

THE GEOPOLITICS OF OIL AND CLIMATE CHANGE

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This paper aims to present the role of oil in today's world, society, and economy. It is important because anything nowadays is about oil, from economy, and society, to international politics. Since the development of air and road transportation, but especially after World War II, the transfer of wealth from some countries (the consuming countries) to another countries (the producing countries) is unique in human history; and the influence of the second group of countries in world politics is very high due to this situation.

Furthermore, past and present pattern of oil consumption have negative impacts upon environment and humans wellbeing. Oil used in energy generation, and especially its use in transportation makes it a resource with a strategic character.

In the literature of international affairs, and international economy, oil is found in almost in every article, and book; but of course, there are books and articles focused especially upon this resource, and upon its role in world politics. In last decades, there appeared another element which fight to capture world public opinion, and political agenda: this is climate change. The best reference in this context is the First report for the Club of Rome (Limits to Growth, 1972), which signaled the unsustainable way of how society works.

Taking account of this alarming signal, we intended to show (using research methods based upon numbers) that there are very negative effects of using oil in the future in the same way as in the past. There is needed another type of economy, and society, based on other types of resources than oil.

But in the same time this situation creates hardships for oil importing countries, many of western societies being vitally dependent in their mobility by oil. In the same time, transportation is responsible for some one third of oil consumption, generating huge quantities of CO2 emissions in the atmosphere, bringing what can be called climate change. Put shortly, the paper presents the negative impact of oil using from geopolitical and climate points of view, and which could be the solutions for escaping this situation.

The added value of our endeavors is connected to present the negative implications from geopolitical and climate changes points of view, and which are the actions which could put in practice.

Keywords: oil, geopolitics, energy, climate change, oil transportation routes

JEL Codes: F1; F5

The humans and environment are strong interconnected; hence environment influence human activity, but in the same time, human activity can create harm to the environment. The human society became dominant because of developing skills regarding energy production and use; and the activity which hurts a lot the environment is connected with energy. The energy production causes irreversible harm to the environment. Carbon and other greenhouse gases' rising concentration level in the atmosphere, due to fossil fuels burning for energy generation, influence the temperature patterns; and an increase of more than 2 degrees Celsius could have serious impacts globally, including the extinction on many plant and animal species, or even the collapse of the entire ecosystems (Bales and Duke 2008: 78).

Climate change would in the same time bring security risks; if the planet warms by 1.3 degrees by 2040, there will be "heightened internal and cross-border tensions caused by large-scale

migrations; conflict sparked by resource scarcity...; increased disease proliferation...; and some geopolitical reordering” (Bales and Duke 2008: 79; *The Age of Consequences* 2007).

Today every man can easily see that almost everything is influenced by the oil. The problem of oil is more and more politicized; oil and the secure access to it are aspects which are present on the top of all states’ agenda. The problem of oil is more pressing, and it has become so, because of the fluctuation of oil prices. Stating in early 2000 oil price registered a constant rising, until summer of 2008, and since then the peculiarity of oil market was price fluctuation; this is a great problem because it can hit hard interests of the state (it can influence the balance of payments of importing states through rising expenditures for oil imports). Governments in nearly all the large consuming nations are preoccupied by energy security aspects like at no time since the oil crises of the 1970s (Victor and Yueh 2010: 61).

Starting with the middle of last century, another element started to be regarded with some attention, but its visibility was much lower in comparison with its importance; it is climate change.

Yet important shifts are taking place in global energy system (Victor and Yueh 2010: 62): one regards the changing of energy consumption countries, most of the future growth on oil demand will come from emerging economies, especially from China and India; the other concern regards the environmental impact of energy use, especial carbon dioxide emissions.

Unfortunately, man and society always pay attention to pressing problems, leaving other problems – which could be more important – unresolved, thinking they will never become pressing enough in order to impose strong hand decision. Oil is one of the most pressing problems on states’ agenda, and for some states oil policy almost equates foreign policy (be they oil importing, or oil exporting countries). Climate change is recognized to be a certain fact, but this aspect is not so pressing; this is due to the fact that present situation is this: for modern society oil is a key-element, which sustains its present way of development, and oil is an extremely important asset because it is the essential element in today’s transportation system, sustaining the movement of wealth and people, and being an extremely important ingredient in a lot of products which dominate modern lifestyle: 90% of the goods in one store implies the using of oil in one way or another (Giddens 2009: 10).

That for, it is important to fight to de-carbonize transportation sector: solely in OECD countries, in 2006 the oil consumption in transportation sector was 1252 millions tones, while for the 2030, there is expected to be 1289 millions tones of oil consumed in transportation sector (World Energy Outlook 2008: 508); in India the rise is expected to be from 37 (2006) to 156 millions tones (2030) of oil (World Energy Outlook 2008: 532), while in China it will rise in the same interval from 127 to 440 millions tones (World Energy Outlook 2008: 530). Globally speaking, the level of CO₂ emissions due to transportation (in million tones) is expected to rise from 6444 in 2006, to 8013 (2020), and 8921 in 2030, respectively (World Energy Outlook 2008: 393).

As these figures show, present world is characterized by a very strong dependence on oil, and the reduction of oil dependence should be one of the most important policies a state have to pursue; reducing oil dependence would not only prevent the climate change, but in the same time the capacity of oil to influence and determine the fate of world politics would significantly diminish (World Energy Outlook 2008: 12).

The peculiarities of oil geopolitics lies in the fact that it is a key-resource used in transportation, it is located in a handful of countries (which after 2000 went to resource nationalism, which can use oil as weapon, and where one can met civil unrest), it must be transported over long and (more and more) maritime risky routes (including crossing through straits), it can bring wars for access to oil resource or for control over oil transportation routes, and there are some emerging economies, very hungry for oil; but continuing the same path – of using oil more and more in industry, energy production, and transportation – will not only create greater pressure on remaining oil resources, even wars for access to it, but this trend could bring great havoc to

whole humanity, through climate changes which will affect both, rich, and especially poor countries. And all these things take place in a situation where since 1901 until 2000 world oil production had risen over 180 times (Malița 2009: 297). And doesn't matter which measures and steps are taken in the field of energy efficiency, the pursuing of clean energy, and alternatives oil in transportation, energy, and industry, oil will continue to be a very critical element in the stability of world economy, and regional and international security (Morse 2009: 52).

The consequences of this course of policy could be identified immediately: international role played by the states which poses important oil reserves would considerably diminish, and the role of Russia and Islam (especially Arab countries) in world politics would change (Friedman 2008: 92-102). As oil price rises, the petro-states tend to a more autocratic regime, the oil price and domestic politics being strong interconnected (Giddens 2009: 217). In this light, oil can be regarded as the enemy of democracy.

Each resource which could push up the power of the state which uses it, could be called a strategic resource. In this case, every resource which promotes economic and military power, or promote the mobility's rising, can be regarded as a strategic resource. Now, the peculiarities of oil geopolitics are due to the fact that it is a strategic resource – the whole world depends on oil as an energy resource, particularly in transportation sector. In the same time, the problem becomes more complex because the oil resources are concentrated in few countries. Coal can be found almost in each country, but oil is concentrated in Middle East, Russia, and some problematic countries in Africa, Latin America. It is noteworthy to specify that when price of oil is high, some producers resort to using energy as tool of leverage, as Venezuela (which uses incomes from oil exports to undertake anti-American activities through Latin America), or Iran (which uses its to promote its interests in Middle Eastern countries, Iraq, Lebanon, Palestine, Saudi Arabia) (Morse 2009: 48).

Regarding Russia, a low price of oil has immediate and strong impact on its domestic, and foreign policies. When price of oil is high, Moscow can easily play pipeline politics, using gas deliveries with political ends; when oil price is low, Russian state strongly needs to receive currency from its gas exports, reducing its capacity to use gas delivery as a political weapon.

Another state which has an assertive policy, and which can create trouble on regional scale, with global consequences, is Iran. As oil price is high, Iran has money to sustain subversive activities in Arab Sunni countries, and can influence the direction taken by Middle East peace process. If Iran has lower revenues, then the flow of petrodollars to terrorists would be reduced, and the adamant policy of Tehran could swift to a more moderate one.

Taking account of this situation, on short run, the main global consumers could establish and consolidate the connections with oil producing countries from Gulf, Central Asia, and Africa, forging an exchange concentrated on arms and military assistance for oil – a peculiarity of oil trade in the second part of 20-th century. The intensification of state's actions could become very present, rising even more the risks of militarization of oil trade, bringing the possibility of tensions and escalations, culminating in wars among the most powerful nations, through proxy allies.

On medium term, the intensification of tensions among the greatest oil consumers would bring a rising of their military expenditures, reducing in this way the available funds headed for the creation of a new, clean energy base. The opportunity of reorientation of funds from military destination to the development of alternative energy capacities, would simultaneously reduce the pressure on fossil fuels, and the carbon emissions which come from their burning process, too. In medium term, even if the states wouldn't enter a conflict in order to have access to oil resources, the rising of oil demand (due to developing economies, rising population at global level, the urbanization process, and of the income's rising), would bring a rising of oil price, hitting both the developed nations (because of rising cost of living, and especially the developing ones,

because, a greater part of the income there would be directed to food, whose price goes up when oil price rises).

On long term, the maintaining of the same course in oil consumption peculiar nowadays would bring a dramatic and irreversible climate change, with negative effects on the whole human civilization.

The climate change problem is the energy problem (Klare 2008: 242), and solving it depends upon the humanity's capacity to transform its way to produce, and use energy. The most important point here is the transportation, and energy sectors' de-carbonization.

Even the G-8 placed climate and energy issues high on its agenda nearly every year for the last decade, there hasn't done much beyond presenting empty propositions in the front of cameras (Victor and Yueh 2010: 68).

Present society is very dependent on oil, and security of oil supplies is a national security matter; security of oil supplies is a pressing problem not only because old supply reserves are depleting quickly, but because investors are not very open to risk in developing new supplies, in a very volatile global economical and political environment. There are massive risks (economical, as well as political) in developing new projects for oil supply, especially if they involve the transfer of oil over many national borders, facing a myriad of political uncertainties.

Facing these problems, the cross-point can be this: promoting investment to develop needed supplies of oil on short run, and incentives for climate-friendly energy capacities of production, that will change the energy system, in the long run.

Regarding geopolitics of oil, it can be specified that in 2020 India and China will depend on imported oil transported from Middle East and Africa, these two countries becoming more and more interested by African wealth (Chaponniere 2009: 24). In order to secure their economic interests and to promote their political ones, both countries intensify their military presence in this part of the world: China promotes the "Pearls Strategy", (Perelman 2005: 21-27) while India constructs military alliances in Eastern Africa on the base of agreements which she signed with Mauritius, Seychelles, Madagascar, and South Africa (Chaponniere 2009: 24). This could be simply regarded as a the geopolitics of the Indian Ocean, but taking account that these two countries will be the giants of world economy in the years ahead, the relationship between them in Indian Ocean, focusing on oil, will have global reaches, influencing even the most remote areas of the Earth.

To the scarcity and constant reduction of the quantity of non-renewable energy resources – which has brought, and will continue to bring tensions among nations – we need to add the carbon emissions generated by their burning; and both these things signal us that we must reorient to those energy sources which are renewable – but which have disadvantages regarding fluctuations in energy production (water, Sun, wind, geothermal) – and to unlimited energy resources, which work more constantly (nuclear power, and hydrogen).

Not only that the reduction – and possibly elimination – of fossil fuel energy resources will bring a type of society which embraces sustainable development, and which is not so greed in using natural resources to sustain its activity, but the importance of the resource – oil – which already has generated bloody wars would fade, creating the possibility of reducing military expenditure which would have been made in order to secure and maintain access to it in different places of the Earth. The money saved in this situation could be used in developing green energy projects in great energy consumers, and in developing countries, too, helping whole humanity to live in a better and cleaner world.

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Recent papers in Geopolitics of Global Climate Change. Papers. People. Ulloa-A-2018-Reconfiguring-climate-change-adaptation-Colombia.pdf. Conceptual discussions on the notion of "adaptation" as a strategy to face climate transformations around the world have highlighted the wide range of interpretations about its meaning and scope. Debate on this concept is important given more. Conceptual discussions on the notion of "adaptation" as a strategy to face climate transformations around the world have highlighted the wide range of interpretations about its meaning and scope. Debate on this conc The Geopolitics of Climate Change: Challenges to the International System. FOI, Swedish Defence Research Agency. Jan 2007. H Peter. Peter H. (2007) The Geopolitics of Climate Change: Challenges to the International System. A combination of factors is encouraging Saudi Arabia to consider raising crude oil production capacity beyond the current ceiling of 12.5 million barrels per day. The kingdom has managed to maintain a constant share of global crude oil markets, even as it copes with growing domestic demand for oil and a spate of investments in refineries, inside and outside the kingdom. Longer term, the threat of [Show full abstract] peak global oil demand " perhaps in response to climate change " enhances the attractions of a shorter time horizon to depletion. Voice: Everything You Think About the Geopolitics of Climate Change Is Wrong Everything You Think About the Geopolitics of SHARE: Voice. Everything You Think About the Geopolitics of Climate Change Is Wrong. Conventional wisdom also holds that shrinking demand for oil and gas will mean lower prices, implying that even if petrostates gain market share, they would still see revenues collapse. Here, too, the reality is more complicated. Absent continued investment, production from existing fields declines at a rate of roughly 8 percent per year. Rather, national security leaders must anticipate and prepare for the new geopolitics of clean energy "not only to mitigate new risks, but because a robust climate agenda will not succeed unless they do. Oil used in energy generation, and especially its use in transportation makes it a resource with a strategic character. In the literature of international affairs, and international economy, oil is found in almost in every article, and book; but of course, there are books and articles focused especially upon this resource, and upon its role in world politics. In last decades, there appeared another element which fight to capture world public opinion, and political agenda: this is climate change. BENEA Ciprian-Beniamin & BACIU Adrian, 2012. "The Geopolitics Of Oil And Climate Change," Annals of Faculty of Economics, University of Oradea, Faculty of Economics, vol. 1(2), pages 70-74, December. Handle: RePEc:ora:journl:v:1:y:2012:i:2:p:70-74. as.