador) and the Telecommunication Bureau in Bahrain.

3.2.3 The GCC Member States (Map 1)

“Over the past three decades the member states of the Gulf cooperation Council have witnessed an unprecedented economic and social transformation. Oil proceeds have been used to modernize infrastructure, create employment and improve social indicators, while the countries have been able to accumulate official reserves, maintain relatively low external debt, and remain important donors to poor countries”¹⁴.

There is a basic overview about each member country according to the CIA The World Factbook.

¹⁴ Fasano, Ugo, Iqbal, Zubair; GCC Countries: From Oil Dependency to Diversification, page 2.

3.2.3.1 United Arab Emirates¹⁵

- Capital City: Abu Dhabi
- Largest City: Dubai
- Emirates: Abu Dhabi, Ajman, Dubai, Sharjah, Umm al-Qaywayn, Ras al-Khaymah and Fujairah
- Area: 83,600 km²
- Population: 4,764 mil (2008)
- Population Growth: 3.689% (2009 est.)
- GDP: (2008 est.)
 - purchasing power parity: \$184.6 billion
 - official exchange rate: \$270 billion
 - real growth rate: 7.7%
 - per capita (PPP): \$40,000
- Unemployment rate: 2.1% (2001)

Six of the small states, except the emirate of Ras al-Khaymah, set free from the UK and formed United Arab Emirates in 1971 (The independence day- December 2, 1971). The seventh state joined one year later in 1972. UAE is a stable economy with the second largest economy in the Middle East. It has been a member of OPEC since 1967, member of OAPEC since 1970 and the member of The League of Arab States since 1971. It has become a member of WTO since 1996. According to the number of per capita GDP, UAE could be seem as one of the prosperous states which has similar economy as those countries in the Western Europe. The state's foreign policies and revenues from the oil are the main features to become the leader in the area of the Middle East.

This state is one of the most diverse country in this region with 19% Emirati, 23% other Arab and Persian, 50% of South Asian and 8% other population. In fact, more than 70% of

¹⁵ CIA, <https://www.cia.gov/library/publications/the-world-factbook/geos/ae.html>

all UAE population is non-citizens. The main religion is Islam (94%) obviously and 4% include Hindu and Christian. However, non-Islamic religion is illegal.

UAE is a federation based on federation of seven Emirates (Federal Supreme Council- rulers of Abu Dhabi and Dubai have veto power) and a federal presidential represented by a monarchy, which is elected regularly. No political parties are allowed. Its legal system is based on Sharia and civil courts (Union Supreme Court). President Khalifa bin Zayed Al-Nuhayyan has been chief of the states since November 4, 2004. The Prime Minister and Vice President of UAE has been Muhammad bin Rashid Al-Maktum since January 5, 2006, who is at the same time the head of government. President and Vice President are elected by FSC every five years. Next one will be held this year 2009. The Prime Minister is chosen by the president. Legislative branch is represented by the Federal National Council (FNC) with 40 seats- 20 seats elected in two-year term and 20 appointed by each ruler from each Emirate.

3.2.3.2 The Kingdom of Bahrain¹⁶

- Capital City: Manama
- Largest City: Manama
- Governorates: Wasat, Muharraq, Asamah, Janubiyah and Shamaliyah
- Area: 665 km²
- Population: 727,785 (2009 est.)
- Population Growth: 1.285 % (2009 est.)
- GDP: (2008 est.)
 - purchasing power parity: \$26.7 billion
 - official exchange rate: \$19.68 billion
 - real growth rate: 6.1 %
 - per capita (PPP): \$37,200
- Unemployment rate: 15 % (2005)

The Kingdom of Bahrain is a set of several islands, of which the island of Bahrain is the largest one (83 % of total area) in the Persian Gulf. Bahrain is an Arabic term of “two seas” which refers to both freshwater springs and salty seas. This county has very good strategy position in ancient times as well as in present times. It has significant influence in foreign affairs among its neighbours, according to its small size and strategic centre position. After the Persian Huwala clan lost its territory, the al-Khalifa family gained these islands in the year 1783. On August 15, 1971 the Kingdom of Bahrain reached its independence from the UK.

Following the crude oil discovery in 1932 Bahrain has become an international banking centre. In 1970 Bahrain joined OAPEC and one year later also joined the League of Arab States. In 1995 it became a member of WTO. This country has one of the fastest growing and one of the freest economy in this region according to the 2006 Index of Economic

¹⁶ CIA, <https://www.cia.gov/library/publications/the-world-factbook/geos/ba.html>

Freedom published by the Heritage Foundation /Wall Street Journal. The petroleum processing and production stands for 30 % of GDP.

More than 60 % of population is Bahraini and the rest are non-citizens. Almost two-thirds of citizens are Arabs and one-third is of Persian origin. The major religion is again Muslim religion (Shia 66 % and Sunni 33 %), Christian 10 % and the last 10 % of other religion (2001 census).

Bahrain is a constitutional monarchy with the chief of state- King Hamad bin Isa al-Khalifa since the year 1999. The monarchy is heritable. The head of the government is a Prime Minister- Shaik Khalifa bin Salman al Khalifa since 1971 (Prime Minister is appointed by the monarch). He takes the chair over twenty-five members of the cabinet, of whom almost 80% are from the royal family. Its legislative branch consists of Consultative Council with 40 members appointed by the King, and the Chamber of Deputies with elected 40 members regularly every four years (next elections in 2010). Political parties are prohibited and political societies were legalized in 2005. The High Civil appeals Court is Bahrain's judicial branch.

3.2.3.3 The Kingdom of Saudi Arabia¹⁷

- Capital City: Riyadh
- Largest City: Riyadh
- Provinces (Emirates): Tabuk, ‘Asir, Ha’il, Ar Riyad, Ash Sharqiyah, Makkah, Al Jawf, Al Qasim, Al Bahah, Al Hudud ash Shamaliyah, Jizan, Najran and Al Madinah
- Area: 2,149,690 km²
- Population: 28,686,633 (2009 est.)
- Population Growth: 1.848 % (2009 est.)
- GDP: (2008 est.)
 - purchasing power parity: \$582.8 billion
 - official exchange rate: \$467.7 billion
 - real growth rate: 4.2 %
 - per capita (PPP): \$20,700
- Unemployment rate: 8.8 % (2008)

The KSA is the largest state of the Persian Gulf and it is sometimes called “The Land of the Two Holy Mosques” according to Mecca and Medina. The Saudi Arabia is a birthplace of Islam and that is why the religion in this country is Muslim religion only. There are more than 90 % of Arab citizens and 10 % of Afro-Asian origin (5.5 mil of non-nationals). The modern Saudi Arabia was found on September 23, 1932 (independence day) by unifying the main regions of Qatif, Nejd, Al-Hasa and Hejaz.

This “energy superpower” is the biggest oil and gas producer in the world. It has more than 90 % of exports and about 70 % of government revenues from the oil. The state holds about 20 % of all oil reserves. It became the member of The Arab League in 1945, OPEC in 1960 and OAPEC in 1968.

¹⁷CIA, <https://www.cia.gov/library/publications/the-world-factbook/geos/sa.html>

There is one most important person in Saudi Arabia, such as Abdullah bin Abd al-Aziz Al Saud who has been the King (chief) of the monarchy and Prime Minister at the same time since 2005. There are no elections because the title of the monarch is heritable. The legal system is based on Sharia law (Islamic law). Obviously, no political parties are present. Legislation is done by the Council of Ministers (from royal family) and it has to go with Sharia. The Consultative Council has 150 members who are appointed by the King every four years and it has limited rights. The Supreme Council of Justice represents the justice.

3.2.3.4 The Sultanate of Oman¹⁸

- Capital City: Muscat
- Largest City: Muscat
- Provinces: 5 regions (Ad Dakhiliyah, Al Batinah, Al Wusta, Ash Sharqiyah and Al Dhahirah) and 4 governorates (Muscat, Dhofar, Musandam and Al Buraymi)
- Area: 212,460 km²
- Population: 3,418,185 (2009 est.)
- Population Growth: 3.138 % (2009 est.)
- GDP: (2008 est.)
 - purchasing power parity: \$67 billion
 - official exchange rate: \$56.32 billion
 - real growth rate: 6.7 %
 - per capita (PPP): \$20,200
- Unemployment rate: 15 % (2004 est.)

The independence was reached in 1650 after the 140-year Portuguese occupation. The newly sultanate in Muscat was created and in the late 18th century was signed the first series of friendship with the British. The military and political dependence on Britain had increased but Oman has never become a British colony.

About 50 % of whole population lives in the capital city Muscat. There are many ethnic groups such as Arab, Baluchi, South Asian, African and about 2/3 of all inhabitants are Omanis. The major religion here in Oman is Ibadhi Muslims (75 %) and the rest belongs to Sunni and Shi'a Muslim and Hindu (25 %).

Interestingly, Oman is not a member of any of the international organizations (OPEC, AOPEC, The Arab League). But it has become a new member of WTO since 2000.

¹⁸ CIA, <https://www.cia.gov/library/publications/the-world-factbook/geos/mu.html>

The Sultanate of Oman is a monarchy with sultan Qaboos bin Said al-Said (since 1970). There exists a National holiday at the day of sultan's birthday (November 18). The title of sultan is heritable. He is chief of the state, head of government as well as the Prime Minister (since 1972). The cabinet appoints the sultan. Legislative branch is represented by bicameral Majlis Oman- upper (71 seats) and lower (84 seats) chamber. There are no political parties at all. This sultanate is divided into 9 provinces. Each governorate has its own history, habits, clothing, dialects etc. The Governorate of Muscat is economic, political and administrative centre of Oman. Muscat is combination of Oman's heritage and modern society.

3.2.3.5 The State of Qatar¹⁹

- Capital City: Doha
- Largest City: Doha
- Municipalities: Umm Salal, Umm Sa'id, Al Khawr, Al Wakrah, Ad Dawhah, Al Ghuwayriyah, Al Jumayliyah, Ar Rayyan, Madinat ash Shamal and Jarayan al Batinah
- Area: 11,437 km²
- Population: 833,285 (2009 est.)
- Population Growth: 0.957 % (2009 est.)
- GDP: (2008 est.)
 - purchasing power parity: \$85.35 billion
 - official exchange rate: \$116.9 billion
 - real growth rate: 11.2 %
 - per capita (PPP): \$103,500
- Unemployment rate: 0.6 % (2008 est.)

Qatar is a small emirate in the Persian Gulf. Since the middle of 1800s the al-Thani family have ruled till now. Qatar has become an independent state with significant oil and gas reserves in September 3, 1971 (from the UK). Because of the oil and gas revenues, Qatar has achieved the highest per capita income in the world.

Basically all Qataris profess Sunni Islam and the rest (8 %) are Christians. There are 40 % of Arab inhabitants and many ethnic groups originally from the eastern countries, such as Indian (18 %), Pakistani (18 %), Iranian (10 %) and other.

The state of Qatar was among the first states that attended the first OPEC conference in September 1961. Nine years later they joined Arab twin of OPEC- the OAPEC organization and in 1971 they became a member of The Arab League. Since 1996 it has been a member of WTO. Qatar is an emirate, so that the chief of the state and also the

¹⁹ CIA, <https://www.cia.gov/library/publications/the-world-factbook/geos/qa.html>

Minister of Defense is Emir Amir Hamad bin Khalifa al-Thani as he ousted his father in 1995. The head of government is Hamad bin Jasin bin Jabir al-Thani. Their cabinet is represented by the Council of Ministers of which the members are appointed by the monarch. The “monarch” is of course heritable. The Unicameral Advisory Council with 35 seats is Qatar’s legislative body. Members of this branch are appointed. There are no political parties as it is usual.

3.2.3.6 The State of Kuwait²⁰

- Capital City: Kuwait City
- Largest City: Kuwait City
- Governorates: Al Ahmadi, Al'Asimah, Al Jahra', Hawalli. Al Farwaniyah and Mubarak al Kabir
- Area: 17,820 km²
- Population: 2,691,158 (2009 est.)
- Population Growth: 3.547 % (2009 est.)
- GDP: (2008 est.)
 - purchasing power parity: \$149.1billion
 - official exchange rate: \$159.7 billion
 - real growth rate: 8.5 %
 - per capita (PPP): \$57,400

Unemployment rate: 2.2 % (2004 est.)

The state of Kuwait is an Arab emirate with the fifth largest oil reserves in the world. The name "Kuwait" mean "fortress built near water" in Arabic language. The British ruled Kuwait from 1899 to 1961 and on June 19, 1961 they reached independency from the UK. Kuwait was attacked by its neighbour- Iraq in August 1990. After 6 months, UN liberated this state in February only in four days. The infrastructure had to be rebuilt and repaired. The Al-Sabah family which had been ruling from 1899 until 1961, has returned to power in 1991.

Kuwait is one of the establishing states of OPEC (1960) and of the League of Arab states in 1961. It has been also a member of OAPEC since 1968. It has been a WTO member since 1995.

²⁰ CIA, <https://www.cia.gov/library/publications/the-world-factbook/geos/ku.html>

There are more than 2 million non-national inhabitants out of almost 3 million in Kuwait. Ethnic groups are divided into Kuwaiti with 45 % and other Arab 35 %, South Asian with 9% and Iranian with 4 %. The main religion is Islam with the share of 85 % (Sunni 70 %, Shia 30 %) and other included Christian, Hindu, Parsi and other.

Kuwait is a constitutional emirate with the chief of the state Amir Sabah al-Ahmad al-Jabir al-Sabah since 2006. Head of government is the Prime Minister Nasir al-Muhammad al-Ahmad al-Sabah since 2007. The Council of Ministers (Cabinet of Ministers) is appointed by the Prime Minister and approved by the Sheikh. There is no election on head of the state because the title is heritable. The parliament is represented by the National Assembly. It has 50 elected members who are elected every four-year term and it has a power to dismiss the Prime Minister. Nomination of Amir has to be proved by the National Assembly.

4. EU dependency on Middle East crude oil

4.1 The EU and the GCC

The discovering of crude oil in 1930s was very important terminus in Middle East history. The Arabian Peninsula had stayed important sea-route to the east and what furthermore it has became very important source of energetic raw material for the whole world. The strengthening of territorial demand was closely linked with the licensing of the oil concessions. These concessions were offered to the big foreign oil companies by the monarch of each sultanate. Because of that, the USA started to vibrate to the areas which were strictly ruled by the British. The British domination over the Persian Gulf ends during 1950-1960²¹.

“This relation is a new trend in terms of global integration which is closely connected with growing dependence on crude oil import and export all over the world. The member states of GCC are trying to be an internal part of world community”²². Surprisingly, this relation is not new. Economic cooperation has existed from the beginning of the GCC establishing. The first meeting of EU and GCC took place in Saudi Arabia in 1983. With some difficulties however, negotiations started one year later.

The 1988 EU-GCC Cooperation Agreement encouraged trade and economic cooperation. In the Bahrain summit, in December 1988, the Supreme Council of the GCC has examined the agreement of cooperation signed in Luxemburg on 15 June 1988 between the Gulf Cooperation Council, on the one hand, and the European community, on the other, and has decided to approve it²³. “The first major milestone of EU-GCC multilateral engagement is the 1989 cooperation agreement which set the stage for negotiations of a free trade agreement (FTA) and stipulated annual meetings of EU and GCC foreign ministers through

²¹ Mansoor Maitah, Ekonomické vztahy zemí GCC a EU, www.maitah.com/wp-content/ekonomicke-vztahy-gcc-a-eu.doc, page 1.

²² Elena Melkumyan, EU-GCC relations in the global context, page 1.

²³ Closing Statements of the Sessions of the Supreme Council, the Gulf Cooperation Council Secretariat. Doha, 1996, page 91.

a joint council/ministerial meeting. Cooperation in energy, industry, trade and services, agriculture, fisheries, investment, science, technology and the environment were envisaged, all in line with the primarily economic nature of EU-GCC relations”²⁴. This agreement went into effect on January 1, 1990. “This agreement, comprising the institutional framework for the relationship between the European Union and the GCC, states three general objectives: Relations between the European Community and the GCC countries shall be strengthened by placing them in an institutional framework; economic and technical cooperation relations are to be broadened; and development and diversification in the GCC countries shall be promoted, thus reinforcing these countries' role in contributing to peace and stability in the region”²⁵. “At that time, the trade balance with the GCC was still negative, with the EU imports accounting for around 41 billion euro and exports accounting for around 13 billion euro”²⁶.

Another important year in the EU-GCC cooperation was the year 2003, January 1, when the negotiation about free trade went into effect. The agreement included a statement that every GCC state has to firstly create a custom union to integrate its economy. According to the Cooperation Agreement, both leaders of the EU and GCC have to meet every year (Joint Council Meeting). These two leaders agreed to reinforce cooperation in the question of energy and on quick conclusion of understanding on energy cooperation on May 15, 2006 in Brussels²⁷.

The most important year for negotiating and strengthening the relation between these two giants was the year 2004. There have been made some institutional changes and the main fifth enlargement of the European Union. The EU became bigger by 10 new member states (Czech Republic, Slovak Republic, Poland, Slovenia, Hungary, Cyprus, Malta, Lithuania,

²⁴ Steffen Hertog, EU-GCC Relations in the Era of the Second Oil Boom, CAP Working Paper, December 2007, page 4.

²⁵ Sahel, The European Union and the Gulf Cooperation Council: A growing partnership, Volume VII, October 1990, No., Middle East Policy Council (http://www.mepc.org/journal_vol7/9910_saleh.asp)

²⁶ *Savage B.* The EU and the GCC: A growing partnership // GCC-EU Research Bulletin. Gulf Research Center. Issue N1, 2005, page 6.

²⁷ http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/er/89619.pdf

Latvia and Estonia). By this fact, the EU became closer to the GCC integration. This year was also NATO Conference in Istanbul where GCC provides an initial scope for security cooperation in the Gulf area and enlarged NATO's role in this region²⁸. "Turning the EU-GCC relations into more politically substantial dialogue would have to include the necessity that the EU would become an actor with more serious weight in the region" – according to Heidi Huuhtanen from Finish Institute of International Affairs²⁹.

The Free Trade agreement which has been discussed since 1988, was again the number one in negotiating in December 2008 in Muscat. "The GCC countries have suspended this agreement and according to the General Secretary Abdul Rahman al Attiyah, the GCC will be negotiating this statement only if the EU will sign the agreement in a form that will satisfied all of the GCC states. This fact leads to interrupt or even stop these negotiations until next meeting"³⁰.

4.1.1 Economic relations between GCC and EU³¹

The relations between EU and GCC are based on the principle of bilateralism. The states of GCC integration are very important for the interests of European Union in the economic viewpoint. The interests are based only on EU's energetic needs which satisfied very the GCC countries. There are huge and fundamental differences between political systems of EU and GCC. These differences are mainly in political systems, culture, different religion and understanding the religion, different types of market systems and different level of intervention to the economy of the states. These reasons mentioned above are considerable barriers in negotiations between these two regional blocks in terms of various bilateral

²⁸ NATO, Opening statement, <http://www.nato.int/docu/speech/2004/s040628f.htm>

²⁹ *Huuhtanen H.*, EU-GCC relations: towards a more political partnership? // GCC-EU Research Bulletin. Gulf Research Center. Issue N1. Dubai, 2005, page 13

³⁰ Zastupitelský úřad České republiky, Reakce SAE na krach dohody o volném obchodu mezi EU a GCC, <http://www.businessinfo.cz/cz/clanek/spojene-arabske-emiraty/sae-krach-dohody-mezi-eu-a-gcc/1001482/51533/>

³¹ Mansoor Maitah, Ekonomické vztahy zemí GCC a EU, www.maitah.com/wp-content/ekonomicke-vztahy-gcc-a-eu.doc, page 4.

agreements. The heads of The GCC countries are “decision makers” because their decision-making competence is not limited that much.

The framework of the relation between EU and GCC is defined by:

- World oil market- the GCC share on overall energetic needs of the EU is around 60%. The Middle East countries play significant role in terms of imported crude oil to the EU. And for the future they will be even more important in importing oil as well as natural gas.
- Bilateral trade and investments- business cooperation between EU and GCC will set different dimension after achieving the custom union of each GCC country (which was achieved in 2003) and reaching the Free Trade Area between them (the negotiation about this issue stopped in December 2008). This situation will be even better when Saudi Arabia will become a member of WTO. Unfortunately, all the GCC countries have already been members of WTO except Saudi Arabia.
- Global strategic development- it is especially the development after the September 11 and other terroristic attacks in Madrid or Riyadh. The stable politic situation in each state could be interrupted by any of the global issues, especially world market development with the energetic raw materials and petrochemical products. Each ruling family is more and more aware of the fact that their living standards are linked together with providing extra benefits for the citizens in form of easy approach to education, to effect appropriate health care and other advantages. And that is why they have to strengthen safety inside the country as well as outside.

The states of the European Union are after Asia the second largest export market form the GCC and after USA the second most important source of direct investments into GCC countries. The EU investments are more spread to various kinds of industry. Crude oil and its derivatives stands for 95% of GCC export to the European Union. This undeniable fact affects that both economies are very sensitive to crude oil price fluctuation.

4.1.2 Energetic relations between GCC and EU³²

The crude oil is the most important not only energetic raw material for global economy and global stability. Both importing and exporting countries rely on non-stop supply into EU. In the end of 2007 the Persian Gulf states produced almost 25.2 million barrels daily (31% share of total production). The average OPEC surplus crude oil production is 2.8 million barrels per day in the years 1998-2008. It means that in Persian Gulf is around 90% of the world oil surplus production that is 2.52 millions barrels daily on average (see Chart 9). The oil surplus production is very important when the oil supply is disrupted. In that case, the surplus balances the lack of crude oil.

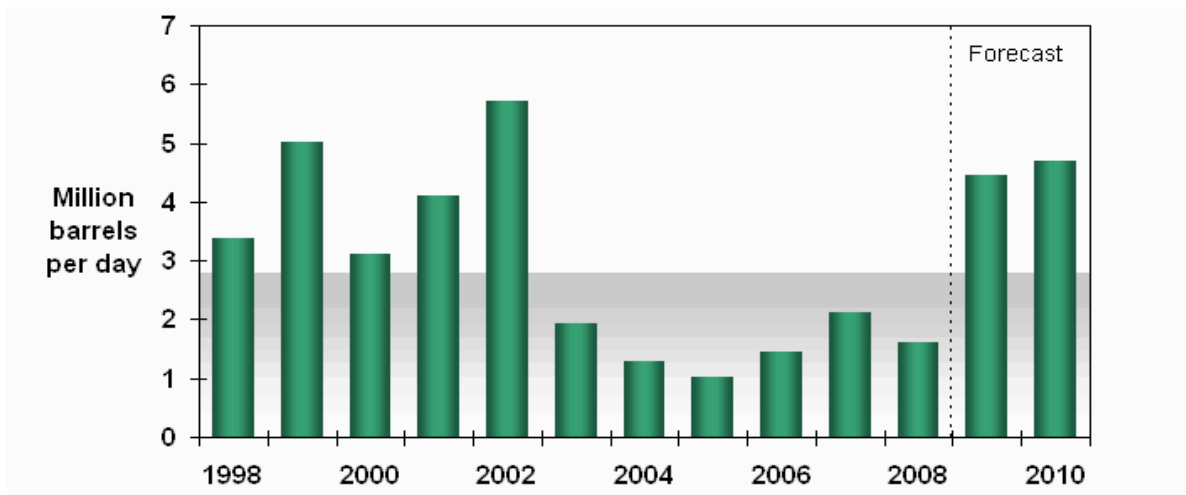


Chart No.9: OPEC Crude Oil Surplus Production

source: EIA (Energy Information Administration)

The European Union is very dependent on crude oil from the GCC integration. The relations between EU and GCC are characterized by the dependence on each other in the energetic point of view. The EU imports about 45 %-50 % of overall consumption from the Middle East. The GCC countries hold 43 % of the world crude oil reserves and they are very dependent on revenues from the exported crude oil. The crude oil is the most

³² Mansoor Maitah, Ekonomické vztahy zemí GCC a EU, www.maitah.com/wp-content/ekonomicke-vztahy-gcc-a-eu.doc, page 14.

important commodity in the European Union and its share on consumption in 45 %, natural gas 22 % and coal 16 % in the EU.

Because of the fact that oil share on consumption is significant and probably is going to be higher, the EU dependence of oil from the GCC states is going to increase in long-term.

4.2 Crude oil dependence in larger economies

It is well-known that European Union has no bigger oil reserves, just only some in North Sea- the proven reserves at the end of 2007 was 6.8 thousand million bbl. These reserves are in the United Kingdom (3.6 thousand million bbl), Denmark (1.1 thousand million bbl), Italy (800 million bbl) and in Romania (500 million bbl). These numbers are quite ridiculous according to the EU consumption which is 703.9 million tones (14,861 thousands barrel daily) and the EU oil production is about 113.5 million tones (2,394 thousands barrel per day) in 2007 [BP 2008]. By comparing these numbers we can get that the EU is heavily dependent on imported crude oil. According to the Chart 10 is obvious that the European Union is the main importer with 10,890 thousands bbl/day of crude even before US.

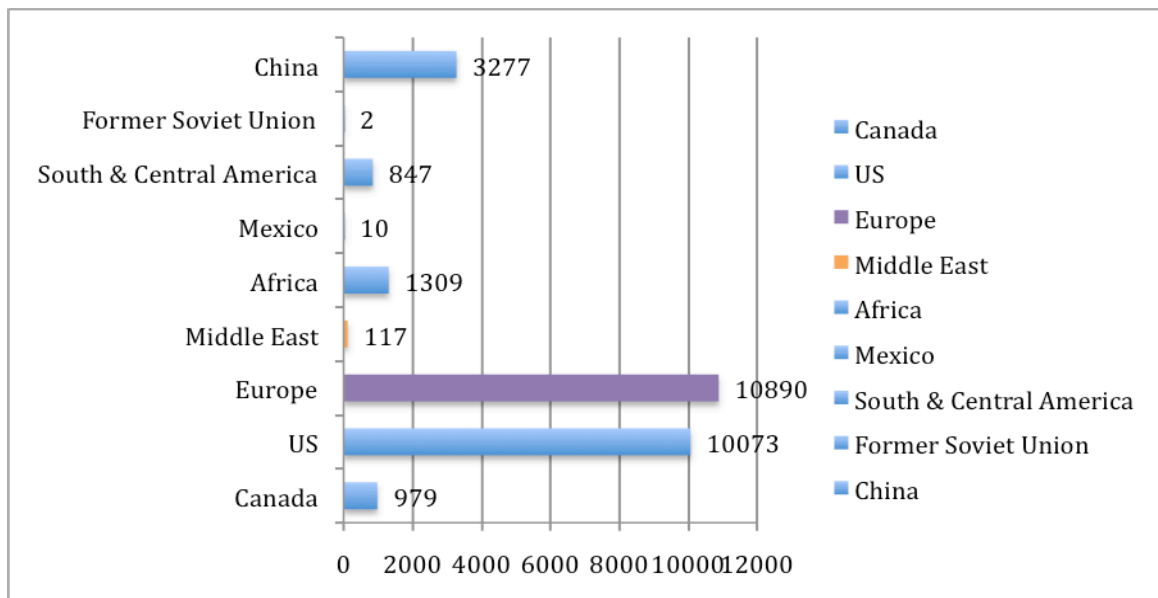


Chart No.10: Oil Importers in 2007 (thousands barrels daily)

Source: BP/ own chart

The North America has quite big crude oil reserves especially in US, Canada and also in Mexico. The largest reserves are in US- 29.4 thousands million barrels, followed by Canada with 27.7 thousands million barrels and Mexico with “only” 12.2 thousands million barrels. Interestingly in 1987 there were the largest proven oil reserves in Mexico- 54.1 thousands million barrels and in Canada it was only 11.7 thousands million barrels. During the years 1997-2006 the oil reserves in Mexico had declined to 12.8 thousands million barrels. And during the same time another oil reserves were found in Canada and their reserves jumped to present number. [BP 2008]

The US crude oil production is 311.5 million barrels (6,879 thousands barrels daily) and oil consumption reached 943.1 million barrels (20,698 thousands barrels a day) in 2007 [BP 2008]. With consideration on the US consumption, which highly exceeds the production and despite the fact that the US has “good” oil reserves, they are also very dependent on importing crude oil from the foreign states. That is why the US is the second biggest crude oil importer (see Chart 10).

China’s crude oil reserves are slightly larger than in Mexico (15.5 thousands million barrels). The oil production is in between the EU and the US, namely 186.7 million barrels (3,743 thousands b/day) and its oil consumption is 368 million barrels (7,855 thousands barrels per one day). That is why they are ranked rightly among the top 5 consumers in the world (see Chart 8).

Due to very high crude oil consumption and increasing population in China, an increase in oil consumption is to be awaited logically. Thus China is the third biggest importer of crude oil with 3,277 thousands barrels per day (Chart 10).

4.3 Crude oil export from the Middle East

The Middle East is the major exporter of all (see Chart 11). The reason is the largest proven crude oil reserves- 56 % of world reserves in 2007 [BP 2008]. During the past 20 years the distribution of proven reserves has been more or less constant, in average 62.3 % (1,237.9 thousands million barrels). It is the highest distribution of proven reserves at all. To compare, Europe together with Eurasia had 11.6 % in 2007. [BP 2008]

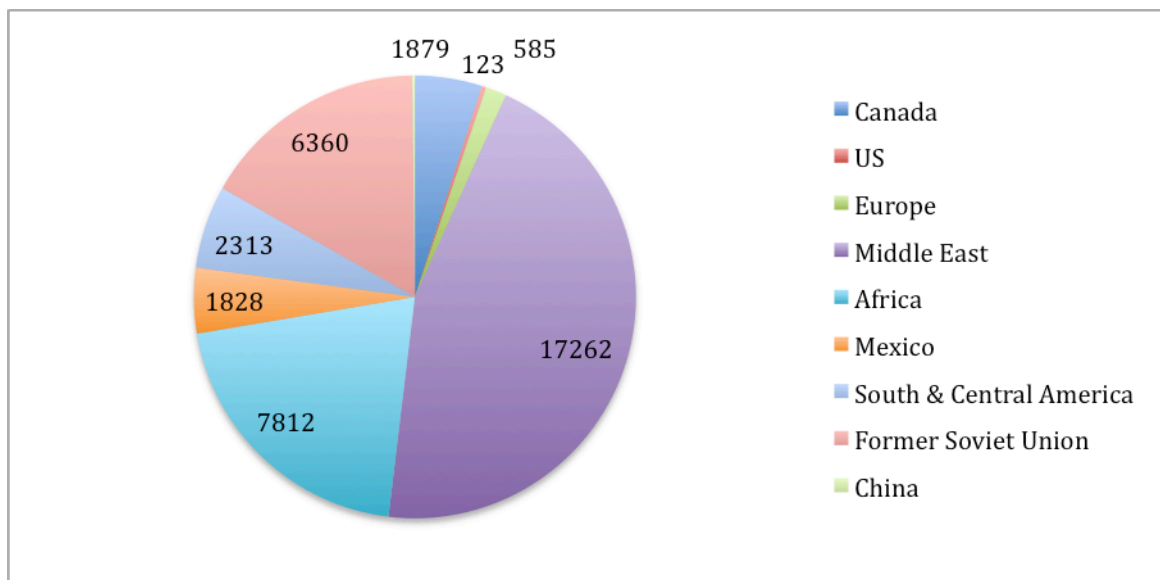
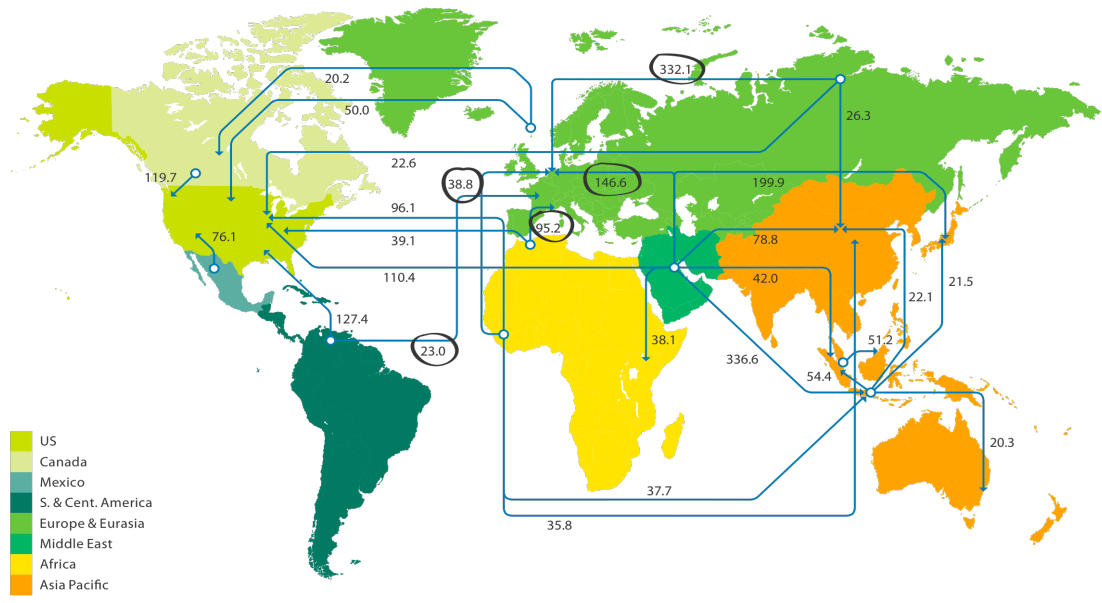


Chart No.11: Oil Exporters in 2007 (thousands barrels daily)

Source: BP/ own chart

During the year 2007 the Middle East exported over 975 million tones crude oil (19,680 thousands barrels daily) out of 2700 million tones of world oil export (54,824 thousands barrels daily) (see Table 1). Their crude oil is exported all directions but mainly to Europe, US, Japan, China, Indonesia and Africa (see Map 2).



Map No.2: Crude Oil Movements in 2007
 Source: BP

The main exporter from the GCC integration is probably Saudi Arabia (8,900,000 bbl/d) and then Kuwait (2,200,000 bbl/d), Qatar (960,600 bbl/d), Oman (733,100 bbl/d) and finally Bahrain (235,500 bbl/d) in 2007. [WTO 2008] The GCC countries have 13,029 thousands barrels daily share in total Middle East export (almost 2/3 of Middle East export).

4.4 Crude oil imports to Europe

European countries are heavily dependent on imported crude oil. As it was already mentioned, it is one of the biggest oil consumer but unfortunately not the biggest crude oil producer. The European Union produced 113.5 million tones of crude oil in 2007. It is 3 % of total world production in 2007. The European oil consumption exceeds its own production more than six times. Only one possible solution of this problem is importing crude oil from abroad.

Europe has four major crude oil suppliers. They are Russia (Former Soviet Union), Middle East, Africa and South & Central America. In the table below (see Table 1) you can find out how much and from whom is crude oil being imported to Europe. I also marked the US to compare the amounts. It is obvious that Europe is the major importer of crude oil and we are mainly dependent on oil supply from the Former Soviet Union.

Inter-area movements 2007													
Million tonnes From	To												Total
	US	Canada	Mexico	S. & Cent. America	Europe	Africa	Austral- asia	China	Japan	Singapore	Other Asia	Rest of World	
US	-	10.9	11.1	21.6	15.8	1.4	0.4	0.3	4.2	0.7	1.1	1.6	69.1
Canada	119.7	-	0.1	†	0.5	-	-	0.5	0.4	0.1	†	-	121.2
Mexico	76.1	1.3	-	9.6	8.8	-	-	-	-	0.2	1.9	0.2	98.1
S. & Cent. America	127.4	5.3	2.9	-	23.0	2.0	†	13.7	0.4	0.1	0.3	0.1	175.3
Europe	50.0	20.2	5.1	-	7.5	-	14.4	0.2	0.5	0.7	0.4	1.6	109.9
Former Soviet Union	22.6	2.1	-	1.7	332.1	0.2	†	26.3	8.2	0.2	10.9	6.8	411.1
Middle East	110.4	7.0	0.8	4.5	146.9	38.1	7.7	78.8	199.9	42.0	336.6	3.0	975.3
North Africa	39.1	9.1	0.2	5.6	95.2	4.3	-	4.6	0.3	0.1	6.4	-	164.9
West Africa	96.1	4.0	0.1	21.1	38.8	3.8	0.1	35.8	2.2	0.2	37.7	-	240.2
East & Southern Africa	-	-	-	†	0.1	-	-	12.7	5.1	0.9	1.4	-	20.2
Australasia	0.2	-	-	†	†	-	-	1.4	3.3	9.2	12.5	†	26.6
China	0.6	†	0.1	2.4	0.9	0.2	0.2	-	1.2	3.7	9.7	0.2	19.2
Japan	2.6	0.4	0.7	†	0.9	†	1.5	3.1	-	1.1	1.2	†	11.5
Singapore	0.7	†	0.2	0.3	1.2	1.0	9.2	3.3	1.3	-	51.2	0.5	68.9
Other Asia Pacific	11.4	0.2	0.5	4.8	4.1	0.6	20.3	22.1	21.5	54.4	-	0.3	140.1
Unidentified*	14.9	6.2	-	†	20.8	-	1.2	†	-	-	5.8	†	49.0
TOTAL IMPORTS	671.9	66.7	21.6	79.2	688.8	66.1	40.8	203.1	248.8	113.4	478.3	22.1	2700.6

Inter-area movements 2007													
Thousand barrels daily From	To												Total
	US	Canada	Mexico	S. & Cent. America	Europe	Africa	Austral- asia	China	Japan	Singapore	Other Asia	Rest of World	
US	-	226	231	450	329	30	9	6	88	15	22	33	1439
Canada	2426	-	1	†	10	-	-	9	7	3	†	-	2457
Mexico	1533	26	-	194	176	-	-	-	-	4	38	4	1975
S. & Cent. America	2592	109	60	-	469	41	†	278	9	3	7	3	3570
Europe	1038	408	106	156	-	300	3	9	14	8	34	195	2273
Former Soviet Union	467	42	-	35	6726	4	†	532	166	4	220	137	8334
Middle East	2218	140	16	91	2957	772	154	1587	4032	844	6806	63	19680
North Africa	795	182	3	113	1923	87	-	93	6	3	129	-	3336
West Africa	1933	81	3	425	781	77	2	719	45	4	758	-	4830
East & Southern Africa	-	-	-	†	3	-	-	255	103	19	27	-	407
Australasia	4	-	-	†	†	-	-	29	67	191	252	†	543
China	13	1	1	50	18	3	3	-	26	77	202	5	399
Japan	54	8	14	†	19	1	32	64	-	22	26	1	241
Singapore	15	†	4	6	25	21	192	69	27	-	1069	11	1440
Other Asia Pacific	235	5	11	99	85	12	408	458	441	1132	-	5	2892
Unidentified*	308	125	-	†	432	-	26	†	-	-	117	†	1008
TOTAL IMPORTS	13632	1354	451	1620	13953	1350	830	4111	5032	2329	9705	457	54824

*Includes changes in the quantity of oil in transit, movements not otherwise shown, unidentified military use, etc.
†Less than 0.05.

Table No.1: Inter-Area Movements in 2007

Source: BP

But our second biggest supplier is the very Middle East region with 146.6 million tones of crude oil. Another supplier is North (95.2 million tones) and West Africa (38.8 million tones) (see Chart 12). Saudi Arabia is our main oil supplier from the GCC region.

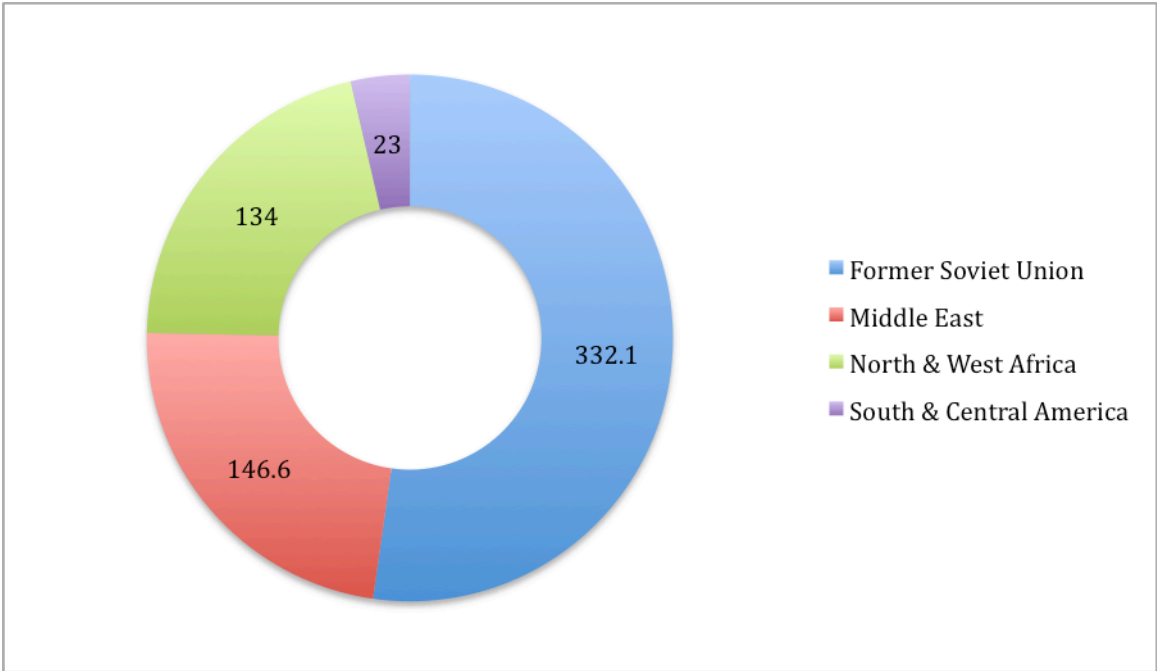


Chart No.12: Oil Imports to Europe in 2007 (million tones)
Source: BP

5. Conclusion

The main aim of this thesis was to deal with The European Union dependency problem with the crude oil supply. The problem is concerned mainly within the Middle East region. To be more specific I was concentrating primarily on the GCC member states (Saudi Arabia, Kuwait, Bahrain, Qatar, Oman and United Arab Emirates). For defining the answer of the dependency problem, let me firstly conclude some main facts and findings.

For the beginning here is a description of crude oil in various topics. The first one is brief crude oil history which started 4,000 years ago as a mass to fortify walls in ancient Babylon. But the modern history began in mid 19th century (1846) with discovery of the process of refining kerosene from coal. In 1854 petroleum was firstly fractionate by distillation. In 1886 Karl Benz and Gottlib Daimler firstly introduced gasoline-powered automobiles. During the 19th century larger oil fields were found in Iran, Canada, Venezuela and Mexico. In GCC block the oil discoveries were made in years 1932-1964. The 1973 and 1979 energy crisis lead to higher interest about oil supply and to the fact that crude oil is a limited resource. Today, about 90 % of vehicle fuel needs are met by oil.

Also the price of crude oil has its own history and there were many fluctuations during the past years. The OPEC was established in 1960 to control the price of oil. The major oil companies come predominantly from Middle East. They are the Saudi Aramco members (Exxon, Mobil, Chevron and Texaco), Kuwaiti partners Gulf and British Petrol and Shell, which had a share in the Iraq Petroleum Company.

The largest crude oil reserves are situated in Middle East (56 % of world oil reserves), especially in Saudi Arabia. That is why Middle East is the biggest oil producer with 28 % share of Saudi Arabia production. But from the oil consumption point of view, the USA has been the biggest consumer for years, currently with 20,680 thousands barrels per day and the EU takes the second place with 14,390 thousands barrels per day. The world crude oil consumption grows by approximately 1.2 % every year.

Furthermore, I was interested in the Gulf Cooperation Council which was established in 1981 in Abu Dhabi. It was created to its Charter, “effect coordination, integration and inter-connection among the Member States in all fields, formulating similar regulations in various fields such as economy, finance, trade, customs, tourism, legislation, administration in order to achieve unity” and stress “the special relations, common qualities and similar systems founded on the creed of Islam, faith in a common destiny and sharing one goal” defined by the Arab identity. I made a brief regional analysis of each “Gulf state” with a view on history of state, government form, economy and finally I also mentioned the ruling families in each state.

The relation between the EU and the GCC is not new. The first meeting of these two regional blocks was in 1983 in Saudi Arabia. Five years later the Cooperation Agreement was signed. The framework of EU-GCC cooperation is defined by the world oil market, bilateral trade and investments and global strategic development. The GCC-EU relations are based on bilateralism because there are certain interests on both sides. These interests are setup on EU’s energetic needs which can satisfy very the GCC countries and on the other hand, GCC states are very dependent on revenues from the exported crude oil to the European Union. Both needs are satisfied.

Crude oil is the most important commodity in EU with the 45 % share on EU consumption followed by gas (22 %) and coal (16 %). It is more than obvious according to no EU’s bigger oil reserves and its consumption (703.9 million tones) and production (113.5 million tones) that the EU is heavily dependent on crude oil supplies. The US and China are likewise in the very similar position. Recent data indicate that in the year 2007 the EU became the biggest oil importer. Surprisingly, we overtook even the US by 817 thousands barrels daily.

Europe has four major oil suppliers: Former Soviet Union (Russia) with 52 %, Middle East with 23 %, North & West Africa with 21 % and South & Central America with 4 %. The EU dependency is present and it will increase rapidly because the oil production in OECD Europe has already peaked in 2000. The probably production will go down by about 50 %

till 2015. Thus the demand for oil supply will grow without doubt it is estimated that EU's imports of oil will grow by 29 % by 2012.

There could be only problem with the oil supplies from the Middle East respectively potential problems with world terrorism or local and global political tensions. On the other hand Middle East could be the major oil supplier despite the fact that Russia is now the main EU's oil supplier. Why? For example: At the beginning of year 2009 the natural gas supplies to Europe from Russia were struggling. We witnessed that those state which totally depend on Russian's gas supplies, were facing huge difficulties with collecting natural gas from other suppliers such as their neighbouring countries and their reserves. The same can happen with crude oil. In case of difficulties with oil supply from certain country/region, that is why it is better to have oil supplies from various countries. For a long-term period the Middle East is the most important and irreplaceable oil supplier in terms of world proven crude oil reserves.

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- **8. Abbreviations**

API	the American Petroleum Institute
BP	the British Petroleum
EIA	the Energy Information Administration
EU	the European Union
FNC	the Federal National Council in the United Arab Emirates
FSC	the Federal Supreme Council in the United Arab Emirates
FTA	the Free Trade Agreement
GCC	the Gulf Cooperation Council
GDP	Gross Domestic Product
ICE	the Intercontinental Exchange
KSA	the Kingdom of Saudi Arabia
NATO	the North Atlantic Treaty Organization
NYMEX	the New York Mercantile Exchange
OAPEC	the Organization of Arab Petroleum Exporting Countries
OECD	the Organization for Economic Cooperation and Development
OPEC	the Organization of Petroleum Exporting Countries
PPP	Purchasing Power Parity
UEA	the United Arab Emirates
UK	the United Kingdom
UN	the United Nations
US(A)	the United States of America
USSR	the Union of Soviet Socialist Republics
WTI	the West Texas Intermediate (also Texas Light Sweet)
WTO	the World Trade Organization

bil	billion (thousand million)
bl/d	barrels/day
m	meter
mil	million

9. Supplements



Map No.1: The Middle East
Source: The Crunch Magazine (www.thecrunchmagazine.wordpress.com)