

Research Report

Special Conference II: Development and Sustainability

Reducing dependency on energy supplies from politically unstable regions

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Introduction

Our dependency on energy has increased drastically over the past centuries. The influence energy and fuel prices have on the global market has become absolutely phenomenal. This also means that the suppliers of energy have a huge influence on today's market, which can also be a crucial issue concerning the stability of the global economy. Energy is needed for our most basic needs such as household related activities (heating, cooking, etc..) but it is also necessary to sustain economic sectors (such as agriculture, the functioning of industries, services and transports). This makes it indispensable for wealth generation. As suppliers are minimal and often large, the energy market can be considered to be a monopoly. In this case supplier then has so much power over a market that it has indirect control over states.

Moreover, being such an important factor, energy has a large impact on the living conditions of populations and development of a country. This is also why energy has become a recognized measure to determine the quality and development of countries through the Energy Development Index (EDI). If the market only has a few suppliers controlling the energy supply, they will have immense influence over states. If, on top of that, the suppliers are unstable, due to internal or multilateral conflicts, a consuming country cannot be guaranteed stability. This will lead to further national problems.

Definition of Key Terms

Energy sources

The raw materials needed to generate power (i.e. fossil fuels), as well as the electrical power that could be supplied.

Energy supplier

A provider of energy. In the case of this issue mostly a nation as a whole.

Energy independence

The goal to reduce reliance on foreign energy sources and become self-sufficient in the acquisition and generation of fuels and energy.

Energy security

The International Energy Agency (IA) defines the term energy security as the uninterrupted availability of energy sources at an affordable price.

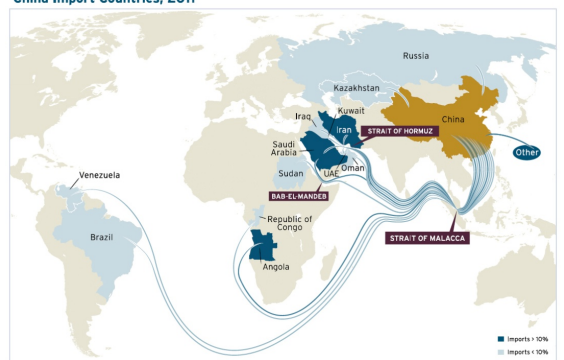
General Overview

In 2004, the global consumption of oil was at 82.4 million barrels per day, and over the years, this number has only increased. Surprisingly, there are only three main producers (Saudi Arabia, the United States of America, and Russia) and two main exporters (Saudi Arabia and Russia) of oil. All other nations that produce petrol produce an incomparable amount. With the uprisings and political instabilities within the Middle East and Eastern Europe, the impact and control that these four countries could have is becoming increasingly more prominent and distressing. The idea of becoming energy independent is becoming many nations' ideal, though it is also important to understand the consequences it could have.

Geopolitics of energy security

Geopolitics is very important to consider with regards to this topic. Energy supplies are geographically determined while the exchange of this valued product is politically decided. This means that when a country considers a supplier, it needs to consider the location of the source as well as their political relationship with and the stability of the supplier. With the lack of large global suppliers, the

China Import Countries, 2011



Created by Marcia Underwood of the Brookings Institution with data compiled from the U.S. Energy Information Agency's China Country Report 2012. <http://www.eia.gov/countries/cab.cfm?id=c21>

"The New Geopolitical and Security Consequences of Energy." *The Brookings Institution*. N.p., n.d. Web. 29 June 2014.
 <<http://www.brookings.edu/research/papers/2014/04/14-geopolitical-security-energy-jones-steven>>.



choices are limited and this takes its toll on the security of possible sources.

There are three main possibilities to increase stability with regard to the geopolitical front of this issue: becoming an energy independent nation; strengthening relations with the large energy suppliers; using multiple smaller exporters to decrease the impact each can have. The diagram above uses China as an example of how and from where energy imports can originate from and be regulated.

An example showing how the effects of the geopolitics of energy can be problematic is the current problem between Russia and the Ukraine, and the ways in which it is affecting all of Europe. Russia is one of Europe's main energy suppliers, supplying them with 24% of the total energy they consume. When the unrest between Russia and the Ukraine began, and Europe sided with the Ukraine, Russia threatened to cut off the energy supply going out to Europe. Considering the fact that Europe is a large domestic consumer of energy, fear of unrest within other states in Europe became noticeable. Cutting off the supply to Europe would of course also affect Russia but as they also export a lot to other nations, such as China, the potential effect this would have on Europe was considerably greater. The impact Russia's oil embargo could have had would have been disastrous on Europe's economy as the oil prices and cost of living would have inflated so dramatically, it could lead to irreversible damage.

Another example is when a country has internal problems. In 2011 when Libya underwent a revolution, the global oil prices also inflated dramatically. Beyond the instability of the country, rebel interference caused problems with the exporting of oil, and the main importers of Libyan oil also started taking precautions and started importing from other sources. As Libya was still one of the global top 15 exporters of oil, the consequences were reflected in all aspects of almost all societies. In this way it was not an intentional instability such as the one Russia created, but the reliance on the exports still impacted the global markets a lot.

Natural disasters

Apart from the political liability that could cause problems, there are also other factors that could cause issues within the oil sector. There are numerous large resources that are being used up for energy. This occurs both with fossil fuels as well as other sources but they are almost always supplied from a single area. This means that a local catastrophe, such as a natural disaster, could also suddenly cause unforeseen problems for millions of people. It



does not always need to be political instability and problems that make an energy source less secure.

The issue of oil: unique political challenges

The oil crisis of 1973 was the first event, which showed man how important it was to be concerned about where energy comes from. Historically, energy security has been linked to oil. Indeed, the term 'energy security' gained importance in 1973, following the Kippur War (Israeli-Arab war) during which countries that were part of the Organization of Petroleum Exporting Countries (OPEC) imposed an oil embargo on Israel and the countries providing support to Israel. Prior to this event, flows of oil from the Middle East region were imported without threats to oil supplies or with any conflicts. With the rise of OPEC as a defender of the rights of producers and the IEA (International Energy agency), the market of oil had entered a new era marked by the legacy of the embargo.

Major Parties Involved and Their Views

International Energy Agency (IEA)

The organization acts in the same way as the IMF does for world banking. The IEA acts a mechanism to "smooth and ameliorate disruptions and shocks to the international energy markets". Concerning energy security, it focuses on promoting diversity and efficiency within all different sectors of energy. It was founded as a response to the 1973 oil crisis, in order to create a platform of discussion and collective action.

Organization of Petroleum Exporting Countries (OPEC)

OPEC has the objective to coordinate and unify the petroleum policies of its member countries and to ensure the stabilization of oil markets. This must be done with the aim to create and secure an efficient, economic and regular supply to consumers. But it also works to maintain a steady income to producers and a fair return on capital for those investing in the petroleum industry.

Saudi Arabia

Saudi Arabia is the largest producer and exporter of petroleum and also has one of the largest gas reserves. 54% of their fuels are exported to Far East Asia though it is also the second largest exporter of fuel to the United States of America.

Russia

Russia is the country that holds the world's largest reserves of natural gas. Furthermore, it competes with Saudi Arabia to be the top producer of oil. One third of European oil and gas is imported from Russia, and Russia is cumulatively exporting more to Asian markets. It recently closed a large deal with one of its main importers, China. With European countries' high dependency on Russia's energy supplies, energy has become much more than a commercial assets, but a lever of Russia's geopolitical strength and stabilization. Energy is used as a tool for intimidation, and energy security appears to be the primary issue for Russia's national security.

United States of America

The United States is, together with China, the largest consumer of oil. 95% of the country's transportation energy is petroleum based, and the majority of this oil comes from unstable countries (Venezuela and Middle-east). Energy's disruption or extravagant cost could lead to the collapse of their economy. Therefore energy dependency poses economic, security and health vulnerabilities for the United States.

Timeline of Events

Date	Description of event
May 9 th , 1950	Creation of ESC (European coal and steel community). Aim: to unite coal and steel industries of France and Germany under a single authority, in order to prevent future wars. Composed of 6 members: France, Germany, Luxembourg, Netherlands, Italy and Belgium.
1957	With the creation of EU came the creation of Euratom creating a European nuclear energy sector.
1967	ESC and Euratom are merged
October 1973	First oil crisis following Kippur War where OPEC countries implemented an oil embargo which dramatically raised the price per barrel. It showed the power of these countries towards rest of the world just by their possession of



oil.

1974	Creation of IEA - initiative from Henry Kissinger
1994	European Energy Charter to promote an efficient energy market (through the price mechanism), but also to take the environment into consideration.
1996	Green paper on a Common Energy Policy established in security of supply and environmental considerations.
2008	Implementation of the 20-20-20 package. By 2020, EU targeted a cut of 20% in greenhouse gas emission, an increase of 20% in energy efficiency and aims for 20 % of energy coming from renewable sources
February 2014	Beginning of the Ukrainian crisis and the risk of a gas crisis

UN involvement, Relevant Resolutions, Treaties and Events

- Energy Charter Treaty, 16 March 1998
- Treaty on the Non-Proliferation of Nuclear Weapons, 1 July 1968
- Treaty establishing the Energy Community, 25 October 2005

There are a lot of other bilateral and closed multilateral treaties that have been created since the 'shock' in 1973. Most of these treaties all share the goal of creating peaceful and secure energy markets amongst member states but also aim to expand the markets. Whether this is the right position to take on this issue is debatable but it is the main focus the United Nations have been taking to create an overall more secure energy market.

Evaluation of Previous Attempts to Resolve the Issue

Up until this point the issue has not necessarily been seen as an issue. The United Nations have been working on creating a larger and more free energy market to be able to

supply the world with energy more freely and equally but not specifically with the aim to eradicate the problem of unstable energy sources.

The attempts of interconnecting energy sources have been successful though and multilateral energy grids have started to become more common. The global involvement in and awareness of the energy crisis has also opened more doors to an intercontinental but also international distribution and exchange of energy and the market.

Possible Solutions

The most obvious path towards long-term energy security is to improve relations between countries, establish regulations allowing energy to become less of a state-owned product, and increasing energy efficiency so that, in the long term, countries use less energy. These things would mean reforming the whole energy system that is currently in place and getting people to change their perspective on energy.

First of all, the perspective on energy must change because seeing energy as a regular good can be problematic. It is necessary to recognize energy as a vital commodity, and it should be considered a publically shared good. Just as with any other public good, government action is required to define and set clear objectives to limit any dangerous movements concerning the equilibrium of the market. As energy supplies circulate through countries, such objectives can only be reached through a collaborative approach. This idea comes from the simple theory that by helping neighbors with this issue, we will achieve energy security.

The reason why the market needs to run by international cooperation is because it is such a labile market. If an importer suddenly changes its source, it might not impact the importer but it could have devastating consequences on the economy of the supplier, which will later backfire on other aspects of the global economy. The consideration of the bilateral coordination that is needed between suppliers and importers is essential. A demonstration of this would be to consider what would have happened if Russia had cut off the oil supply: Europe's economy would have been impacted greatly. This would have led to fewer investments in China, which would at that point be Russia's main importer of oil, and then China would have also decreased their oil imports, adding on to Russia's losses. Because the global market is so interconnected, it has become almost impossible to do something without it in some way impacting everything else. This situation shows how closely countries



must work together on energy security and that changing the supplier is not the best long-term alternative.

Furthermore, improving the technology concerning the exchange of energy could also improve the situation. To improve energy efficiency, more funds should be allocated to Research and Development (R&D) on this issue. There are many companies that have the potential to offer new technological and digital solutions for households and companies to reduce and improve their energy consumption.

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