

**International Studies Program
University of California, San Diego
Winter Quarter, 2019**

**INTL 190
“THE POLITICAL ECONOMY OF GLOBAL ENERGY”**

Instructor: Mikkal Herberg
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Classes: Friday 12:00-2:50 pm
Room: Robinson 1328
Office Hours: GPS Building #3131 - Friday 10:30-12:00 pm

This course will analyze the political economy of the global energy industry and markets. The themes will revolve around the complex interaction between the economics and geopolitics of energy markets, the endless quest for energy security, and the challenges of achieving sustainable energy development. The course will begin with an introduction to the basic elements of energy production, consumption, and transportation, followed by a survey of the functioning of the global energy markets, industry, and investments. Particular emphasis will be placed on the oil industry due its pivotal role in global energy use, pricing, and geopolitics. The course will then turn to the concept of energy security and the geopolitics of energy policy in today’s highly politicized, volatile energy markets. The focus will then turn to a survey of the nexus between energy and the environment and the search for a more “sustainable” energy future, in particular addressing climate change, air pollution, prospects for clean energy technology, and the challenge of meeting rapidly rising energy consumption in the developing world while simultaneously shifting away from fossil fuels toward a cleaner energy mix.

The majority of the course will focus on developing a more in-depth understanding of these themes through an examination of the major countries, regions, institutions, and political and economic forces in today’s world energy scene, including the U.S., Europe and Japan, OPEC and the major oil producing countries, China and developing Asia, Russia and Eurasia, and Latin America.

By the end of the course students should be able to:

- Describe major trends in global energy markets, including oil, natural gas, coal, renewables, and cleaner energy and climate sensitive trends.
- Describe the key energy security issues of importance globally and regionally, especially the vital energy security concerns of the major Asian powers, and their strategies for managing their energy security.
- Describe the dilemmas for Asian policymakers in accelerating their national transition from a fossil-fueled energy system towards a more sustainable energy future and their strategies to do so.

The course textbooks are *Energy & Security: Strategies for a World in Transition*, Jan Kalicki and David Goldwyn, eds., (2nd Edition 2013), and *The Quest* by Daniel Yergin, both available at the bookstore or Amazon. Readings will be from the course textbooks, articles, and research reports

available on the web or through the UCSD Library databases. The texts will be on reserve at the library also. I will post some readings in the class folder on TED.

The class will be run as a graduate seminar, made up of a mix of lectures and class discussions. Grades will be based on class projects and class participation. Students are expected to do the assigned readings prior to class, *keep current on major energy issues in the news*, attend all classes and participate in class discussions.

Each student will be required to make one 7-8 minute presentation in class during the quarter based on one of the readings for that week and questions posed by the instructor. You will need to reserve your article selection with the instructor ahead of time. Those presentations can start during the fourth week.

A final project will be a research paper - an analysis of a key energy geopolitics, energy security, or energy policy issue (4,000 words – roughly 15 pages). You'll get more guidance on this project during the course. You will need the approval of the instructor for your proposed topic.

Evaluation of class participation will be based on the quality of contributions throughout the course. The research project will account for 60% of your grade, the article presentation for 10%, and class participation in discussions will be 30%. Attendance is mandatory and absences will require complete explanations and I must be notified in advance. All papers must be turned in through *Turnitin* service in the class TED Folder.

Academic Integrity: all work must be done exclusively by the individual to whom it has been assigned. Students should assume that collaboration on assignments, the use of previously assigned homework, outside sources or outside aids (both written and electronic) are not allowed unless explicitly approved by the professor. All cases of suspected cheating will be referred the International Studies Program. Any violation for which a student is found responsible is considered grounds for failure in the course.

January 11: Introduction: fundamentals of the energy industry, markets, investment, and energy policy

Jan H. Kalicki and David L. Goldwyn, "Introduction and Part 1, Chapters 1, 2, pp. 1-68, in *Energy and Security: Strategies for a World in Transition*.
Daniel Yergin, *The Quest*, Introduction and Prologue, pp. 1-18.

January 18: Energy Security, Resource Nationalism, and the Geopolitics of Energy

Kalicki and Goldwyn, Chapters 3,4,5,6, pp. 88-164.
Yergin, Chapters 11-16, pp. 229-346.
Robin Mills, *Risky Routes: Energy Transit in the Middle East*, Brookings Doha Center Analysis Paper No. 17 (April 2016).

January 25: The Energy/Environment Nexus

International Energy Agency, *Energy, Climate Change & Environment: 2016 Insights*, Paris, 2016 (OECDSource) Executive Summary and Chapter 1, pp. 11-26.

Kalicki and Goldwyn, Chapter 21, pp. 483-498.

Yergin, Chapters 22-26, pp. 436-524.

Bruce Jones and David Steven, *The Risk Pivot: Great Powers, International Security, and the Energy Revolution*, Brookings University Press (2015); Chapter 4 “Energy and Climate”, pp. 95-120.

Richard K. Morse, “Cleaning Up Coal”, *Foreign Affairs* (July/August 2012), pp. 102-112.

February 1: The US, Canada, and Mexico: U.S. - the global energy superpower

Kalicki and Goldwyn, Part V, Chapters 15 (Neff and LaRose), Chapter 16 (McLarty), Commentary (Foss).

Rosenberg, Gordon, Maruyama, and Sullivan, *The New Great Game: Changing Global Energy Markets, The Re-Emergent Strategic Triangle, and U.S. Policy*, Center for a New American Security (June 2016).

Anthony H. Cordesman, *The Myth or Reality of US Energy Independence*, Center for Strategic & International Studies (January 2, 2013) at CSIS website.

Adrian Lajous, *Mexican Energy Reform*, Center on Global Energy Policy (June 2014).

Jim Krane and Kenneth Medlock, “Geopolitical dimensions of US oil security”, *Energy Policy*, Vol 114, March 2018, pp. 558-565.

February 8: OPEC, the Middle East, and the producing countries: the global oil balance wheel

Kalicki and Goldwyn, Part III, Chapters 10 (West and Alkadiri), 11 (Mohamedi), 12 (Niekirk and Sayne), Commentary (Al-Attayah).

Saudi Arabia: The Power Behind OPEC, Issue Brief, Securing America’s Future Energy, Washington, D.C. (November 2016).

The GCC and the New Oil World, Columbia University Center on Global Energy Policy (January 2016).

Ramon Espinasa and Carlos G. Sucre, *Cheap Oil? Making Sense of a Competitive Oil Market*, Inter-American Development Bank (July 2015).

February 15: Japan, China, India, and Asia: the new center of global energy demand

Kalicki and Goldwyn, Part IV, Chapters 13 (Jaffe and Medlock) and 14 (Herberg).

Mikkal E. Herberg, “Asia’s Rising Energy and Resource Nationalism”, in *Strategic Asia 2010-11*, Ashley J. Tellis and Travis Tanner, eds., The National Bureau of Asian Research (2011).

Kang Wu and Jane Nakano, *The Changing Political Economy of Energy in China*, Center for Strategic & International Studies (December 2016).

John Lee, “China’s Geostrategic Search for Oil”, *The Washington Quarterly*, Vol. 35, No. 3 (Summer 2012) pp. 75-92.

John W. Garver, *China and Iran: An Emerging Partnership Post-Sanctions*, Middle East Institute Policy Focus 2016-3 (February 2016).

Phyllis Yoshida, *Japan's Energy Conundrum*, Sasakawa Peace Foundation USA, Washington, D.C. (February 2017), Chapter 1 and 4, pp. 1-11, 37-46.

Aparajit Pandey, *India's Low Carbon Transition*, Observer Research Foundation, New Delhi (2017).

Leszek Buszynski, "The South China Sea: Oil, Maritime Claims, and U.S.-China Strategic Rivalry", *The Washington Quarterly*, Vol. 35, No. 2 (Spring 2012), pp. 139-156.

March 1: Russia, the Caspian, and Central Asia

Kalicki and Goldwyn, Chapter 8 (Nanay and Kalicki on Eurasia and Russia).

Yergin, Chapters 1-3, pp. 21-83.

Tatiana Mitrova, *Shifting Political Economy of Russian Oil and Gas*, CSIS Energy and National Security Program (March 2016).

Thane Gustafson, "Putin's Petroleum Problem: How Oil is Holding Russia Back – and How It Could Save It", *Foreign Affairs* (November/December 2012) pp. 83-96.

Keun-Wook Paik, *Sino-Russian Gas and Oil Cooperation: Entering into a New Era of Strategic Partnership?*, Oxford Institute for Energy Studies Paper WPM 59 (April 2015).

March 8: Europe: energy security, reliance on Russia, pipeline geopolitics

Kalicki and Goldwyn, Chapter 7 (Noel – European Gas Security)

Jonathan Stern, *The New Security Environment for European Gas*, Oxford Institute for Energy Studies, October 2006.

David Buchan, *Europe's Energy Security – caught between short-term needs and long-term goals*, Oxford Institute for Energy Studies (July 2014).

Richard B. Andres and Michael Kofman, *European Energy Security: Reducing Volatility of Ukraine-Russia Natural Gas Pricing Disputes*, Institute of National Strategic Studies (INSS), Feb 2011.

March 15: Latin America and Africa - Conclusions and Wrap-up

Kalicki and Goldwyn, Part V, Chapter 16 (McLarty chapter on Latin America), Commentary (Foss).

Francisco Monaldi, *Oil and Politics in Venezuela*, Center for Hemispheric Policy, University of Miami (January 29, 2014).

Francisco Monaldi, *The Impact of the Decline in Oil Prices on the Economics, Politics and Oil Industry of Venezuela*, Columbia SIPA, Center on Global Energy Policy (September 2015).

Aaron Sayne and Aubrey Hruby, *Nigeria's Oil Revenue Crunch*, Atlantic Council Issue Brief (January 2016).

Kalicki and Goldwyn, "Conclusion: Energy, Security, and Foreign Policy", pp. 545-581.

March 21 – 5:00 pm PST: Final Research Project Paper Due to "Turnitin"