

GEOPOLITICAL VIEWS ON THE RELATIONSHIP OF OIL AND CLIMATE CHANGE

Nikolco SPASOV, PhD
The Intelligence Agency
e-mail: spasov.nikolco@yahoo.com

Toni MILESKI, PhD
Faculty of Philosophy– Institute for Security, Defense and Peace
e-mail: toni@fzf.ukim.edu.mk

Aleksandar PAVLESKI, PhD
Faculty of Philosophy
e-mail: pavleski@fzf.ukim.edu.mk

Abstract

Today, in the modern and dynamic development of humanity almost all activities are related to dependence on energy, especially oil dependence, starting from the economy as well as activities in the society and international politics. Since the development of air and road traffic, especially after World War II, the transfer of wealth from some countries (producing countries) to other countries (consumer countries) is already an everyday major activity. Climate change is expected to pose a safety hazard if the planet warms by 1.3 degrees by 2040, is expected to occur "enlarged internal and cross-border tensions caused by the large number of migrations, conflicts due to lack of resources, increased spread of diseases coming to possible new geopolitical change". Geopolitical approach of oil is in fact a key resource that is used in transport and is located in few countries (which then in 2000 moved to the resource nationalism that could use oil as a weapon and where people may face civil strife) that must be transported over long (and increasingly) risky maritime routes (including passage

through straits), can lead to wars on access to oil resources or control over oil transport routes.

Key words: Geopolitics , Geo strategy, Oil, Climate change.

Introduction

The complexity of questions due to the challenges that are imposed by the climate changes, leaves a deep reflection on the theoretical problems associated with these questions. The suggestions for practical solutions for the ongoing transformation of the structure of modern societies are becoming more and more urgent. The climate change is a complex global question, whose impact is expected to result in serious security implications for the humanity. The long term impact of climate change will be expressed through negative changes in temperature, precipitation, frequency of extreme events (droughts, heat waves, forest fires) and the anticipated negative effects on agricultural production, forestry, water resources, food security and biodiversity is a present issue which will gain more and more importance in the following years. The effective reaction to climate change must cover two crucial elements: global reduction in emissions of gases that cause the greenhouse effect (GHG) and adjustment on regional, national and local level to deal with the climate change.

Today, we are witnessing the emergence and the vulnerability of countries from climate change, the vulnerability of certain segments and prominence to the importance of certain regions in Africa and Asia, in which is expected to start decreasing and instead to increase the importance of Russian and Arctic regions, which are rich with oil and natural gas.

The relationship between oil and climate changes

Today, in the modern and dynamic development of humanity almost all activities are related to dependence on energy, especially oil dependence, starting from the economy as well as activities in the society and international politics. Since the development of air and road traffic, especially after World War II, the transfer of wealth

from some countries (producing countries) to other countries (consumer countries) is already an everyday major activity. Moreover, the way of consumption-usage of the oil had a negative impact on the environment and the human well being. The oil used in energy, and especially its application in the transport, makes it a resource with strategic character. In the literatures that cover international relationships and economy, the oil is mentioned in almost every segment and every book, and it became an integral segment of the world politics. In the last decades of world politics, an issue appeared that attract the worlds public opinion and the political agenda- the climate changes. The best reference in this context is the first report for the Club of Rome (Limits to Growth, 1972), which highlights the unacceptable way of how the society functions. Considering this alarming signal, it is necessary to highlight the negative effects on the environment from oil usage. It is required reduction of classical and traditional use of this fuel, taking into account the indicator of growing demand for this fuel as result of developing globalizing processes and increased global population. In future other types of independent economic societies are required, which are not based on oil dependency but instead focus on renewable sources.

This situation creates difficulties for the countries that import oil, for example many Western societies are vitally dependent and associated with oil. North Africa plays a major role in supplying the European markets, the exportation of oil and natural gas has regional influence in stabilizing the political and economic developments in Europe. The export of oil in North Africa in 2010 amounted to 3,9 MMBD (Million Barrels Per Day). According to the projections of the EIA (Energy Information Administration) the export of North African oil will decrease and will be around 4% in 2020, compared with the period of 90s of the previous century when the export was 6%. North Africa is still an important „player“ in the world market, which is extremely important for Europe. The destabilizing processes that occurred in the so-called Arab Spring, which aimed to change the regimes of the authorities, become a real challenge for energy security and the security of distribution of oil and gas to Europe. The transport sector fall about a third in consumption of oil, creating enormous CO₂ emissions into the atmosphere, contributing to the creation of greenhouse gases that are directly related to climate change. The people and the environment are mutually tightly connected, the environment affects human activity, but at the same time, the human activity could damage the environment. The society become dominant due to the developmental skills in production and use of energy. The activates which harm the environment are directly

associated with energy. The production of energy causes irreparable damage to the environment. The increased concentrative level of carbon and other gases in the atmosphere, creates the greenhouse as a result of bumming fossil fuels it affects the persistence of global temperature and the increase for more than two degrees Celsius can cause serious global problem, including the extinction of many plant and animal species, and collapse of entire ecosystems. (Bales and Associates, 2008) The climate change would also pose safety risks if the planet warms by 1,3 degrees by 2040, it is expected to occur "increased internal and cross border tensions cause by the large number of migrations, conflicts cause by lack of resources, increased spread of diseases, coming to possible new geopolitical changes." (Bales and Associates, 2008)

Variability in demand for oil and geopolitical processes in the world

Today, the oil issue is more and more politicized, the oil and the safe access to it are aspects that are present on top of all state agendas. The oil issue is becoming more popular, and the reason lies in the volatility in oil prices as result of world political impacts. As of early 2000, it was observed a steady increase in oil prices until the summer of 2014, till then the oil market was characterized with price incensement, this can be a big problem because it may affect the achievement of state interests (it could have an impact on the balance payments for the countries importers through increased consumption of oil importing). (David and Yueh, 2010) Starting from the middle years of the last century, climate changes occur as a problem that attract the public attention. Till then the visibility of climate change was negligible on the need for attention. However, we can say that we are witnesses of two world processes in the global energy system. (David and Yueh, 2010) On one hand, the dependence and increased consumption of energy, especially of oil from the new world economies as China and India are more and more accurate, and on the other hand the negative environmental effects from oil usage, especially the emissions of carbon dioxide.

Unfortunately, people and society always pay attention to the current problems, leaving other unsolved, believing that they will never make enough to impose solid solutions. The oil is one of the most urgent problems of state agendas, and for some countries, the oil politics almost corresponds with external politics (whether they are countries which are importing or exporting oil). Although climate changes are

evident and we are already feeling them, the oil problem is more meaningful in the world global politics. This is due to the fact that the current condition of modern society, the oil is a key element, that relies on current patterns of development, and oil is an important energy source because it is an essential element in today's transport system, relying on people's and wealth's movement, and important ingredient in many products that dominate the modern way of living: 90% of products in warehouse imply the use of oil on one way or another, while we feel the vulnerability and loss from climate change spontaneously. (Anthony, 2009)

For this reason, it is very important to persist to minimize the transport sector only in the countries where the organization for economic collaboration and development (OECD countries) is established. In the year 2014, the oil consumption in the transport sector was 1252 million tons, while in the year 2030 is expected to be 1289 million tons of oil consumed in the transport sector. (World Energy Outlook, 2014) India's growth is expected to be from 37 (from year 2006) to 156 million tons of oil (by the year 2030), while in China will range between 127 to 440 million tons. Globally speaking, the level of emission of carbon dioxide due to transport (millions of tons) is expected to grow from 6444 in year 2006, to 8013 in year 2020, or to 8921 in the year 2030. (World Energy Outlook, 2014)

While some studies speak for the oil treasure of Middle East, the biggest part of the reserves are focused on the Bay. Middle East might have more 65% of the world oil reserves and 40% of gas reserves, but 90% of them, are placed in the Bay. The US Energy Department calculated that the Bay earned an average of 14,5 millions from the export by the end of year 2000, which is equal to 41% of the total world exports. The Energy Department also predicts that the Bay by the year 2020 will reach average earnings of 37,2 millions from export, which is equal to 56% of the world total export. In the Bay there are also the main natural gas reserves, around 33% from world gas reserves. Second country that owns the biggest natural gas reserves is Iran with 16%, while all other countries from this region own less than 3% from world reserves. (National Security Strategy, 2010)

As presented in these examples, the current world is characterized by the big oil dependency, but minimizing the oil dependency should be one of the most important politics which every country should strive for. Minimizing the oil dependency is not only stopping the climate changes, but the oil capacity which influences and decides the

destiny of the world politics is decreasing at the same time. (World Energy Outlook, 2014)

Global triangle – oil, geopolitics and climate changes

The geopolitical approach towards oil is the fact that it is a key resource which is used in transport and it is located in few countries (which after year 2000 crossed to resource nationalism, and can use the oil as weapon and where people can come across civil strife), and must transport through long (and even more) sea risked routes (including crossing between sea straits), it can bring wars to access oil resources or controlling oil transport routes. The newly found economies are oil dependent, using oil in industry, energy production and transport not only will create bigger pressure for remaining oil resources, but it is expected to come to strife or wars. This trend may cause global chaos to entire humanity, through climate changes prism which will influence the rich and especially the poor countries. These processes happen in a condition where from year 1901 to 2000 the world oil production has grown 180 times more. (Mircea, 2009) Not considering the measures and steps which are taken to the field of energetic efficiency, aiming towards pure energy and the alternative fuels for transport, energy and industry, the oil will continue to be the most important fuel for stability of world economy, as well as for the regional and international safety. (Morse, 2009)

The countries' international role which produces small amount of oil reserves will decrease significantly, while the role of Russia towards Arabian countries in world politics is expected to change in their geopolitical influence. (Friedman, 2008) With the rise of oil prices, the countries who own big number of oil sites will aim towards more autocratic mode of operation, creating tendencies toward connecting the price of oil and the internal politics of the country. (Giddens, 2009) From this point of view "oil" can be considered as an "enemy" of democracy.

Every resource which enhances the power of the country who uses the same exact resource can be called strategic resource. In that case, every resource which promotes economic and military power, or promotes the growth of the mobility can be considered as strategic resource. The specifics of geopolitics through oil prism are due to the fact that it is about a strategic resource, resource that the whole world depends

on, especially the transport sector. At the same time, the problem becomes more complex because the oil resources are centered in couple of countries. The coal exists in almost every country but the oil exists in the Middle East, Russia and some of the more conflict countries in Africa and Latin America. Looking through the prism of oil price and the role (the power) of the state who owns the oil reserves, it can be said that they have important influence in creating the world geopolitics, using the oil as a powerful tool, such as Venezuela (which uses the income of the oil export taking over the anti-American activities in Latin America), or Iran (who uses their income to promote their interests in the countries of the Middle East, Iraq, Lebanon, Palestine, Saudi Arabia).(Morse, 2009)

When it comes to Russia, the low oil price has direct and big influence on their internal and external politics. When the oil price is high, Moscow can easily play the role of blackmail force with pipelines to supply oil system, using the gas delivers as political weapon, complementing the needs and incomes of this fuel minimizing the capacity, the power for delivering the gas as political weapon. Other country that has a clear politics and that can create a problem of regional level, with global consequences is Iran. Iran owns 9% of the total oil reserves in the world. The most of the Iranian oil reserves are placed in the region of Khuzestan near the borders with Iraq. The average production of oil is about 5 MMBD (Million Barrels Per Day), Iraq according the distribution capacities is closer to Iran, or daily from Iraq are being exported 5.5 - 6 MMBD (Million Barrels Per Day).

On a short term period, the tensions reinforcement between the biggest oil consumers (USA, China and India) will bring to raising their military expenses, reducing them in a way that the available funds aim for creating new and pure energetic base. The possibility for funds reorientation from the military goals to development of alternative energetic capacities and at the same time will minimize the pressure on fossil fuels and discharging of carbon dioxide whoalso comes from their combustion process. Even if there was some sort of conflict conditions with a goal toget access to oil resources, the growth of the oil demand (which is due to developed economies, the growth of the population on global level, urbanization process and the growth of the income), will cause rise of the oil prices, hitting both the developed nations and nations in development at the same time, because the bigger part of the income will be redirected for food production, which price will rise with the rise of the oil price. On a long term plan, keeping the same course of oil consuming today, will cause dramatic

and irreversible disturbances of climate changes, with negative effects on the entire human civilization.

The problem with climate changes is energetic problem, and solving the same depends on the human capacity to transform the way of production and the way of using the energy. (Benea and Baci, 2011) Even the countries from the group G-8 are putting the problems with climate changes and high level energy on their agenda almost every year in the last decade. (David and Yueh, 2010) Today's society almost in every segment is oil dependent as a fuel, while the safety of oil reserves is a problem of national security.

The geopolitical aspects of viewing oil as fuel, can be highlighted that by the year 2020 India and China will depend on imported oil transported from the Middle East and Africa, both countries who have more and more interest and are bonding with African treasure. (National Research Council, 2010) In order to protect their economic interests and to promote their politics, the two countries are reinforcing their military presence in this part of the world. China is promoting the "Pearl strategy", while India creates military unions with Eastern Africa based on contracts that India has signed with Mauritius, Seychelles, Madagascar and South Africa.(Adger, 2006) This can simply count as Indian Ocean geopolitics, but considering the fact that these two countries will be giants in world economy in the following years. The bond between them in the Indian Ocean, focused on the oil, will have achievements on a global level and will influence even the most undeveloped Eastern regions.

Conclusion

Climate changes and energy security are key drivers for future energy policy. While energy security has been a pillar of energy policy for about a century, concern about climate change is more recent and is bound to radically change the landscape of energy policy. Therefore, policy makers are now under increasing pressure to address these twin challenges: to develop cost-effective policies that will both ensure the security of energy system as well as to reduce greenhouse gas emissions. Generally, there are two approaches that are commonly used by the policy-makers to assess the energy security implications of resource concentration. The first one focuses on the notion of diversity, while second one focuses on measuring import dependence.

In general, physical impacts of climate change are complex and unpredictable, expressing the large average global temperatures, rising sea levels, the increasing shortage of arable land and lack of water, the progress of the world is particularly sensitive to these influences. Projections of climate change during the 21st century indicate the following: The global average temperature will increase by 0,8 degrees Celsius since the early 20th century, by 2100 will increase by 2-7 degrees Celsius depending on the quantum of future emissions of greenhouse gases and technology development.

The exporters of oil and natural gas could get greater geopolitical importance, while importers of energy will have its geopolitical consequences. All these things could cause internal politics destabilization in the affected countries as well as radicalization. Further escalation of climate change in the most vulnerable areas will lead to the radicalization of politics vehicle especially if it is overloaded with historical ethnic and / or religious intolerance. The best example of a region in which all these factors can bump is South Asia, but the vast region of Southeast Asia, the Middle East and sub-Saharan Africa which in the future may not be immune to this kind of development. The demand of India and China should not be neglected and should be closely followed in the future, which depend on imported oil shipped from the Middle East and Africa, the two countries are increasingly interested and tied with African heritage.

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