

DRAFT – 11/11/2015 version

Course Syllabus

PUBP 710-008: Geopolitics of Energy Security

Course Credits: 3

Fall 2015

Days/Time: Wednesday, 7:20 PM

Classroom: Founders Hall Room 318

Instructor: Richard D. Kauzlarich

Co- Director, Center for Energy Science and Policy (CESP) and Adjunct Professor, School of Policy, Government and International Affairs (SPGIA)

My office: Founders Hall 709

Office Hours: Wednesdays 5:00 - 7:00 pm; or by appointment.

Email: rkauzlar@gmu.edu

Phone number (O): 703-993-9652

Course Description

Warning: Not everyone taking this course will receive an A as a final grade.

This course will introduce students to the complex global setting where energy security and geopolitics intersect and the implications for policy makers. In this context two definitions are important:

What is geopolitics?

What is energy security?

Nation-states have a geopolitical identity or geopolitical aspirations for influence. Access to energy is an important factor in those aspirations. Even small states (like Israel and Azerbaijan) can play a global geopolitical role that impacts on energy security. Indeed, geopolitics is about nation-states -- individual

states or groupings (formal or informal) of nation-states like the EU. Nation-states are able to influence developments beyond their borders related to access to, and transportation of, natural resources. Students will learn about hard and soft power impacts and the political significance of strategically important geography. Students will learn how energy security relates to: (a) unhindered access to energy from domestic or foreign sources; (b) the transportation of energy at competitive world prices without hindrance; (c) independence from foreign sources; and (d) the important relationship between climate change and energy security. All of this against the global shift from the geopolitics of energy scarcity to the geopolitics of energy abundance.

Energy Security may be about security of supply, demand, infrastructure, environment, and the global climate. People everywhere want abundant, reliable (accessible on demand), clean and affordable energy from diverse sources. Energy Security may have political, economic, commercial, and military aspects. Perceptions of geopolitics and energy security are more important than reality – a reality that is changing more rapidly and unpredictably than at any time in the past 100 years. While we will look globally, our focus will be on developments in the Western Hemisphere and Eurasia.

Blackboard

This class will use Blackboard (mymasonportal.gmu.edu) as the authoritative source of all information related to PUBP 710-008. It will contain the class syllabus, course readings (except for the required books as noted below), session content, and assignments. All written assignments must be submitted via Blackboard. Assignments submitted via e-mail or in hard copy will not be accepted. All grades and feedback will be provided via Blackboard.

Course Materials

Required books

Yergin, Daniel **The Quest: Energy, Security and the Remaking of the Modern World**, The Penguin Press, New York, 2011

LeVine, Steve. **The Powerhouse: Inside the Invention of a Battery to Save the World**, Viking, New York, 2015

Kalicki, Jan H. and David L. Goldwyn. **Energy & Security: Strategies for a World in Transition**, Woodrow Wilson Press, Washington, DC, 2013.

These will be the core texts for the course. Specific sections of the texts will be assigned as relevant to the topics under discussion in each session.

Recommended books

Gustafson, Thane. **Wheel of Fortune**, Belknap Press, Boston, 2012.

LeVine, Steve **The Oil and the Glory**, Random House, Inc., New York, 2007

De Vasconcelos, Alvaro ed., **Global Trends 2030 - Citizens in an interconnected and polycentric world**, European Union Institute for Security Studies, EUISS, Paris, 2012

http://www.iss.europa.eu/uploads/media/ESPAS_report_01.pdf

National Intelligence Council **Global Trends 2030: Alternative Worlds**, Washington DC, 2012

<http://www.dni.gov/index.php/about/organization/national-intelligence-council-global-trends>

Tsalik, Svetlana **Caspian Oil Windfalls: Who Will Benefit?** Open Society Institute, New York, 2003

Periodical literature

For your weekly discussion outline read regularly from among

New York Times

Platts www.platts.com

Financial Times

Moscow News

Times of India

Economist

China Daily

RIGZONE www.rigzone.com

Breaking Energy <http://breakingenergy.com/>

Quartz www.qz.com

POLITICO Pro Morning Energy www.politico.eu

Additional related resource material

Energy Information Administration (EIA), www.eia.doe.gov

International Energy Outlook, www.eia.doe.gov/oiaf/ieo/index.html

International Energy Agency (IEA), www.iea.org

OPEC, World Oil Outlook,

http://www.opec.org/opec_web/static_files_project/media/downloads/publications/WOO_2014.pdf

BP Statistical World Review, www.bp.com/statisticalreview

Shell Scenarios, www.shell.com/scenarios

EU Commission Energy Directorate, http://ec.europa.eu/energy/index_en.html

U.S. Department of Energy, www.energy.gov

UK Department of Energy and Climate Change, <http://www.decc.gov.uk/>

Atlantic Council Energy & Environment, <http://www.acus.org/program/energy-and-environment>

Bipartisan Policy Center Energy Project, <http://bipartisanpolicy.org/projects/energy-project>

Baker Institute Energy Forum, <http://bakerinstitute.org/programs/energy-forum>

Belfer Center The Geopolitics of Energy Project,

http://belfercenter.ksg.harvard.edu/project/68/geopolitics_of_energy_project.html

Brookings Energy Security Initiative, <http://www.brookings.edu/about/projects/energy-security>

Carnegie Endowment Program on Energy and Climate

<http://carnegieendowment.org/programs/global/index.cfm?fa=proj&id=108>

Clingendael International Energy Programme (CIEP) <http://www.clingendaelenergy.com/>

Congressional Research Service (CRS), <http://ncseonline.org/nle/crs/>

Council on Foreign Relations Energy/Environment,

<http://www.cfr.org/issue/energyenvironment/ri17>

CSIS Energy and National Security Program, <http://csis.org/program/energy-and-national-security>

Independent Petroleum Association of America (IPAA) <http://www.ipaa.org/economics-analysis-international/economic-reports/>

Institute for Energy Research, <http://instituteforenergyresearch.org/>

National Petroleum Council Report, Facing the Hard Truths about Energy

http://downloads.connectlive.com/events/npc071807/pdf-downloads/Facing_Hard_Truths-Report.pdf

NOAA, State of the Climate in 2012,

<http://journals.ametsoc.org/doi/pdf/10.1175/2013BAMSSStateoftheClimate.1>

EPA Carbon Pollution Standards <http://www2.epa.gov/carbon-pollution-standards>

Course Learning Objectives

Knowledge and Understanding

- Understand and assess causes and effects of geopolitics on energy security, including climate change – and vice versa.
- Relate past, present and likely future developments in the global energy sector to geopolitical changes and global trends.
- Distinguish between the role national and corporate interests, and personal economic and political power objectives of leaders.
- Assess the interrelationships among energy security, environmental and climate change objectives.

Analytical Skills and Abilities

- Develop skills for processing information, developing hypotheses, and exploring cause and effect relationships.
- Determine reliable information sources in an environment filled with conflicting, self-serving information designed to influence as much as inform.
- Understand how analysis affects policy making.

Professional Development

- To effectively communicate policy-oriented research and analytical conclusions in written and oral form.
- To learn tools and approaches for delivering presentations to senior policy makers.
- To conceptualize complex technical issues for policy-makers in terms that enable senior officials to make decisions.
- To follow instructions.

Teaching and Learning Methods

Students are required to attend class.

Students will prepare to discuss the reading assignments each week.

These classes will be discussion-based and lead off with an oral presentation of a relevant energy topic by selected students. Each student should be prepared to present each class.

If there is a guest speaker you will be expected to ask questions. You also will be expected to participate during class in critiquing both the oral presentations and assigned reading. If you do not contribute you will lose participation points. Unlike life in general, showing up is not enough to demonstrate participation in the class. If you must miss a class let me know.

Grade Table

Grade	Percent
A	95-100%
A-	90-94.9%
B+	87-89.9%
B	83-86.9%
B-	80-82.9%
C+	77-79.9%
C	70-76.9%
D	60-69.9%
F	<60%

Grading and Performance

- A. Weekly Presentations 15%
- B. Written Policy Paper 25%
- C. Oral Policy Briefing 15%
- D. Final exam 35%
- E. Attendance & participation in class 10%

NOTE: Final class grades are non-negotiable.

Submission of Documents

Students should use Microsoft Word (or MS Word compatible) word processing software. Please use Times New Roman font with font size of 12. Left, right, top and bottom page margins should be 1 inch only. **All papers should be double-spaced.** Assignments that do not follow these rules will lose 10% of total scored points. Deadlines will be indicated on assignments in Blackboard. All documents must be submitted on time via Blackboard.

Writing help

Diana Hacker's A Pocket Manual of Style is the standard style manual for the School. It is available in the Bookstore. If you would like help with learning about how to compose your arguments or write more clearly, please contact the University Writing Center, <http://writingcenter.gmu.edu>

Disabilities

If you are a student with a disability and you need academic accommodations, please see me and contact the Disability Resource Center (DRC) at 993-2474. All academic accommodations must be arranged through the DRC.

SPGIA Policy on Plagiarism

The profession of scholarship and the intellectual life of a university as well as the field of public policy inquiry depend fundamentally on a foundation of trust. Thus any act of plagiarism strikes at the heart of the meaning of the university and the purpose of the School of Policy, Government and International Affairs (SPGIA). It constitutes a serious breach of professional ethics and it is unacceptable.

Plagiarism is the use of another's words or ideas presented as one's own. It includes, among other things, the use of specific words, ideas, or frameworks that are the product of another's work. Honesty and thoroughness in citing sources is essential to professional accountability and personal responsibility. Appropriate citation is necessary so that arguments, evidence, and claims can be critically examined.

Plagiarism is wrong because of the injustice it does to the person whose ideas are stolen. But it is also wrong because it constitutes lying to one's professional colleagues. From a prudential perspective, it is shortsighted and self-defeating, and it can ruin a professional career.

The SPGIA faculty takes plagiarism seriously and has adopted a zero tolerance policy. Any plagiarized assignment will receive an automatic grade of .F. This may lead to failure for the course, resulting in dismissal from the University. This dismissal will be noted on the student's transcript. For foreign students who are on a university-sponsored visa (e.g. F-1, J-1 or J-2), dismissal also results in the revocation of their visa.

To help enforce the SPGIA policy on plagiarism, all written work submitted in partial fulfillment of course or degree requirements must be available in electronic form so that it can be compared with electronic

databases, as well as submitted to commercial services to which the School subscribes. Faculty may at any time submit student's work without prior permission from the student. Individual instructors may require that written work be submitted in electronic as well as printed form. The SPGIA policy on plagiarism is supplementary to the George Mason University Honor Code; it is not intended to replace it or substitute for it.

Resources:

Avoiding Plagiarism <http://writingcenter.gmu.edu/?cat=23>

Turnitin <http://wac.gmu.edu/program/newsletter/archive/fall2006/turnitin.htm>

Assignment Details

I. Weekly Discussion

A. Short discussion of energy topics relating to session that:

- i) Have geopolitical significance
- ii) Relate to energy security or climate change
- iii) Technological developments with geopolitical or energy security implications

B. Outline your presentation — 3 ½ minutes maximum -- one-page

- i) Key point for policy maker (What's going on?)
- ii) Why important? (Why is it going on? What does it mean?)
- iii) Policy recommendations (What should the policy do about it?)

C. Sources – **separate page**. Specify source. Not just a link.

II. Policy Paper -- 10 page paper on a topic you suggest (see attached list of ideas on page 23) organized as follows:

- A. Key policy question (s)
- B. Time period
- C. Executive Summary
- D. Assumptions

- E. Analysis
 - i. Drivers
 - ii. Wild Cards
 - iii. Alternative outcomes
- F. Policy recommendations

Due Dates for elements in policy paper process:

- A. Concept paper (1/2 page) – September 16
- B. Outline (1 page) – October 14
- C. First draft (10 pages) – November 11
- D. Final (10 pages) – December 9 (ck)

III. December 9 Policy Oral Briefing (TBD)

LAST FALL'S TOPIC. MAY CHANGE. You will be assigned to teams representing Russia, India, China, the United States, and the EU. Consider your team as the negotiating team for your country to November 2015 meeting of the Conference of Parties (COP) of the Framework Convention on Climate Change (FCCC). All of you should be very excited since COP-21 will be held in Paris.

One of the readings for Session 4 -- Expectations for a New Climate Agreement -- is a fine status report on the COP-21 negotiating process as of late 2014.

Your task is to brief your country's foreign, environment and energy ministers (in the case of the EU, Commissioners). The outcome is to be a 10 minute oral presentation for the ministers. It should cover:

- Objectives for COP-21
- How these COP-21 objectives enhance your country(ies) energy security
- Potential allies in COP-21 negotiating setting
- Likely outcomes at COP-21

You can have no more than 2 power point slides (not required).

IV. Final Exam

A take home assignment (details to be provided toward the end of the semester)

Tentative Class Schedule

(Readings will be adjusted throughout the semester. Details will be posted on Blackboard in the course Content folders for each session)

September 2 -- Session 1: Overview/Introduction -- Geopolitics and Energy Security

Introductions

Review course content

Review requirements

Expectations

Use of Blackboard

Global Trends 2030. Director of National Intelligence. Washington, DC (Exec. Summary and pp 31-38)
<http://globaltrends2030.files.wordpress.com/2012/12/global-trends-2030-november2012.pdf>

Levine, Steve “10 indicators you should watch to predict the geopolitics of energy” Quartz, October 19, 2012
<http://qz.com/17335/ten-indicators-you-should-watch-to-predict-the-geopolitics-of-energy/>

Masuda, Tatsuo. Security of energy supply and the geopolitics of oil and gas pipelines. European Review of Energy Markets- volume 2, issue 2, December 2007
<http://www.eeinstitute.org/european-review-of-energy-market/erem5-article-masuda>

Oyvind Osterud and Michael Mayer. What is geopolitics?
http://www.geopoliticsnorth.org/index.php?option=com_content&view=article&id=45:article2&catid=1:latest-news

Pascual, Carlos. The Geopolitics of Energy: From Security to Survival. Washington DC. Brookings Institution.2008
http://www.brookings.edu/~media/research/files/papers/2008/1/energy%20pascual/01_energy_pascual.pdf

Nye, Joseph. “Shale Gas is America’s Geopolitical Trump Card.” The Wall Street Journal, June 8 2014
<http://online.wsj.com/articles/joseph-nye-shale-gas-is-americas-geopolitical-trump-card-1402266357>

Mackinder, H.J. "The Geopolitical Pivot of History," The Geographical Journal Vol 23. No4 (Apr.1904)

<http://intersci.ss.uci.edu/wiki/eBooks/Articles/1904%20HEARTLAND%20THEORY%20HALFORD%20MACKINDER.pdf>

September 9 -- Session 2: Energy Outlook -- Next Five Years

Yergin

Chapter 8 The Demand Shock

Part 2 Securing the Supply

Kalicki and Goldwyn

Chapter 1 The Global Energy Outlook 25-68

World Energy Outlook in 2014. Executive Summary International Energy Agency. Paris France

<http://www.iea.org/textbase/npsum/weo2014sum.pdf>

BP Statistical Review of World Energy June 2015 <http://www.bp.com/content/dam/bp/pdf/Energy-economics/statistical-review-2015/bp-statistical-review-of-world-energy-2015-full-report.pdf>

BP Energy Outlook 2035. http://www.bp.com/content/dam/bp/pdf/Energy-economics/energy-outlook-2015/Energy_Outlook_2035_booklet.pdf

OPEC World Oil Outlook 2014

http://www.opec.org/opec_web/static_files_project/media/downloads/publications/WOO_2014.pdf

ExxonMobil 2014 The Outlook for Global Energy to 2040

<http://cdn.exxonmobil.com/~media/Reports/Outlook%20For%20Energy/2014/2014-Outlook-for-Energy.pdf>

EIA Annual Energy Outlook 2015 [http://www.eia.gov/forecasts/aeo/pdf/0383\(2015\).pdf](http://www.eia.gov/forecasts/aeo/pdf/0383(2015).pdf)

September 16 -- Session 3: Energy Security -- US Context

Yergin

Chapter 6 Aggregate Destruction

Chapter 7 War in Iraq

Kalicki and Goldwyn

Conclusion: Energy, Security and Foreign Policy 545-581

Maugeri, Leonardo. Oil: The Next Revolution. Boston MA: Harvard Kennedy School Belfer Center. June 2012 <http://belfercenter.ksg.harvard.edu/files/Oil-%20The%20Next%20Revolution.pdf>

Remarks by Tom Donilon, National Security Advisor to the President At the Launch of Columbia University's Center on Global Energy Policy, April 24, 2013 <http://www.whitehouse.gov/the-press-office/2013/04/24/remarks-tom-donilon-national-security-advisor-president-launch-columbia->

Securing America's Future Energy, A National Strategy for Energy Security 2013
http://www.secureenergy.org/sites/default/files/SAFE_National-Strategy-for-Energy-Security_0.pdf

World Oil Transit Chokepoints. Energy Information Administration.
http://www.eia.gov/beta/international/analysis_includes/special_topics/World_Oil_Transit_Chokepoints/wotc.pdf

Cunningham, Nick and Warren Dym. The U.S. Tight-Oil Boom: Geopolitical Winner or Long-term Distraction. The American Security Project, Washington DC, August 2013
<http://americansecurityproject.org/featured-items/2013/perspective-the-u-s-tight-oil-boom-geopolitical-winner-or-long-term-distraction/>

Oil Security 2025. Commission on Energy and Geopolitics. Washington, DC 2013
http://secureenergy.org/sites/default/files/Oil_Security_2025_0.pdf

September 23 -- Session 4: Environmental and Climate Change Challenges

Yergin

Part 4 Climate and Carbon

Kalicki and Goldwyn

Chapter 21 Energy, Environment and Climate 483-498

De Vasconcelos, Alvaro ed., Global Trends 2030 - Citizens in an interconnected and polycentric world, European Union Institute for Security Studies, EUISS, Paris, 2012

http://www.iss.europa.eu/uploads/media/ESPAS_report_01.pdf

Chapter 5 Climate change and scarcities: the challenges to human development

World Energy Outlook 2015 Special Report on Energy and Climate Change, IEA, Paris, April 2015

<https://www.iea.org/publications/freepublications/publication/WEO2015SpecialReportonEnergyandClimateChange.pdf>

Coady, David, Ian Parrey, Louis Sears. And Baoping Shang. IMF Working Paper How Large are Global Energy Subsidies? WP/15/105 International Monetary Fund, May 2015

<http://www.imf.org/external/pubs/ft/wp/2015/wp15105.pdf>

Murphy, Alexander B. And Demian Hommel, The Geopolitical Implications of Environmental Change Department of Geography, University of Oregon.

<http://geography.uoregon.edu/murphy/articles/murphy%20hommel%20with%20figures.pdf>

Espach, Ralph; Duncan Depledge ; Tobias Feakin. The Climate and Energy Nexus: Challenges and Opportunities for Transatlantic Security, CNA. Washington DC June 2013 (LINK NO LONGER VALID)

<http://www.cna.org/sites/default/files/research/ClimateEnergyNexus.pdf>

New Lens Scenarios: A Shift in Perspective for a World in Transition. Shell International BV. 2013

http://s03.static-shell.com/content/dam/shell-new/local/corporate/Scenarios/New_Lens_Scenarios_Low_Res.pdf

Jacoby, Henry D. & Y.H. Henry Chen. Expectations for a New Climate Agreement. MIT Joint Program on the Science and Policy of Global Change, Report No. 264, August 2014.

http://globalchange.mit.edu/files/document/MITJPSPGC_Rpt264.pdf

September 30 -- Session 5: Turkey/Russia/Caspian

Yergin

Chapters 1 Russia Returns

Chapter 2 The Caspian Derby

Chapter 3 Across the Caspian

Kalicki and Goldwyn

Chapter 8 Russia and Eurasia 187-204

Turkey Country Analysis Brief. Energy Information Administration , April 17, 2014

http://www.eia.gov/beta/international/analysis_includes/countries_long/Turkey/turkey.pdf

Russia Country Analysis Brief. Energy Information Administration . November 26, 2013

http://www.eia.gov/beta/international/analysis_includes/countries_long/Russia/russia.pdf

Azerbaijan Country Analysis Brief. Energy Information Administration. August 1, 2014

http://www.eia.gov/beta/international/analysis_includes/countries_long/Azerbaijan/azerbaijan.pdf

Kazakhstan Country Analysis Brief. Energy Information Administration . January 14, 2015

http://www.eia.gov/beta/international/analysis_includes/countries_long/Kazakhstan/kazakhstan.pdf

Caspian Sea Region. Energy Information Administration. August 26, 2013

http://www.eia.gov/beta/international/analysis_includes/regions_of_interest/Caspian_Sea/caspian_sea.pdf

Global and Russian Energy Outlook Up To 2040. The Energy Research Institute of the Russian Academy of Sciences and Analytical Center for the Government of the Russian Federation. Moscow April 21, 2014,

http://www.eriras.ru/files/2014/forecast_2040_en.pdf

Okumus, Oglu. Turkey's Standing in Gas Pipeline Games. Geopolitical Trends Center (GPoT) GPoT PB no.31, March 2012 http://www.gpotcenter.org/dosyalar/PB31_2012_Gas_Okumus.pdf

October 7 -- Session 6: Far East and South Asia -- Energy Moves East**Guest Lecturer:****Laura Singer, Energy Information Administration (confirmed)**

Yergin

Chapter 4 Supermajors

Chapter 9 China Rise

Chapter 10 China in the Fast Lane

Kalicki and Goldwyn

Chapter 13 China, India and Asian Energy 283-302

China Country Analysis Brief. Energy Information Administration. May 14, 2015

http://www.eia.gov/beta/international/analysis_includes/countries_long/China/china.pdf

India Country Analysis Brief. Energy Information Administration. June 26, 2014

http://www.eia.gov/beta/international/analysis_includes/countries_long/India/india.pdf

Jian, Zhang. China's Energy Security: Prospects, Challenges and Opportunities. Washington DC: Brookings Institution. July 2011

http://www.brookings.edu/~media/research/files/papers/2011/7/china%20energy%20zhang/07_china_energy_zhang_paper.pdf

Linn, Jenney China's Energy Security Dilemma. Project 2049 Institute

http://project2049.net/documents/china_energy_dilemma_lin.pdf

Sun-Joo Ahn and Dagmar Graczyk Understanding Energy Challenges in India IEA, 2012

http://www.idsa.in/nationalstrategy/eventDec10/WP_DevikaSharma.pdf

South China Sea. Energy information Administration. February 7, 2013

http://www.eia.gov/countries/analysisbriefs/South_China_Sea/south_china_sea.pdf

October 14 -- Session 7: "Resource Curse" – Corruption

Yergin

Chapter 5 Petro State

Kalicki and Goldwyn

Chapter 19 Governance, Transparency and Sustainable Development

Find Levine and Tsalik readings at e-reserves on Blackboard

Tsalik, Svetlana. Caspian Oil Windfalls: Who Will Benefit? Open Society Institute

Chapter 2 Natural Resource Funds: Case Studies in Success and Failure

Levine, Steve. The Oil and the Glory. Random House, New York 2007

Chapter 1 The Barons

Chapter 2 A Visitor from Sweden

Chapter 3 Revolutions

Chapter 4 Soviet Days

Ahmadov, Ingilab; Mammadov, Jehun; Aslani, Kenan. Assessment of Institutional Quality in Resource-Rich Caspian Basin Countries. Eurasia Hub, June 4, 2013

Working Group on Corruption and Security. Corruption: The Unrecognized Threat to International Security. Carnegie Endowment for International Peace, June 2014.

http://carnegieendowment.org/files/corruption_and_security.pdf

October 21 -- Session 8: Technological Change and Low Carbon Approaches**Guest Lecturer**

Leigh Hendrix Goldwyn Global Strategies

Yergin

Part 5 New Energies

Part 6 Road to the Future

Kalicki and Goldwyn

Chapter 17 Technology, Development and Energy Security 378-421

Tracking Clean Energy Progress: Energy Technology Perspectives 2012 Pathways to a Clean Energy System: International Energy Agency, 2012

<http://www.iea.org/publications/freepublications/publication/ETP2012SUM.pdf>

Ladislaw, Sarah, et. Al. A Roadmap for a Secure, Low-Carbon Energy Economy. Washington, DC: CSIS. January 2009. http://pdf.wri.org/secure_low_carbon_energy_economy_roadmap.pdf

Millhone, John P. Russia's Neglected Energy Reserves. Washington, DC: Carnegie Endowment for International Peace. 2010 http://www.carnegieendowment.org/files/russia_energy_reserve.pdf

Gordon, Deborah. The Carbon Contained in Global Oils. Washington, DC. Carnegie Endowment for International Piece. 2012 http://carnegieendowment.org/files/global_oils.pdf

Gordon, Deborah. Understanding Unconventional Oil. Washington, DC Carnegie Endowment for international Peace. 2012 http://carnegieendowment.org/files/unconventional_oil.pdf

BP. Technology Outlook, November 2015. <http://www.bp.com/content/dam/bp/pdf/technology/bp-technology-outlook.pdf>

October 28 -- Session 9: North Africa, Middle East and Africa – Something Old, Something New

Kalicki and Goldwyn

Chapter 5 OPEC: Can the Cartel Survive Another 50 Years? 121-139

Part III The Middle East and Africa 225-277

Angola Country Analysis Brief. Energy Information Administration. March 19, 2015.

http://www.eia.gov/beta/international/analysis_includes/countries_long/Angola/angola.pdf

Algeria Country Analysis Brief. Energy information Administration. July 24, 2014.

http://www.eia.gov/beta/international/analysis_includes/countries_long/Algeria/algeria.pdf

Eastern Mediterranean Analysis Brief. Energy Information Administration. August 13, 2013.

http://www.eia.gov/beta/international/analysis_includes/regions_of_interest/Eastern_Mediterranean/eastern-mediterranean.pdf

Qatar Country Analysis Brief. Energy Information Administration. October 20, 2015.

http://www.eia.gov/beta/international/analysis_includes/countries_long/Qatar/qatar.pdf

Saudi Arabia Country Analysis Brief. Energy Information Administration September 10, 2014

http://www.eia.gov/beta/international/analysis_includes/countries_long/Saudi_Arabia/saudi_arabia.pdf

Iran Country Analysis Brief Energy Information Administration. June 19, 2015

http://www.eia.gov/beta/international/analysis_includes/countries_long/Iran/iran.pdf

Tagliapietra Simone. Towards a New Eastern Mediterranean Energy Corridor: Natural Gas Developments: Between Market Opportunities and Geopolitical Risks. FEEM December 2013.

<http://www.feem.it/userfiles/attach/2013215105594NDL2013-012.pdf>

November 4 -- Session 10: Western Hemisphere -- Energy exporter for how long?

Kalicki and Goldwyn

Part V. The Western Hemisphere 323-371

Annual Energy Outlook 2015. Energy Information Administration , April 2015

[http://www.eia.gov/forecasts/aeo/pdf/0383\(2015\).pdf](http://www.eia.gov/forecasts/aeo/pdf/0383(2015).pdf)

U.S. Crude Oil, Natural Gas and Natural Gas Liquids Proved Reserves 2013. U.S. Energy Information Administration, December 2014. <http://www.eia.gov/naturalgas/crudeoilreserves/pdf/uscrudeoil.pdf>

Canada Country Analysis Brief. Energy Information Administration. September 30, 2014.

http://www.eia.gov/beta/international/analysis_includes/countries_long/Canada/canada.pdf

Mexico Country Analysis Brief. Energy Information Administration. April 24, 2014.

http://www.eia.gov/beta/international/analysis_includes/countries_long/Mexico/mexico.pdf

Brazil Country Analysis Brief. Energy Information Administration. December 29, 2014.

http://www.eia.gov/beta/international/analysis_includes/countries_long/Brazil/brazil.pdf

Venezuela Country Analysis Brief. Energy Information Administration. June 20, 2014.

http://www.eia.gov/beta/international/analysis_includes/countries_long/Venezuela/venezuela.pdf

November 11 -- Session 11: Far North -- "The Last Frontier"

Guest Lecturer:

Ambassador(ret) Ken Yalowitz Georgetown University (confirmed)

Kalicki and Goldwyn

Chapter 9 The Arctic: Promise or Peril? 205-220

Trenin, Dmitri and Pavel Baev. The Arctic: A View from Moscow. Carnegie Endowment for International Peace, 2010. http://carnegieendowment.org/files/arctic_cooperation.pdf

Conley, Heather; Jamie Kraut; Terry Toland. A New Security Architecture for the Arctic. Center for Strategic and international Studies, January 2012.

http://csis.org/files/publication/120117_Conley_ArcticSecurity_Web.pdf

Holmes, James. Open Seas: the Arctic is the Mediterranean of the 21st Century. Foreign Policy. October 27, 2012.

www.foreignpolicy.com/articles/2012/10/29/open_seas?print=yes&hidecomments=yes&page=full

Collins, James; Michael Sfraga; Ross Virginia, Kenneth Yalowitz. A Euro-Atlantic Action Plan for Cooperation and Enhanced Arctic Security. The Carnegie Russia and Eurasia Program. May 14, 2013.

http://carnegieendowment.org/files/UArctic_report_full.pdf

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December 9 – Session 14: Class Oral Policy Briefing on COP-21

December 16 (ck) -- Final

Ideas for Papers in PUBP 710 008 Geopolitics of Energy Security

- Securing energy production and distribution systems in zones of conflict.
- US state and local government energy policy as affect geopolitics of energy security
- What position should Virginia take on off-shore oil and gas development?
- Who has the comparative advantage on non-conventional oil and gas development – majors or independents?
- Do subsidies work? Case study of solar power in Germany, China and the US.
- Mexican energy sector reform – how far can it go?
- New energy technologies – the next three game-changer energy developments.
- Arctic energy development – can it compete with non-conventional and low-carbon alternatives?
- Future of OPEC in an ever changing global energy market.
- Is there a “safe” nuclear power (or “safe” coal) alternative?
- Energy efficiency as the “fifth fuel source”.