



# ARAB LEAGUE / A

Threats that the development of renewable energy represents toward the economies mainly based in the oil industry

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## INTRODUCTION

Much of the world depends on oil to provide power for many necessities of daily living. It is the primary source for numerous factories, farms, houses and, of course, cars. However, energy is equally important to power technology as well as many other things. Both underpin modern life and therefore it is an important issue of our time.

Renewable energy sources receive its power from existing flows of energy, or like Renn State College of Agricultural Science stated: "Renewable energy is energy that is generated from natural processes that are continuously replenished. This includes sunlight, geothermal heat, wind, tides, water, and various forms of biomass. This energy cannot be exhausted and is constantly renewed. Although this may be true, let's take in account the definition for oil, which is the world's most important fuel.

The Cambridge Dictionary states that oil can be defined as a thick liquid that comes from petroleum, used as fuel and for making parts of machines move easily. It doesn't only provides modern convenience, but also freedom of movement, since it is crucial for transport systems. When talking about oil, industries and countries need fossil fuels. In Saudi Arabia exist fossil fuel sources that are some of the largest around the world, although Middle East oil from other countries in the region such as Iran and Iraq also create a significant part of the world figures of production.

These last ones have been a huge source for economic prosperity, especially in countries as United Arab Emirates and Saudi Arabia. From half of the 20th century onwards, oil has taken place as one of the main indicators of economic activity around the world, thanks to its importance in the supply of energy demands in the world.

Nonetheless, the use of renewables will diminish the role of fossil fuels significantly in this countries. Moreover, talking about affecting this country's economy is to fear that large number of families would lose their jobs, numerous people would lose quality of life and eventually the country will run out of money due to their oil based economy. Likewise advances in technology offer long term services, and it has now increased in a significant way; playing an important role in the energy mix and as a result it has led to a falling demand of oil and low prices.

Of course United Arab Emirates and Saudi Arabia aren't the only countries affected: Qatar, Japan, South Korea, Thailand, Western Europe and United States of America are some others. During 2008 this began to represent a problem for United Arab Emirates due to the decrease of almost 17 times their actual imports; today imports have not been able to overgo those numbers.

## **HISTORICAL BACKGROUND**

Oil is mainly used for transportation; the entire transport system of the world depend on petroleum be it road, air or water. Furthermore oil is not only used for heat and light by producing electricity for industrial and domestic use, but also for the petrochemical industry since it used to produce raw material as fertilisers, plastics, fibers, etc.

In the same way, it is also important to know more about renewable energy's history. Energy itself, in physics, is the capacity of doing work. There exists solar energy, hydroelectric power, bioenergy, geothermal energy, etc. This energy is collected from renewable resources as sunlight, wind, rain, tides, waves, and geothermal heat.

### 9th Century, First Oil Wells:

The earliest known oil wells were drilled in China and oil fields were exploited in the Republic of Azerbaijan.

### 1712, First Engine:

In 1712, the first steam engine was developed in England to Pump water out of Coal Mines.

### 1800's, New Alternatives Emerge:

Windmill become popular water pumping tool of Western Homesteaders and Railroad Builders in 1850s. While the First Solar Power System was developed in France to produce steam to drive machinery in 1860. Moreover in 1876, the first demonstration of

generating electricity directly from sunlight took place in a Selenium Solar Cell.

Latest 1850's and early 1860's, Oil Exploration and Developments:  
In 1846 the first well drilled with percussion tools to a depth of 21 meter for oil exploration took place in Bakú, Azerbaiyán. Moreover, it was developed the kerosene lamp, which would be widely used during 1860s. Likewise, in 1863 John D Rockefeller built his first oil refinery.

1900's, Oil Discoveries:

During 1910, oil was discovered in Mexico. Similarly, oil was discovered in Saudi Arabia on March 3, 1938. Equally important, United Arab Emirates used its revenues of oil that were discovered in the early 1960's and a financial and commercial network to attract global investment and achieve economic development. The United Arab Emirates ranked fifth in the world in income, but it has fallen to 40th place.

1927 - 1958, Years of Advance:

The first commercial wind Turbines sold in 1927 to Generate Electricity on Remote Farms in 1927. While in Hoover Dam, 1935, the World's Largest Hydroelectric Power Plant, is built. And surprisingly in 1958, the first US satellite in Orbit Utilizes Solar Cells for Power.

1960, Organization of Petroleum Exporting Countries (OPEC):

It was created on September 14th in Baghdad (Iraq) by oil producing countries that are Venezuela, Saudi Arabia, Iran, Iraq and Kuwait. Later this organization was registered at the UN on November 6, 1962.

1973-74, International Energy Agency (IEA)

The IEA was created right after a petroleum crisis. Its principal objective was to coordinate the necessary measures to ensure the supply of oil, in emergency situations, in order to sustain the economic growth of its members.

Beginning of the 21st Century, Energy Consumption:

About 80% of the world's energy supply was derived from fossil fuels (things like coal, petroleum, and natural gas). While renewable energy sources accounted for nearly 20% of global energy consumption. In other words, 15% of the world's total electricity comes from large hydroelectric power plants, whereas only 3.4% comes from solar, wind and geothermal.

Correspondingly growth in wind power exceeded 20 percent and photovoltaic grew at 30 percent annually in the 1990s, while renewable energy technologies continue to expand. By 2007 more than 60 countries had adopted policy targets to increase the portion of energy they derive from renewable sources.

According to the IMF, the income in 2010 was slightly lower than 30 years ago on an inflation- adjusted basis. It has represented a problem for United Arab Emirates ever since 2008, therefore of the combination of falling oil prices, real-estate markets collapsing, banking crisis and international financial struck the United Arab Emirates economy. With this in mind, United Arab Emirates won't be the only country affected; but also Qatar, Saudi Arabia, Japan, South Korea, Thailand, Western Europe and United States of America since they are the main receivers of oil.

## **CURRENT RELEVANCE**

The importance of this current problematic is due to the high demand of renewable energy as well as the high demand of oil in our lives day to day. Both threatened each other by their pure existence, and eventually one will win over the other one, assuring the other industry's destruction. It's important to know that oil in the United Arab Emirates represents one of the strongest elements of its national economy. This phenomenon can be seen mostly in Saudi Arabia which not only has 18% of the world's petroleum reserves, but also ranks first internationally, with about one-fifth of the world's known reserves. It is one of largest petroleum exporter and has led the Organization of Petroleum Exporting Countries for many years. According to CNBC News statistics, since 1980 nearly half the world's proven oil reserves are in the Middle East.

Analysis have predicted an oil price war between Saudi Arabia and Iran; both countries have a great rivalry, but they also have something in common: their massive oil reserve. It is a big discussion to know which of this countries would be better selling oil; Capital's John Kilduff said "the math is simple" to show that Iran would make more money selling fewer barrels at a higher price.

Furthermore although it's chances are better they are not as good as they should be. In fact, between 2008 and 2010 the number of barrels imported from United Arab Emirates to the United States of America went up to a 15,000 imports. However, they decreased in 2010 to 819 thousand barrels the years after that until last year, 2016 since they couldn't increase more than 5,000 barrels.

In August 2011 the US imposes new economic sanctions on Syria, freezing Syrian government assets in the US, barring Americans from making new investments in the country and prohibiting any US transactions relating to Syrian petroleum products, among other things. In september of the same year The European Union bans the import of Syrian oil. The European Union imposes additional sanctions against Syria, due to "the continuing brutal campaign" by the government against its own people.

## INTERNATIONAL ACTIONS

In 1960 the Organization of Petroleum Exporting Countries (OPEC) was created based on the principles that they still use today. OPEC activities are mainly focused on oil; analysts agree that hydrocarbons will remain the most important source of energy for decades to come.

In 1992 at the Rio Earth summit the International Framework Convention on Climate Change (FCCC) was agreed by the world's governments. In 1997, they met again and with the agreement they signed a process of mandatory cuts in greenhouse gas emissions started.

In 1995, the United States of America paid between \$5.2 and 35.2 billion of dollars in subsidies to the oil sector. Over the last 20 years oil companies have paid lower taxes, and United States of America has of course charged less than that .

In 2009, Obama and the G20 Nations proposed they ended inefficient fossil fuel subsidies, but it had very limited progress. In 2016 the G7 meeting was a key step for eliminating inefficient subsidies by no later than 2025.

Also in 2016 Hillary Clinton's campaign for the presidency of the United States of America received more than \$6.9 million from lobbyists, bundlers but mostly a large number of donors connected to the fossil fuel industry. As a matter of fact 60 registered oil, coal and gas lobbyists have given \$142, 640; of those 60, 13 were bundlers.

## UN ACTIONS

In 2005 ten oil and gas companies collaborated and created Oil and Gas Climate Initiative to reduce greenhouse gas emission. This agreement was reached by the United Nations during the Climate Change Conference (COP 21).

In 2014, United Nations Headquarters in agreed to take action by minimizing methane emissions from upstream oil and gas production backed by Benin, Canada, Colombia, Denmark, France, Mexico, Mongolia, Netherlands, Nigeria, Norway, Peru, Philippines, Russia, Sweden, United Kingdom and the United States of America as well as many NGOs.

The Secretary-General of the United Nations Ban Ki-moon leads a Sustainable Energy for All initiative to ensure universal access to modern energy services, improve efficiency and increase use of renewable sources. One of its goals is that by 2030 “enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology”.

Some actions that the United Nations have taken are that because 80% of world’s energy, and 66% of electrical generation are supplied from fossil fuels, that contribute about 60% of the greenhouse gas (GHG) that causes climate changes. In many countries a transition has already begun to a cleaner form of energy. Renewable energy could be positioned faster if energy policies addressed both the subsidies and impacts of fossil fuels while facilitating more finance for renewable energy projects.

## POINTS TO DISCUSS

Which is the role that the oil industries have in the economical aspect of each delegation?

Are there any kind of regulations for the oil industry? Which? How do they work? Are they effective?

Is the oil industry a sustainable business?

Which are the advantages and disadvantages of both oil industries and renewable energy?

Is a delegation in favour of changing the oil industry for renewable energy industries?

How are these changes affecting the social and economic aspects of each delegation?

Which would be the consequences of eliminating any of these industries?

Which would be the consequences of an international intervention in these industries?

Considerate the differences between the economies of the different delegations involved

Economical consequences in a local (a single delegation) and global level

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