

Petroleum industry and Geopolitics of the Middle East

A. Introduction

Energy has long been a major factor in the formulation of country strategies, the exercise of national power, and in shaping international politics and security. As concerns about energy security and climate change issues intensify, countries are struggling to situate their energy policies in the broader context of their long term strategies. Considering the significance of oil and gas resources of the Middle East, and the leading role that petroleum industry plays in economic development of the region this course will examine this intersection between national security, politics and energy issues in the Middle East, taking in to account the impact of unconventional oil and gas revolution in North America, the geopolitical implications of which are being felt particularly by countries of the region.

The course takes petroleum industry of the major oil and gas exporting countries of the ME as its launching point, exploring not only how these countries shape their economic development strategies around petroleum industry, but also how such strategies have implications for other countries of the region and the international system. It looks at the changing landscape of global energy and how these changing patterns could shape the geopolitics of the region and the future paths of economic development of the major countries of the ME. Finally, while acknowledging that oil and gas will be dominant sources of energy for the next 25-35 years, the course considers the consequences of a successful shift away from petroleum based economies to anticipate how a new energy order will alter geopolitics in the ME in fundamental ways.

Four pursuits define the course. Students can expect to i) gain a greater understanding of economics of energy and particularly exhaustible resources of oil and gas and petroleum industry of the major oil and gas exporting countries of the ME; ii) identify and analyze how the importance of oil and gas resources to the global economy have influenced foreign policies, domestic efforts, and military strategies of the major oil and gas exporting countries of the region; 3) examine shifting trends in the energy realm, with a major focus on the unconventional oil and gas revolution; and 4) anticipate new patterns and structural shifts in the geopolitics of ME and international environment in light of these trends.

The course begins with an introductory section examining economics of energy with focuses on economics of exhaustible resources of energy, i.e. oil and gas, petroleum industry in the ME and the factors affecting these important commodities' prices. It then turns to explore how energy has been a major determinant of the international system in the past exploring the current landscape in terms of markets, governments, businesses, and international

institutions and how these factors affect geopolitics in the region. Resource realities, the rise of resource nationalism, the nature of the resource curse and the unconventional revolution are discussed next. The course then examines a number of ways – in the past, present, and possibly, in the future – how energy has been used as a means to project power. We look at how the major oil and gas exporting countries of the ME, (and to some extent, OPEC, Russia, and others) have used energy to advance broader national security aims. The next section then explores the reverse: how countries and entities have used their more conventional military, political, and economic power to protect and secure energy; how should we view the U.S. presence in the Persian Gulf or China's actions in Africa? After a brief examination of national security strategies and their geopolitical implications, the final section of the class focuses on new energy, asking how future developments in energy innovation will affect the nature of politics and security in the ME.

B. Class schedule,

The schedule below may change albeit in small respects – in terms of the sequence and possibly timing of certain classes. We will do our best to give the students of the courses advance notice.

1. **Economics of exhaustible resources (of oil and gas) and determinants of oil prices (3 sessions),**
 - 1.1 Economics of oil and gas and the concept of economic rent,
 - 1.2 Understanding oil prices,
 - 1.3 Natural gas markets and pricing of natural gas in major international gas markets,
2. **Petroleum industry in the ME and major National Oil companies of the region (3 sessions),**
 - 2.1 Algeria,
 - 2.2 Iran,
 - 2.3 Iraq,
 - 2.4 Kuwait,
 - 2.5 Libya,
 - 2.6 Qatar,
 - 2.7 Saudi Arabia,
 - 2.8 United Arab Emirate,
3. **Oil and gas as determinant of the ME geopolitics, economics and security (4 sessions),**
 - 3.1 Resources reality, oil and gas resource endowments of the region,
 - 3.2 Nature of the (rentier) state: what is the relationship between democracy and oil?
 - 3.3 The Global Energy Landscape: Demand, Supply, and Prices,
 - 3.4 The Unconventional Revolution in Oil and Gas in North America

- 3.5 The Potential for the Unconventional Revolution to Go Global,
- 3.6 Resources nationalism; the case of ME and resource curse,

- 4. Energy as a means of national power: Using energy to Project Power (3 sessions),
 - 4.1 Oil market structure,
 - 4.2 Management of oil and gas supply; Organization of Petroleum Exporting Countries (OPEC), and Gas Exporting Countries Forum (GECF),
 - 4.3 Consumer leverage and IEA,

- 5. Energy as an end to foreign policy and security: The Use of Power to Protect and Secure Energy (2 sessions),
 - 5.1 The Geopolitical Implications of the US, China, EU, Japan, India and Russian National Energy Strategy on the Middle East,

- 6. Alternative energies and their implications on the ME geopolitics (2 sessions),
 - 6.1 The unconventional oil and gas revolution, climate change and national security of ME countries,
 - 6.2 Geopolitical consequences of a shift to nuclear power, solar and wind energies,
 - 6.3 Climate change negotiations, international institutions and the impact of global policy changes on geopolitics and energy strategies of the ME countries,

- 7. Concluding and final remarks (1),

C. Required Texts and Reading List (to be completed)

Required texts:

- Daniel Yergin, *The Quest: Energy, Security, and the Remaking of the Modern World*, (New York: Penguin Press), 2011.
- David L. Goldwyn and Jan H. Kalicki (eds.), *Energy and Security: Strategies for a World in Transition* (Johns Hopkins University Press, 2013).
- Andreas Goldthau (eds.), *The Handbook of Global Energy Policy* (John Wiley & Sons, 2013).
- Subhes C. Bhattacharyya *Energy Economics, Concepts, Issues, Markets and Governance* (Springer-Verlag London Limited 2011)

- **James D. Hamilton, Understanding Crude Oil Prices**, *The Energy Journal*; 2009; 30, 2; ABI/INFORM Global

Optional texts:

- Daniel Yergin, *The Prize: The Epic Quest for Oil, Money, and Power* (Free Press), 2008.
- OPEC, *World Oil Outlook 2016*, Executive Summary. December 2016.
- IEA, *World Energy outlook 2016*, November 2016,

D. Assignments and grading

This course is appropriate for those with an interest in energy, geopolitics of the ME and international energy security. There are no prerequisites for the course. The focus of the readings, lectures, class conversations and projects will be more political and strategic than technical in nature. Students are expected to attend all classes and actively participate in class.

Student evaluation will be based on a variety of inputs as outlined below:

- **General class participation (15%)**: The class participation consist of being part of the general class conversation, participating in class debates as structured around the assignments and being part of a presentation upon completion of a group project.
- **Students are expected to write two essays (10% each) related to the topics outlined in the class schedule above.** Essays should be 3 pages in length (more will not be read, less is not recommended), single-spaced, 12pt times new roman font, with one-inch margins
- **Essays should NOT have formal citations**, but you should still give credit to a particular source in the body of the memo if you are borrowing directly from it; a list of references (and charts/graphs) may be included at the end of the essay.
- **Group project on the geopolitics of fossil-fuel energies and petroleum industry of the ME (25%)** . Each student will be part of a team responsible for writing a study of max. 15 pages, (single spaced, one inch margins, 12 point font, graphs and charts can be supplemental and do not count toward page limits; bullets permissible) on a fossil fuel energy.
- **There will be a final written exam (40%).**