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EPPAM INTERNATIONAL BOOK PUBLICATION

EPPAM Director Assist. Prof. Dr. Filiz Katman a study on the Middle East will be published as a book by Lexington Books which is published by leading publisher, Rowman & Littlefield. The study will focus on the situation in the Middle East countries.

ROWMAN & LITTLEFIELD

LEXINGTON BOOKS

INTERNATIONAL STUDIES ASSOCIATION INVITATION

EPPAM was invited to the United States by International Studies Association (ISA) for the 48th Annual Convention of ISA which is the largest meeting of the international relations scholars.

EPPAM Director Assist. Prof. Dr. Filiz Katman was invited to the Middle East Session and she made a speech titled "Kurds in the Middle East".





BOOK PUBLICATION ON TURKISH STREAM

EPPAM Director Assist. Prof. Dr. Filiz Katman will publish book on "Turkish Stream" by LAP Lampbert Publishing, one of Germany's the most respected publishing houses. In the book, the impact of the Turkish Stream Pipeline Project, which increases energy pipeline competition, on the European energy security and its impact on the target of Turkey's energy trade





OP-ED: 2040 PROJECTIONS ON THE SUPPLY AND DEMAND ON THE ENERGY RESOURCES

Ahmad Masud Oraz, PSIR 3rd Year Student

Introduction

Energy resources are the vital resources that could change the shape of the world. The importance of energy resources causes conflicts and the game in power international arena. The types of energy resources that we use the most are nonrenewable energy such as the fossil fuels which they are coal, natural gas and petroleum. Uranium is another nonrenewable energy, but it is not a fossil fuel. Uranium is converted to a fuel and used in nuclear power plants. Once these natural resources are used up, they are gone forever. The gathering of this type energy is harmful yet it is the most accessible resources. Producing non-renewable energy causes pollution which leads to global warming. There are also renewable energy resources that they can be used over and over such as solar energy, hydropower, biomass and etc. They generate much less pollutions than nonrenewable energy resources.

There are countries who supply energy resources and countries who demand energy resources. The risk of energy demand is getting higher, especially non-OECD on Asian countries such as China and India are on the top. But increase in demand can also bring high standard of living and bring growth on GDP for economies. Nowadays OECD countries are on the top for demand on energy resources and the supply for energy resources were given by growing economies. The predictions show that there will be cycle of change around 2040s. The OECD countries will be the least for demand on energy resources, giving the title to the non-OCED Asian countries will be on the top for demand on energy resources. The predictions show that the fossil fuels will continue its domination on energy demand, except the coal will lose its value since the demand and use of natural gas will increase. For this paper, it will be presented that land by land

and energy by energy how their demand and supply are for present day and for the next 25 years.

Fossil Fuels:

Petroleum is one of the most consumed energy resource. The usages of petroleum or liquid fuels are based on transportation and industry. Today the consumption on petroleum is 90 million barrels per day. The estimations shows that in 2040 the usage will increase 31 million barrels per day which makes in 2040 the consumption on petroleum will be 121 million barrels per day. Today the high demand for petroleum is OECD European countries and their number one supplier is Russia. The most petroleum supplier of the world is the OPEC country Saudi Arabia. Today 45% petroleum the of suppliers are the OPEC countries. The estimations show that percentage of petroleum supply by OPEC countries will decrease, because of the technological outbreak of US shale resource or other American countries

such as Brazil's sand oil inventions. As mentioned in the introduction part that the predictions show that there will be cycle of change, with the US tight oil invention the demand for petroleum from European OECD countries and USA will decrease to the point where USA will take place of Saudi Arabia and become the number one petroleum supplier in the world. This will also bring decrease to price of oil which is another reason for US being the top supplier which will have the most effect on oil prices. The estimations shows the higher demand will be on growing economies and mostly on non-OECD Asian countries such China as of the because increase number on motor vehicles and industries.

Natural gas fast is the increasing energy resource on consumption, by the time it retakes the place of petroleum become the and most consumed energy resource. The usage for natural gas resources are mostly on producing electrical energy, usage for energy plants and for

industrial matters. Today the consumption on natural gas in worldwide is 120 trillion cubic feet, by the time of 2040 it will almost double its amount of usage, the estimations shows in 2040 230 trillion cubic feet will be consumed worldwide. The reason why increase in natural gas, because it will with swap place coal consumption. Natural gas is less polluted than coal. Also the growth of Liquefied natural gas trade among the oversee demand and suppliers is another reason to the most consumed energy resource. As the demand for this energy resource extremely increases, the supply will also increase by 69% by the year 2040. By the time the top suppliers of natural gas will be the non-OECD Asian countries (China, Central Asia), middle east, OECD Americas and Russia. The US production growth on natural gas is mainly the shale estimations recourse. The show that the 44% production on natural gas produces by US, China and Russia only in 2040. The demand for this energy resource will be on growing economies such non-OECD countries.

Coal is the least growing energy resources, which it on the point where it loses its value. Today the consumption on coal is 153 quadrillion Btu, the predictions show that in 2040 the consumption on coal will be 180 quadrillion Btu which only makes average 0.6% per year increase. In feature, the consumption of coal will decrease to the point of not using. The usage of coal is the same as the other two fossil fuels, which is industry and producing electrical energy. Top suppliers of coal are China and India. China alone consumes the half of the coal production in the world. China started the project such as declining coal use in China, because of the air pollution.

Other Energy Resources

One of the most growing demands on energy recourse is electricity. Today the consumption on electricity is 21.6 trillion kilowatt-hours (kWh) worldwide, the estimations tells this amount will increase 69% in 2040. which it will make 36.5 trillion kWh worldwide consumption. The demand for electrical energy is mostly on emerging

by economically, non-OECD countries. To produce the electrical power as mentioned in the fossil fuel part, that coal and natural gas can produce electricity. As they are the nonrenewable resources, the producing electrical power makes pollution which can cause the greenhouse gas emission. Electricity can also be produced by renewable energy resources. Renewable energy resource is another increasing energy resource. Countries such as OECD European and China are heavily investing on renewable energy. For European countries as they are depended desperately on Russia's natural resources through investing on renewable energy they try to

become less depended, for example Germany declared that in 2020 every motor vehicle should be electric so they won't buy petroleum from Russia. As for China, they consume half of the coal production worldwide. Through this, they are heavily investing on renewable energy avoid the resources to greenhouse gas emissions which cause the global warming.

Conclusion

The main idea of this paper was that the feature of demand and supply on energy resources will have a cycle of change. The developed OECD countries will change their place with developing countries on the demand for energy resources.

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