

**Forum:** Security Council

**Issue:** Reducing International Dependency on Crude Oil

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## Introduction

According to the 2018 BP Statistical review of world energy, in 2017, a new record for oil production was reached at 92.6 million barrels per day. This massive production comes from the wide variety of products that use oil. It already has a major role in the production of electrical power and it also is used in certain textiles such as nylon and most plastics.

Historically oil has always been considered power since it has a high economic value associated to it, and wars have been waged based on this resource. However, the intense use of this resource comes with a significant price. According to NASA, a 1.1 degree Celsius temperature increase has occurred since late 1900s, the main source originating from human actions, such as the dependency on crude oil.

On the other hand, great progress has been made. Ian Mead, the Assistant Director of the Energy Information Administration (EIA), estimates that there will be a 2.8% annual increase in renewable energy. The continuing growth of solar and wind power will hopefully remain one solution to decrease global dependency on fossil fuels.

## Definition of Key Terms

### Crude Oil

Crude oil is the unrefined form of petroleum. Once it is refined, it is used as fuels in products such as plastics and cosmetics. Crude oil is a natural product of biological decay.

### Tar Sands

Tar Sands are a mixture of sand, clay and bitumen, a form of crude oil with a high density rendering it unable to flow. Bitumen gets separated from other components and is refined into oil. Countries such as Canada that possess massive reserves of tar sands and use them both to as energy and to sell as a method to gain money.

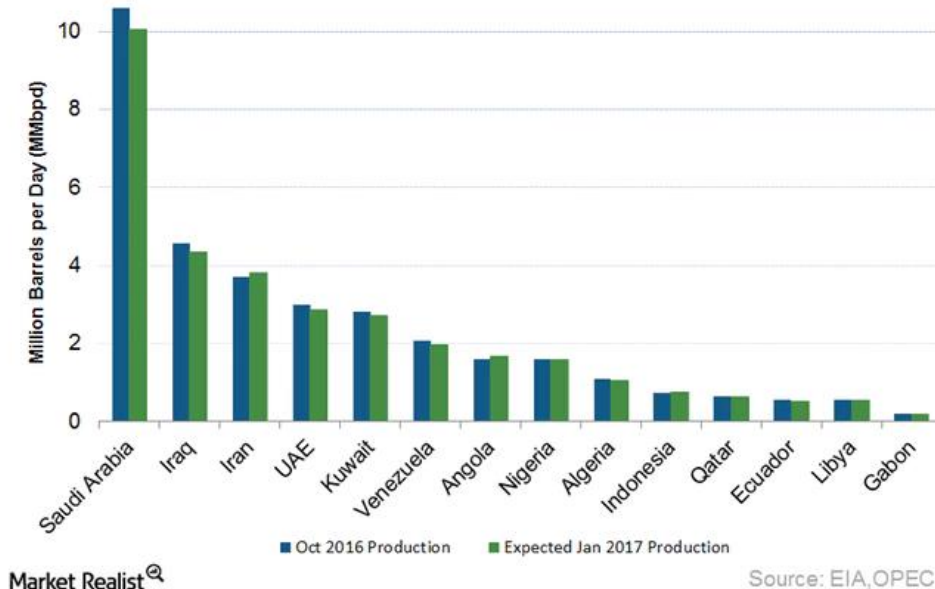
## Fracking

A method used to extract crude oil from shale rocks by injecting a concentrated stream of water and chemicals into oil containing layers of earth. Fracking is primarily used by countries such as the USA who rely on oil but do not wish to employ other nations such as the participants of OPEC for fuel. Although the equipment is making the production costs higher than through traditional oil drilling, the accessible onshore locations reduce both transport and search costs, meaning that in many circumstances fracking is simpler and creates a higher revenue. Many countries such as France have banned fracking because the chemicals used, in fracking have contaminated local water sources and increased the threat posed by earthquakes.

## Organization of the Petroleum Exporting Countries (OPEC)

It is an international organization and currently consists of 14-member states. It states that it has the goal of stabilizing the oil market and to unify the petroleum policies of its member states. In the past it has achieved sustainable growth and development for itself as well as for its member states, despite having been predicted to be dissolved shortly after its creation.

OPEC Members Production Quota in Jan 2016



## Carbon Tax

A carbon tax is a form of tax, meaning it adds a percentage to the price of certain products which goes to the state. Regarding a carbon tax the products receive a percentage proportionate to the carbon-dioxide it took to create. This is meant to encourage clients to purchase sustainable products instead of

polluting. Although the goal is to reduce carbon emissions the money gained doesn't always go to that goal.

## Background Information

### General Overview

There are many reasons for the world's dependence on fossil fuels. One of these is the vast oil market. In 2014, the US is easily the leading economic actor in the oil market; it imports one of highest amounts of all nations at 344 million tones and produces a large amount of oil with 567 million tones, according to the IEA (International Energy Agency).

The world has had a historical dependence on fossil fuels. In 2017, 29 countries still had at least 90% of their electricity from fossil fuels, while 50 have above 86%. Dependence on this resource is not falling, and in some cases is even rising. India's dependence on them has nearly tripled since 1990 and may continue to increase. OPEC's member states depend on fossil fuels for both their energy and their economy, making them extremely susceptible to the falling oil price. Oil has historically proven to be a symbol of power as seen through wars such as the Iran-Iraq War and the two oil crises which have since occurred.

Oil produced from fracking and the tar sands are a major part in some nations' economies. For example, in the US and Canada, fracking allows them to produce petroleum at their own price. Petrol takes 22% of its price to produce so it is more cost effective for potential large-scale producers. The fact that the US is producing huge amounts of oil through fracking shale oil at increasingly low prices could destabilize the whole region in the Middle East and would worsen the already existing geopolitical rivalries such as the one between Saudi Arabia and Iran. OPEC was the controlling power in the oil market before the growth of US fracking. The organization-controlled price as well as who would receive oil and was able to start a oil crisis in the USA rendering the citizens unable to drive their cars. Now that the US is producing their own petrol, the situation has practically reversed. OPEC is scrambling after its lost power and their main source of income. The economic instability cause by the situation worsens the international diplomacy between Saudi Arabia and Iran. Ever since the Iranian revolution Saudi Arabia and Iran had a rocky relationship to say the least.

The use of crude oils and many aspects of human activity cause long lasting effects on the environment. The atmosphere which acts as a protective layer around planet Earth is no exception. The atmosphere is being filled by greenhouse gasses because of pollution. Compounds such as CO<sub>2</sub> and water vapor are suffocating the earth with heat by reflecting it instead of letting it escape. This is called the greenhouse effect.

Due to the long-lasting dependence on fossil fuels, there are increasing consequences. Phenomenons such as acid rain which harm the world are the aftermath of nitrogen oxides, released by burning petroleum, entering our atmosphere. Due to this, many lifeforms, their environments and cultural sites are harmed. Glaciers are also melting and reducing the Earth's reflectiveness. Many marine species are also going extinct due to the rise in sea levels and the warming of the ocean. Frequent severe weather such as floods, droughts, storms and heat waves are occurring worldwide.

**According to CIA Factbook the world's largest oil producers are:**

<b>1</b>	<b>Russia</b>	<b>10,550,000</b>
<b>2</b>	<b>Saudi Arabia</b>	<b>10,460,000</b>
<b>3</b>	<b>United States</b>	<b>8,853,000</b>
<b>4</b>	<b>Iraq</b>	<b>4,452,000</b>
<b>5</b>	<b>Iran</b>	<b>4,068,000</b>
<b>6</b>	<b>China</b>	<b>3,981,000</b>
<b>7</b>	<b>Canada</b>	<b>3,679,000</b>
<b>8</b>	<b>United Arab Emirates</b>	<b>3,106,000</b>
<b>9</b>	<b>Kuwait</b>	<b>2,707,000</b>
<b>10</b>	<b>Brazil</b>	<b>2,517,000</b>
<b>11</b>	<b>Mexico</b>	<b>2,187,000</b>
<b>12</b>	<b>Nigeria</b>	<b>1,871,000</b>
<b>13</b>	<b>Kazakhstan</b>	<b>1,810,000</b>
<b>14</b>	<b>Angola</b>	<b>1,797,000</b>
<b>15</b>	<b>Norway</b>	<b>1,648,000</b>
<b>16</b>	<b>Venezuela</b>	<b>1,621,000</b>
<b>17</b>	<b>Qatar</b>	<b>1,523,000</b>
<b>18</b>	<b>European Union</b>	<b>1,488,000</b>
<b>19</b>	<b>Algeria</b>	<b>1,348,000</b>
<b>20</b>	<b>Oman</b>	<b>1,007,000</b>

## Major Countries and Organizations Involved

## United Nations Environmental Programme (UNEP)

“The United Nations Environment Programme (UN Environment) is the leading global environmental authority that sets the global environmental agenda, promotes the coherent implementation of the environmental dimension of sustainable development within the United Nations system, and serves as an authoritative advocate for the global environment.”

It categorizes issues under sections such as: climate change, disasters and conflicts, ecosystem management, and environmental governance. It hosts many of the world’s vital conventions on environmental issues.

## OPEC

The Organization of the Petroleum exporting Countries states that its mission is to "coordinate and unify the petroleum policies of its Member Countries and ensure the stabilization of oil markets in order to secure an efficient, economic and regular supply of petroleum to consumers, a steady income to producers, and a fair return on capital for those investing in the petroleum industry." OPEC believes that oil is necessary and is doing everything they can to keep their market going. Because of this the nations within the organization are producing oil at full capacity despite the low prices. The US has gained much control over the petroleum market compared to OPEC since it is the world’s highest customer and it has become one of the highest producers through fracking.

## USA

The USA is one of the highest polluting countries in the world. In 2015 alone, it produced 4997.5 million metric tons only from fuel combustion. According to the union of concerned scientists and the IEA, this ranks it second in the world for this year. Currently, the US is in a strange position due to its conflicting policies. The previous President of the US, Barack Obama, served from 2009 till 2017. During this time, he implemented many environmental policies.

Now that Donald Trump is in the office, the entire focus has changed. Although President Obama stressed the importance and gravity of crude oil’s impact on the climate, Trump believes the economy and other matters to be more important. The current President of the US backed out of the Paris Agreement as well as removed climate change from the USA’s priority list and replacing it with the need for economic competitiveness. This means that due to the falling price of oil combined with Trump’s policy, are increasing the use of fossil fuels in the US. The cheap fuel provides the USA with an ideal opportunity to increase their economy, but this may cause its downfall in international trade if carbon taxes or other such laws are implemented in other countries.

## France

As demonstrated by the Paris Agreement, France recognizes the problem of climate change. France banned the creation of new licenses for oil and gas exploration and has pledged to ban all oil and gas exploration and production by 2040.

Instead of oil and gas, France has decided to prioritize nuclear energy. With it powering 81% of France, it easily surpasses most nations in terms of nuclear power. However, France still has CO<sub>2</sub> emissions. In the past years France's government provided a tax relief on diesel engines due to the general preference. After the Volkswagen incident public pressure forced the government to remove these privileges in 2016. The Sustainable Government Indicator (SGI) ranked France 12th in terms of environmental policy. Despite this strong ranking, France is slower to act and is against limiting nuclear power due to the amount of energy they get from it.

## Timeline of Events

Date	Description of event
Until 1859	Crude oils had no major use and were mostly used by ancient cultures such as the Egyptians as a preservative. Whale fat was used as fuel for kerosene lamps up until this point.
1859	Edwin Drake built the first oil well and sold oil commercially for the first time.
1940-1970	The Seven Sisters were founded which became the current oil supermajors now known under the names of: Shell, ExxonMobil, Total S.A., Chevron, ConocoPhillips, and BP.
1949	The first commercial application of fracking happened. The idea was first proposed by Edwin Drake, but it wasn't implemented to increase production until then.
1960	OPEC was founded in Baghdad, Iraq. For a long time it was the force that drove the oil market and it controlled the rise and fall of oil prices. Since its members owned most of the oil reserves worldwide wielded tremendous power.
1973-1974	The first oil crisis took place. It was caused by OPEC's

decision to not only quadruple oil prices, but to also ban exports to the US, Western Europe, and Japan. The decision took place after the support Israel received from Western governments. This showed the power OPEC had and how dependent many nations were on its oil

1979-1981 The second oil crisis happened, this time not on purpose, but as an accident. After the Iranian revolution the unrest in the population caused a fall in oil production which correspondingly raised oil prices.

2015 The United Nations Framework Convention on Climate Change (UNFCCC) convened and released the Paris Climate Agreement. It is mainly driven by Nationally Determined Contributions (NDCs) and as such is dependent on the contribution member states are willing to provide.

## Relevant UN Treaties and Events

- Paris Agreement: the most effective document in its field. It sets a goal of keeping the global temperature increase under 1.5 degrees Celsius above pre-industrial levels by, not only tackling directly connected issues, but also indirectly such as poverty. It also considers the limited resources LEDCs have at their disposal.

## Questions to Consider

- What would happen to the economy without oil? How would this affect the international relations of major oil exporters?
- What would change if the problem were instantly solved?
- How would a country react to another losing all dependency on oil or gaining a dependency on oil?
- How would LEDCs react to other LEDCs getting a loan before them?
- How reliable are alternative energies? What challenges do they pose?

- How would citizens react if all oil was retracted and its use became illegal?

## Previous Attempts to solve the Issue

The Paris Agreement was the most recent meaningful act against global warming and the use of crude oils to be ratified by so many nations. This makes it an important milestone in not only the UNEP's history, but the UN. Although more time is required to know how effective it will be, it currently seems to be the most effective document yet. As proof of this, Norway serves as an example for a nation which has adopted the agreement and renewable energy. Norway is the first and only nation which produces more than 100% of its consumed energy in a sustainable way. At least 97% of its energy comes from hydropower, rising at times to 99% depending on weather conditions. Since 2017 over half of the cars bought in Norway are electric or hybrids, and it has pledged to ban all cars which are powered by fossil fuels by 2025. The Member State recognized early on the effects oil had, utilizing its thriving economy, and it became the first country to be completely independent from crude oils as a source of electrical power.

Other countries too have tried to solve this issue. Recently, Saudi Arabia submitted a new plan called Vision 2030 due to the price of oil which has fallen considerably. The plan hinges on three main themes: increasing the economy, creating a more positive society, and being more ambitious as a nation. In order to enhance income without depending on their oil, Saudi Arabia has planned to raise taxes and to reduce subsidies. The increased income would flow into the government allowing it to implement the delicate transition of the economy and would enable it to closely monitor and manage the changes. Ultimately, Saudi Arabia hopes to be an example in leading the other OPEC members into a different direction and ensure a prospering economy without depending on crude oil.

## Possible Solutions

Alternative energy is a source of energy which is quickly gaining popularity over fossil fuels. Many nations, however, need energy loans from developed nations. Energy loans are when one nation receives money from another nation or company with a minimal interest rate, or in exchange for trade agreements such as rights to certain resources in order to allow less economically developed countries (LEDCs) to build solar and wind energy farms to reduce their dependence from the oil.

More controversially is the alternative energy source of nuclear power. Countries such as France and Japan heavily depend on it due to its ability to produce a large amount of electricity. However, the production of nuclear energy comes with a risk. Nuclear power plants produce nuclear waste, and to date, there is no way to completely remove the risk of the potential damages of radiation. Furthermore,



the power plants themselves are at risk of melting down, such as what happened at Chernobyl in the Soviet Union. When these disasters occur, large amounts of radiation are released, lethally harming nearby ecosystems.

In addition, alternative sources of energy to fossil fuels, a carbon tax would be another possible solution. It would discourage the use of fossil fuels while financially supporting the use of renewable energy. Nations such as Canada are considering its use. This would successfully transfer the economic powerhouse behind crude oils and allow for a smooth transition from one source of current to another. But such change can't be brought about purely from the governmental level. Therefore education is so vital to solving most problems. The change must come from the people as well if we wish for a better future. Because of this, encouraging local grass-root organizations and NGOs may be the final push we need. Most of our world is already moving towards these goals

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