

**NS4960: Energy Security and Geopolitics
Winter 2020**

Tuesday/Thursday, 8:00-9:50
Glasgow 389

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or by appointment

Course Description

In the modern world, national security and prosperity depend on access to energy: in particular, conventional energy resources, like oil and natural gas. Many countries are also highly dependent on energy resource revenue. This course will examine and evaluate an array of threats to countries' energy security, including the oil curse, oil and gas weapons, energy sanctions, interruptions to energy transportation, attacks on energy infrastructure, and competition over oil resources. Students will apply these core concepts to contemporary, energy-related geopolitical challenges, such as instability in Venezuela and Nigeria, fluctuating oil prices, potential Russian cutoffs of European natural gas supplies, sanctions against Iran, attacks on Saudi Arabian oil facilities, US military engagement in the Persian Gulf, China's efforts to secure energy access, and territorial disputes in the South China Sea and Arctic. We will also explore how energy transitions, including the development of unconventional gas resources and increasing use of renewable energy sources, are reshaping global energy geopolitics.

Course Objectives

By the end of this course, you should be able to participate in and contribute to discussions of current energy security issues with policymakers.

Specific course goals include:

- Develop a working knowledge of petroleum geology, production chains, and transportation networks
- Describe core energy security concepts, actors, and institutions
- Access, manipulate, and visually display energy data
- Identify and evaluate threats to consumer and producer states' energy security
- Produce policy recommendations aimed at mitigating energy security threats
- Apply energy security concepts, theories, and historical analyses to contemporary issues in energy geopolitics
- Employ critical reading and analytic skills
- Communicate key findings in written and verbal formats

Class Preparation

There are no **required books** for this course.

“Readings” are required and must be completed prior to each class session. They are available on Sakai or their urls appear on the syllabus. Be sure to review the syllabus to determine whether you are expected to read an entire article/chapter or just part of it!

You should approach the class readings with two goals: understanding and critical assessment. When reading a text, look for answers to the following questions:

- What is the text’s topic?
- What is the author’s argument?
- What assumptions does the author make?
- What evidence does the author use to support her/his argument?
- What does the author omit?
- Was the argument persuasive? Why or why not?
- Was the argument useful/important? Why or why not?
- How could the argument be strengthened?

“Further Readings” (at end of syllabus) are suggestions if you would like more information about a session’s topic. They are NOT required and generally will not be covered in class.

Assignments and Grading

Your grade will assess your progress towards the course’s learning objectives. It is based on three components:

1. Participation 35%

To obtain a high participation grade, you must consistently attend class, complete the required readings prior to each class session, and contribute regularly to class discussions and activities. The quality of your participation also matters. Contributions should be thoughtful, well-informed by the class readings, and not repeat other students’ points. I also encourage you to ask questions, which count towards class participation.

Absenteeism: I excuse absences for illness, medical and family emergencies, and doctor visits that cannot be scheduled outside of class time, if I am notified about them in advance. Other absences are not excused. You are welcome but not required to notify me about unexcused absences.

2. Research Paper 40% Due 19 March

For this assignment, you will write a research paper that conducts a deeper dive into one of the topics we cover in class. The final paper will be approximately 3500 words long (not including citations).

3. Portfolio 25% Various Deadlines

Your portfolio consists of a series of assignments leading up to the research paper. The purposes of these assignments are to encourage progress on your paper, strengthen the paper's content and organization, provide opportunities for feedback, and share your findings with the class. Handouts will provide further details about each portfolio assignment, including grading criteria.

A. Proposal 2.5% Due 21 January

Identify the class session your paper dives into, propose a research question, explain its significance, and provide a brief overview of how you plan to approach your research. 1-2 pages, double-spaced.

B. Data Graphing 2.5% Due 21 January

Using EIA or BP data, create a graph that is relevant to your paper. You are welcome but not required to include this graph in your final paper.

C. Annotated Bibliography 7.5% Due 7 February

List 5-7 sources you have consulted on your paper topic. For each one, provide 2-3 sentences explaining how the source will (or will not) be useful for your paper. 1-2 pages, single spaced.

D. Annotated Outline 10% Due 28 February

Outline your paper, using a bulleted/numbered list format, with annotations to explain what you'll be covering in each topic/sub-topic. 2-3 pages, single spaced.

E. Presentations 2.5% In Class, March 12

Present your findings, using two slides in three minutes.

Technical Requirements for Written Assignments:

- Submit assignments via Sakai, under the "Assignments" tab, before 11:55 p.m. on the due date.
- Format assignments as Word documents (.doc or .docx), with 12 point Times New Roman font, 1" margins, and page numbers.
- Document title should begin with your last name.
- All readings must be cited using a standard citation format (e.g. Chicago Manual of Style). You can use:
 - a. Footnotes with full bibliographical information
 - b. Footnotes in "Author (Date): page" format with a reference list.
 - c. Inline citations "(author date, page)" with a reference list
 - d. Please do not use endnotes!

- Proofread (not just spellcheck) to check for misspellings of author names, grammatical errors, clarity, and flow.

Lateness: Assignments submitted after 11:55 p.m. on their due date will lose 1/3 of a letter grade per day (e.g. an A paper submitted a few hours late becomes an A-; an A 1.5 days late becomes a B+; etc.).

For **general grading information**, please consult the NSA department's expectations for written work (<http://my.nps.edu/web/nsa/grades>).

If you are uncertain about the quality of your written work, I encourage you to draw on the services of the **Graduate Writing Center** (see link on course Sakai site or <https://my.nps.edu/web/gwc/home>).

Additional Class Policies

Deadlines: In general, deadlines will not be changed. However, in cases of genuine emergencies or conflicts, other arrangements can potentially be made. Each situation will be addressed on a case-by-case basis. Students should notify me of any possible issues as far in advance as possible.

Re-grades: Students wishing to challenge a grade must do so within one week of the graded assignment being handed back. Challenges must be made in writing, with a clear argument and justification for why a higher grade is warranted. If you request a re-grade, I will re-grade the entire assignment and the grade may go up or down.

Accommodation: If you have specific physical, psychiatric or learning disabilities that may require accommodations, please let me know early in the quarter so I can ensure that your learning needs are met in a timely fashion.

Academic Integrity: As stated in the Academic Honor Code in the NPS Student Information Handbook, all students are expected to maintain the highest standards of academic integrity and to deal honestly with all matters concerning the course. Plagiarism will result in a zero for that assignment, may result in an F for the course, and may be brought to the Dean's attention.

Plagiarism consists of using words or ideas from another source without proper attribution or citation. This can include exact wording from a source, very similar paraphrasing based on a source, or general arguments from a source. Any facts or positions that are not common knowledge must also be documented, using citations. For further advice on avoiding plagiarism, see the information and resources listed on the NSA department's web page on academic integrity (<http://my.nps.edu/web/nsa/academic-integrity>). The Graduate Writing Center will also provide training on avoiding plagiarism. When in doubt, cite!

Schedule

1. Introduction: What is “Energy”? (7 January)

Readings:

- (8 pages) International Energy Agency (IEA), *World Energy Outlook* (2019), “Executive Summary.” For more info/full report, see <https://www.iea.org/reports/world-energy-outlook-2019>
- (4 pages) IEA, *International Energy Outlook* (2019), “Infographics.”

2. What is “Energy Security”? (9 January)

People use the term “energy security” all the time, but what does it mean?

Readings:

- (1 page) International Energy Agency (IEA), “What is Energy Security?”
- (6 pages) Aleh Cherp and Jessica Jewell, “The Concept of Energy Security: Beyond the Four As,” *Energy Policy* 75 (2014): 415-421.
- (24 pages) Roland Dannreuther, *Energy Security* (Polity Press, 2017), Chapter 2 (“Energy Security: An Analytic and Theoretical Framework”), pp. 9-32.
- (2 pages) National Security Strategy of the United States of America (2017), section on “Energy Dominance,” pp. 22-23.

3. An Introduction to Oil and Natural Gas (14 January)

Where do oil and natural gas come from, how do we transform them into something useful, and how do we move them around the globe?

Readings:

- (82 pages) Vaclav Smil, *Oil: A Beginner’s Guide*, 2nd edition (OneWorld, 2017)
 - Chapter 1 (“Oil’s Benefits and Burdens”), pp. 1-50.
 - Chapter 5 (“How Long Will Oil Last?”), pp. 160-191.

4. Oil and Gas by the Numbers (16 January)

This class will take place in the computer classroom.

Readings: None. Work on Assignment A.

DUE 21 January: Assignment A (Proposal)

DUE 21 January: Assignment B (Data Graphing)

No Class 21 January: Shift Day

5. Controlling Oil: States, IOCs, and NOCs (23 January)

Who owns oil: the states that contain it or the companies that exploit it? When does ownership change? What are the differences between national and international oil companies?

Readings:

- (23 pages) Valérie Marcel, with John V. Mitchell, *Oil Titans: National Oil Companies in the Middle East* (Chatham House, 2009), Chapter 1 (“How it All Started”), pp. 14-36.
- (25 pages) Ruben Berrios, Andrae Marak, and Scott Morgenstern, “Explaining Hydrocarbon Nationalization in Latin America: Economics and Political Ideology,” *Review of International Political Economy* 18, no. 5 (2011): 673-697.

- (15 pages) Jean-François Seznac “Politics of Oil Supply: National Oil Companies vs. International Oil Companies,” in Robert Looney (ed), *Handbook of Oil Politics* (Routledge, 2012), pp. 45-59.

6. The Oil Curse (28 January)

How do oil resources create insecurity in petroleum-producing states?

Readings:

- (18 pages) Terry Lynn Karl, “The Perils of the Petro-State: Reflections on the Paradox of Plenty,” *Journal of International Affairs* 53, no. 1 (1999): 31-48.
- (25 pages) Michael Watts, “Petro-Insurgency or Criminal Syndicate? Conflict & Violence in the Niger Delta,” *Review of African Political Economy* 34, no. 114 (2007): 637-660.
- (8 pages) F. Gregory Gause III, “Sultans of Swing? The Geopolitics of Falling Oil Prices,” Brookings Institution Policy Briefing (April 2015).

7. OPEC and the Oil Weapon (30 January)

Can oil producers cut off resource supplies and/or control prices?

Readings:

- (19 pages) Bassem Fattouh and Anupama Sen, “The Past, Present, and Future Role of OPEC” in Thijs Van de Graaf et al. (eds), *The Palgrave Handbook of the International Political Economy of Energy* (Palgrave, 2016), **READ ONLY** pp. 73-83, 87-94 [skip Section 4].
- (10 pages) A.F. Alhajji, “The Oil Weapon: Past, Present and Future” *Oil and Gas Journal* (2 May 2005).
- (34 pages) Jeff D. Colgan, “The Emperor Has No Clothes: The Limits of OPEC in the Global Oil Market,” *International Organization* 68 (2014): 599-632. [**Note:** don’t worry if you can’t follow the statistics; they’re not key to the argument]

8. Russia and the Gas Weapon (4 February)

When do producers cut off gas supplies?

Readings:

- (14 pages) Brenda Shaffer, *Energy Politics* (University of Pennsylvania Press, 2009), Chapter 7 (“Russia”), pp. 114-127.
- (26 pages) James Henderson, “Does Russia Have a Potent Gas Weapon?” in Thijs Van de Graaf et al. (eds), *The Palgrave Handbook of the International Political Economy of Energy* (Palgrave, 2016), pp. 461-486.
- (15 pages) Adam N. Stulberg, “Natural Gas and the Russia-Ukraine Crisis: Strategic Restraint and the Emerging Europe–Eurasia Gas Network,” *Energy Research & Social Science* 24 (2017): 71-85.
- (watch video, article optional) “Nord Stream 2: Go-ahead for Russian Gas Pipeline Angers Ukraine,” October 31, 2019. <https://www.bbc.com/news/world-europe-50247793>
- (read article, video optional) “U.S. Concedes Defeat on Nord Stream 2 Project, Officials Say,” December 17, 2019. <https://www.bloomberg.com/news/articles/2019-12-18/u-s-concedes-defeat-on-nord-stream-2-pipeline-officials-say>

9. Defense Against the Dark Arts: Diversification, Institutions, Reserves, and Efficiency (6 February)

How can energy-importing states protect themselves against the oil and gas weapons?

Readings:

- (10 pages) Gail Cohen, Frederick Joutz, and Prakash Loungani. “Measuring Energy Security: Trends in the Diversification of Oil and Natural Gas Supplies,” *Energy Policy* 39, no. 9 (2011): 4860-4869.
- (9 pages) Thijs Van de Graaf, “Obsolete or Resurgent? The International Energy Agency in a Changing Global Landscape,” *Energy Policy* 48 (2012): 233-241.
- (19 pages) Michelle Billig Patron and David L. Goldwyn “Managing Strategic Reserves” in Jan H. Kalicki and David L. Goldwyn (eds), *Energy and Security: Strategies for a World in Transition* (Johns Hopkins University Press, 2013), pp. 464-482.
- (15 pages) Devin Stewart, “Japan: The Power of Efficiency,” in Gal Luft and Anne Korin (eds), *Energy Security Challenges for the 21st Century* (Praeger Security International, 2009), pp. 176-190.

DUE 7 February: Assignment C (Annotated Bibliography)

10. Sanctioning Oil and Gas Producers (11 February)

Is sanctioning oil and gas producers’ energy output an effective way to change their behavior?

- (10 pages) Itay Fischhender, Lior Herman, and Nir Maoz, “The Political Economy of Energy Sanctions: Insights from a Global Outlook, 1938–2017” *Energy Research & Social Science* 34 (2017): 62-71.
- (10 pages) Emma Ashford, “Not-So-Smart Sanctions: The Failure of Western Restrictions Against Russia,” *Foreign Affairs* 95 (2016): 114-123.
- (29 pages) Thijs Van de Graaf, “The “Oil Weapon” Reversed? Sanctions Against Iran and U.S.–EU Structural Power,” *Middle East Policy* 20, no. 3 (2013): 145-163.
- (article) Donna Borak and Nicole Gaouette, “US officially reimposes all sanctions lifted under 2015 Iran nuclear deal,” CNN, November 5 2018.
<https://www.cnn.com/2018/11/05/politics/iran-sanctions/index.html>

11. Securing Energy Infrastructure (13 February)

How vulnerable are oil and gas facilities?

- (13 pages) Jennifer Giroux, Peter Burgherr, Laura Melkunaite, “Research Note on the Energy Infrastructure Attack Database (EIAD),” *Perspectives on Terrorism* 7, no. 6 (2013): 113-125.
- (35 pages) Joshua R. Itzkowitz Shifrinson and Miranda Priebe. “A Crude Threat: The Limits of an Iranian Missile Campaign against Saudi Arabian Oil,” *International Security* 36, no. 1 (2011): 167-201.
- (website) Thomas S. Warrick, “What the Abqaiq Attack Should Teach Us About Critical Infrastructure,” Atlantic Council, September 18, 2019. Read online to take advantage of links: <https://www.atlanticcouncil.org/blogs/menasource/what-the-abqaiq-attack-should-teach-us-about-critical-infrastructure/>

12. Securing Energy Transportation (18 February)

What are the most severe threats to oil and gas transportation?

Readings:

- (47 pages) Llewelyn Hughes and Austin Long, “Is There an Oil Weapon? Security Implications of Changes in the Structure of the International Oil Market,” *International Security*, Vol. 39, No. 3 (2014/2015), pp. 152-198.
- (36 pages) Caitlin Talmadge, “Closing Time: Assessing the Iranian Threat to the Strait of Hormuz,” *International Security*, Vol. 33, No. 1 (2008), pp. 82-117.

13. Securing Energy Access: The U.S. in the Persian Gulf (20 February)

Does the US military need to stay in the Persian Gulf for oil?

Readings:

- (14 pages) Sarah Emerson and Andrew Winner, “The Myth of Petroleum Independence and Foreign Policy Isolation,” *Washington Quarterly* (March 2014), pp. 21-34.
- (28 pages) Daniel Byman, “Assessing Current US Policies and Goals in the Persian Gulf,” in Charles L. Glaser and Rosemary A. Kelanic (eds) *Crude Strategy: Rethinking the US Military Commitment to Defend Persian Gulf Oil* (Georgetown University Press, 2016), pp. 49-76.
- (33 pages) Eugene Gholz and Daryl G. Press, “Protecting “The Prize”: Oil and the US National Interest,” *Security Studies*, Vol. 19, No. 3 (2010): 453-485.

14. Securing Energy Access: China (25 February)

Do China’s efforts to secure access to oil threaten other states?

Readings:

- (36 pages) Jennifer Lind and Daryl G. Press (2018) “Markets or Mercantilism? How China Secures Its Energy Supplies,” *International Security* 42, no. 4 (2018): 170-204.
- (23 pages) Elizabeth C. Economy and Michael Levi, *By All Means Necessary: How China’s Resource Quest is Changing the World* (Oxford University Press, 2014), Chapter 1 and Chapter 4, **READ ONLY** pp. 1-9 and 46-60.
- (9 pages) Eugene Gholz, Umul Awan, and Ehud Ronn, “Financial and Energy Security Analysis of China’s Loan-for-Oil Deals,” *Energy Research & Social Science* 24 (2017): 42-50.

15. Oil and Interstate Wars (27 February)

Does oil cause interstate wars? How?

Readings:

- (24 pages) Jeff D. Colgan, “Oil and Revolutionary Governments: Fuel for International Conflict,” *International Organization*, Vol. 64 (2010), **READ ONLY** pp. 661-684. [Note: don’t worry if you can’t follow the statistics; they’re not key to the argument]
- (~35 pages) Emily Meierding, *The Oil Wars Myth: Petroleum and the Causes of International Conflict* (Cornell University Press, 2020), Introduction and Chapter 3.

DUE 28 February: Assignment D (Annotated Outline)

16. Fighting for Oil? The South China Sea (3 March)

Will countries fight for the South China Sea’s oil and gas resources?

Readings:

- (video) “Overview Video” on Council on Foreign Relations’ website, “China’s Maritime

Disputes” https://www.cfr.org/interactives/chinas-maritime-disputes?cid=otr-marketing_use-china_sea_InfoGuide - [!/chinas-maritime-disputes?cid=otr-marketing_use-china_sea_InfoGuide](https://www.cfr.org/interactives/chinas-maritime-disputes?cid=otr-marketing_use-china_sea_InfoGuide)

- (30 pages) Bill Hayton, *The South China Sea: The Struggle for Power in Asia* (Yale University Press, 2014), Chapter 5 (“Something and Nothing: Oil and Gas in the South China Sea”), pp. 121-150.
- (18 pages) Leszek Buszynski (2012) “The South China Sea: Oil, Maritime Claims, and U.S. China Strategic Rivalry,” *The Washington Quarterly* (Spring 2012), pp. 139-158.
- (6 pages) Carl Thayer, “China’s Oil Rig Gambit: South China Sea Game-Changer?” *The Diplomat*, May 12, 2014.
- (website) “Update: China Risks Flare-Up Over Malaysian, Vietnamese Gas Resources,” Asia Maritime Transparency Initiative (AMTI), CSIS, updated December 13, 2019. Read online: <https://amti.csis.org/china-risks-flare-up-over-malaysian-vietnamese-gas-resources/>
- (6 pages) Emily Meierding, “Joint Development in the South China Sea: Exploring the Prospects of Oil and Gas Cooperation Between Rivals,” *Energy Research & Social Science* 24 (2017): 65-70.

17. Fighting for Oil? The Arctic (5 March)

Will countries fight for the Arctic’s oil and gas resources?

Readings:

- (14 pages) Scott G. Borgerson, “The Coming Arctic Boom,” *Foreign Affairs* 92, no. 4 (2013): 76-89.
- (29 pages) Kathrin Keil, “The Arctic: A New Region of Conflict? The Case of Oil and Gas,” *Cooperation and Conflict* 49, no. 2 (2014): 162-190.
- (13 pages) Elina Brutschin and Samuel R. Schubert, “Icy Waters, Hot Tempers, and High Stakes: Geopolitics and Geoeconomics of the Arctic,” *Energy Research & Social Science* 16 (2016): 147-159.
- (16 pages) Jon Rahbek-Clemmensen, “The Ukraine Crisis Moves North. Is Arctic Conflict Spill-Over Driven by Material Interests?” *Polar Record* 53, no. 268 (2017): 1-15.

18. The Changing Global Gas Landscape (7 March)

How are fracking and increased use of natural gas changing energy geopolitics?

Readings:

- (17 pages) Meghan L. O’Sullivan, *Windfall: How the New Energy Abundance Upends Global Politics and Strengthens America’s Power*, Chapter 3 (“Natural Gas Becomes More Like Oil”), pp. 64–80.
- (12 pages) John Deutch, “The Good News About Gas,” *Foreign Affairs* 90, no. 1 (November 2011): 82-93.
- (16 pages) David R. Mares, “Shale Gas in Latin America: Opportunities and Challenges,” Inter-American Dialogue Working Paper, 2012.
- (20 pages) Andreas Goldthau and Michael LaBelle, “The Power of Policy Regimes: Explaining Shale Gas Policy Divergence in Bulgaria and Poland,” *Review of Policy Research* 33, no. 6 (2016): 603–622.
- (20 pages) Guanglin Pi et al. “The Status, Obstacles and Policy Recommendations of

Shale Gas Development in China,” *Sustainability* 7, no. 3 (2015): 2353-2372.

19. Replacing Oil and Gas? (10 March)

Can renewable resources replace oil and gas?

Readings:

- (101 pages) Daniel Yergin, *The Quest: Energy Security and the Remaking of the Modern World* (The Penguin Press, 2011).
 - Chapter 27 (“Rebirth of Renewables”), pp. 523-547
 - Chapter 29 (“Alchemy of Shining Light”), pp. 563-587
 - Chapter 30 (“Mystery of Wind”), pp. 588-613.
 - Chapter 35 (“The Great Electric Car Experiment”), pp. 686-710.

12 March (Th): Presentations (Assignment E)

DUE 19 March: Research Paper

Further Readings:

What is “Energy”?

- EIA, *International Energy Outlook* (2019), full report. Note: format = pdf of slideshow.

What is “Energy Security”?

- Institute for 21st Century Energy, US Chamber of Commerce, *Index of U.S. Energy Security Risk: Assessing America’s Vulnerabilities in a Global Energy Market* (2016 edition).
- (16 pages) U.S. Department of Energy (DOE), *Valuation of Energy Security for the US, Report to Congress* (January 2017), “Executive Summary,” READ ONLY Introduction and Sections I-III, pp. 1-16.

An Introduction to Oil and Natural Gas

- Gavin Bridge and Philippe Le Billon, *Oil* (Polity, 2013), Chapter 1 (“The Nature of a Political Resource”).
- American Petroleum Institute (API), “Understanding Crude Oil and Product Markets.”
- *Energy Primer: A Handbook of Energy Market Basics* (November 2015), Chapter 2 (“Wholesale Natural Gas Markets”), pp. 5-34.
- Lisa Margonelli, *Oil on the Brain: Petroleum’s Long, Strange Trip to Your Tank* (Broadway Books, 2007), especially Chapters 3 (“Refinery”) and 4 (“Drilling Rig”).
- Organization of Petroleum Exporting Countries (OPEC), *World Oil Outlook 2019* (OPEC Secretariat, October 2017).
https://www.opec.org/opec_web/en/publications/340.htm
- Christopher Allsopp and Bassam Fattouh, “The Oil Market: Context, Selected Features, and Implications,” in Andreas Goldthau (eds.), *The Handbook of Global Energy Policy* (John Wiley & Sons, 2013), pp. 81-97.
- Robert D. Blackwill and Meghan L. O’Sullivan, “America’s Energy Edge: The Geopolitical Consequences of the Shale Revolution,” *Foreign Affairs* (March/April 2014).

Controlling Oil: States, IOCs, and NOCs

- Gavin Bridge and Philippe Le Billon, *Oil* (Polity, 2013), Chapter 1 (“The Nature of a Political Resource”) and Chapter 2 (“Capturing Oil”), pp. 35-68.
- Ian Bremer and Robert Johnston, “The Rise and Fall of Resource Nationalism,” *Survival*, Vol. 51, No. 2 (2009), pp. 149-158.
- Vlado Vivoda, “Resource Nationalism, Bargaining and International Oil Companies: Challenges and Change in the New Millennium,” *New Political Economy*, Vol. 14, No. 4 (2009), pp. 517-534.
- Christopher Warshaw, “The Political Economy of Expropriation and Privatization in the Oil Sector,” in David G. Victor et al., *Oil and Governance: State-owned Enterprises and the World Energy Supply* (Cambridge University Press, 2012), pp. 35-61.
- Paasha Mahdavi, “Why do Leaders Nationalize the Oil Industry? The Politics of Resource Expropriation,” *Energy Policy*, Vol. 75 (2014), pp. 228-243.
- Llewelyn Hughes and Sean J. Kreyling, “Understanding Resource Nationalism in the

21st Century,” *Journal of Energy Security* (2010).

- David G. Victor, “National Oil Companies and the Future of the Oil Industry,” *Annual Review of Resource Economics*, Vol. 5 (2013), pp. 445-462.
- Jenik Radon, “The ABCs of Petroleum Contracts: License-Concession Agreements, Joint Ventures, and Production-Sharing Agreements,” in Svetlana Tsalik and Anya Schiffrin (eds.) *Covering Oil: A Reporter’s Guide to Energy and Development* (The Open Society Institute, 2005) pp. 61-86.

The Oil Curse

- Michael Ross, *The Oil Curse: How Petroleum Wealth Shapes the Development of Nations* (Princeton University Press, 2012).
- Mary Kaldor, Terry Lynn Karl, and Yahia Said (eds) *Oil Wars* (Pluto Press, 2007).
- Thad Dunning and Leslie Wirpsa, “Oil and the Political Economy of Conflict in Colombia and Beyond: A Linkages Approach,” *Geopolitics* Vol. 9, No. 1 (2004), pp. 81-108.
- Erika Weinthal and Pauline Jones Luong, “Combating the Resource Curse: An Alternative Solution to Managing Mineral Wealth,” *Perspectives on Politics*, Vol. 4, No. 1 (2006), pp. 35-53.
- Charles McPherson, “Governance, Transparency, and Sustainable Development” in Jan H. Kalicki and David L. Goldwyn (eds), *Energy and Security: Strategies for a World in Transition* (Johns Hopkins University Press, 2013), pp. 444-460.
- Paul Segal, “How to Spend It: Resource Wealth and the Distribution of Resources Rents,” *Oxford Institute for Energy Studies* (May 2012), pp. 1-23.
- Gawdat Bahgat “Sovereign Wealth Funds in the Gulf: Opportunities and Challenges” in Robert Looney (ed), *Handbook of Oil Politics* (Routledge, 2012), pp. 362-374.

OPEC and the Oil Weapon

- Roy Licklider, “The Power of Oil: The Arab Oil Weapon and the Netherlands, the United Kingdom, Canada, Japan, and the United States,” *International Studies Quarterly* 32, no. 2 (1988): 205-226.
- Llewelyn Hughes and Eugene Gholz, “Energy, Coercive Diplomacy, and Sanctions,” in *The Palgrave Handbook of the International Political Economy of Energy* (Palgrave 2016), pp. 487-504.
- Thijs Van de Graaf, “Is OPEC dead? Oil exporters, the Paris agreement and the transition to a post-carbon world” *Energy research & social science* 23 (2017): 182-188.
- Other cartels:
 - Robert Smith, “How A Swiss Cheese Cartel Made Fondue Popular,” *National Public Radio* (23 April 2015). <http://www.npr.org/2015/04/23/401655790/how-a-swiss-cheese-cartel-made-fondue-popular>
 - Jen Skerritt, “Maple Syrup Cartel Battles a Black Market Rebellion,” *Bloomberg* (9 August 2016).

Russia and the Gas Weapon

- Thijs Van de Graaf and Jeff D. Colgan, “Russian Gas Games or Well-Oiled Conflict? Energy Security and the 2014 Ukraine Crisis,” *Energy Research & Social Science*, Vol. 24 (2017), pp. 59-64.

- Morena Skalamera, “The Ukraine Crisis: The Neglected Gas Factor,” *Orbis* (2015), pp. 398-410.
- Yusin Lee, “Interdependence, Issue Importance, and the 2009 Russia–Ukraine Gas Conflict,” *Energy Policy*, Vol. 102 (2017), pp. 199-209.
- Randall Newnham, “Oil, Carrots, and Sticks: Russia’s Energy Resources as a Foreign Policy Tool,” *Journal of Eurasian Studies*, Vol. 2, No. 2 (2011), pp. 134-143.

Defense Against the Dark Arts: Diversification, Institutions, Reserves, and Efficiency

- Paul Stevens, “Co-operation Between Producers and Consumers” in Robert Looney (ed), *Handbook of Oil Politics* (Routledge, 2012), pp. 79-89.
- Nathalie Trudeau and Peter G. Taylor, “The Energy Efficiency Dimension of Energy Security,” in Benjamin K. Sovacool (ed), *The Routledge Handbook of Energy Security* (Routledge, 2011), pp. 218-238.
- Andrew Cheon and Johannes Urpeleinen, “Escaping Oil’s Stranglehold: When Do States Invest in Energy Security?” *Journal of Conflict Resolution*, Vol. 59, No. 6 (2015), pp. 953-983.
- Llewelyn Hughes, “The limits of energy independence: Assessing the implications of oil abundance for U.S. foreign policy,” *Energy Research & Social Science* 3 (2014): 55-64.

Sanctioning Oil and Gas Producers

- Richard Nephew, “Issue Brief: Implications of New Oil Sanctions on Iran,” Columbia SIPA, Center on Global Energy Policy, March 2015.
- George A. Lopez and David Cortright, “Containing Iraq: Sanctions Worked,” *Foreign Affairs* (July/August 2014).
- Iana Dreyer and Nicu Popescu, “Do Sanctions Against Russia Work?” European Union Institute for Security Studies Issue Brief (December 2014).
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Securing Energy Transportation

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