

**International Studies Program
University of California, San Diego
Winter Quarter, 2020**

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

Instructor: Mikkal Herberg
Email: mherberg@ucsd.edu
Classes: Friday 12:00-2:50 pm
Room: Robinson 1201
Office Hours: GPS Building #3132 - Friday 11:00 - 12:00 pm

This course will analyze the political economy of the global energy industry and markets. The themes will revolve around the geopolitics of energy markets, the national quest for energy security, the challenges of building a sustainable energy future, and the challenges of managing difficult domestic energy policy choices and trade-offs. The course will begin with an introduction to the basic elements of the energy industry and global energy markets. 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 energy security and the geopolitics of energy in today's highly politicized, volatile oil markets. The focus will then turn to the nexus between energy and the environment and the search for a more “sustainable” energy future, in particular addressing climate change and global prospects for a sustainable energy future and prospects for curbing growing air pollution challenges, especially in Asia.

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 global powers, and their strategies for managing their energy security.
- Describe the dilemmas for energy policymakers among the largest global energy consumers to meet the challenge 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 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 Canvas folder.

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. I will randomly call on students for their thoughts on the readings and topics during class....**so be prepared!**

Each student will be required to make one 8-10-minute presentation during weeks 5-10 on a topic drawn from a list of energy topics that will be provided by the instructor. I will post a list of topics on the course Canvas folder. That review will be the basis for a short class discussion on that issue. You will need to schedule which topic you would like to review with the Professor in advance.

A final project will be a research paper - an analysis of a key energy geopolitics, energy security, or energy-environment policy issue (roughly 4,000 words – 15 pages). You'll get more guidance on this project during the course. I will post a list of many possible topics you can choose from or you can choose something of special interest to you. 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 20%, and class participation in discussions will be 20%. 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 Canvas 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 10: *Introduction to the World Energy Industry and Markets*

January 17: *Energy Security, Resource Nationalism, and the Geopolitics of Energy*

Jan H. Kalicki and David L. Goldwyn, "Introduction and Part 1, Chapters 1,2,3,4,5,6 pp. 1-164, in *Energy and Security: Strategies for a World in Transition*.

Daniel Yergin, *The Quest*, Introduction and Prologue, pp. 1-18, Chapters 11-16, pp. 229-346.

Sarah Emerson, "The Persian Gulf: More Strategic than Ever?", *Linked-in* (July 13, 2018)

<https://www.linkedin.com/pulse/persian-gulf-more-strategic-than-ever-sarah-emerson/>

January 24: The Great Energy Transition: Searching for a More Sustainable Energy/Environment Balance

- 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.
- David Victor, "Prove Paris was more than paper promises", *Nature* (Aug 2017) pp. 25-27.
- Mark C. Thurber, *Coal, Gas or Nuclear: Asia's Inconvenient Energy Choice*, Pacific Energy Summit Working Paper, The National Bureau of Asian Research (October 2016).

January 31: North America: 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).
- Jim Krane and Kenneth Medlock, "Geopolitical dimensions of US oil security", *Energy Policy*, Vol 114, March 2018, pp. 558-565.
- Jason Bordoff, "The Myth of U.S. Energy Independence Has Gone Up in Smoke", *Foreign Policy*, (September 18, 2019), <https://foreignpolicy.com/2019/09/18/the-myth-of-u-s-energy-independence-has-gone-up-in-smoke/>

February 7: China and Asia: "ground zero" for 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).
- Qi Ye, Nicolas Stern, Tong Wu, Jiaqi Lu and Fergus Green, "China's post-coal growth", *Nature Geoscience* (July 2016).
- John Lee, "China's Geostrategic Search for Oil", *The Washington Quarterly*, Vol. 35, No. 3 (Summer 2012) pp. 75-92.

February 14: China (cont.), Japan, South Korea, India and Southeast Asia

- 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.

February 21: 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-Attiyah).

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).

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

February 28: 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 6: Europe: energy security, 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 13: Africa, Latin America - Conclusions and Wrap-up

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

Francisco Monaldi, *Code Red: Venezuela's Oil and Debt Crises*, Columbia University Center on Global Energy Policy (March 2018).

Francisco Monaldi, *The Collapse of the Venezuelan Oil Industry*, Atlantic Council (March 2018).

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

March 19 – Finals Week - Research Project Paper Due Thursday 5:00 pm