

Masters in International Affairs (MIA)

Academic year 2008 - 2009

The Politics and Economics of International Energy

E657 - Spring - The Politics and Economics of International Energy - 6 ECTS
Mondays 10:15-12:00 (S4)

Course Description

Economic growth requires constantly growing use of energy, and the availability of sufficient sources of energy on a global scale is not for granted. Energy – oil, gas, power – remains one of the biggest businesses, and maintains a strategic characterization that sets it aside from other economic sectors. As such, it attracts the attention of industrial, financial and political actors internationally. The course aims at providing students with the critical knowledge and skills to avoid superficial generalizations and simplifications – which unfortunately remain all too common.

> PROFESSOR

Giacomo Luciani

Office hours:
To be discussed

> ASSISTANT

TBA

Syllabus

Course Website

http://graduateinstitute.ch/mia/courses/mia_non_compulsory_courses/politics_economics_of_international_ener gy.html

Requirements

1. Active participation
2. A mid-term (March 30)
3. A final Q&A written exam

Important

At the first class I will make available a CD-Rom containing a large part of the readings and other important documentation. The contents of the CD-Rom will also be available on CIAO and a copy of the CD will be deposited in the Library. Readings **MUST** be completed **IN ADVANCE** of each class. However, you are not expected to read everything: you should use your judgment in selecting what is truly important. Readings that are available only on paper are highlighted in yellow.

Readings

Background reading: Daniel Yergin, *The Prize: The Epic Quest for Oil, Money, and Power*, London, Simon & Schuster, 1993

You are expected to read this book in parallel with class proceeding although it is not listed as reading for any class in particular. It is fun to read anyhow.

Statistical references:

1. BP Statistical Review of World Energy June 2008
<http://www.bp.com/productlanding.do?categoryId=6929&contentId=7044622>
2. ENI World Oil and Gas Review 2008 http://www.eni.it/en_IT/attachments/cultura-energia/analisi-economiche-energetiche/wogr2008.pdf

Course Outline & Readings

Session	Topic	Readings
February 16	Introduction – Long-Term Energy Perspectives and Scenarios	<ol style="list-style-type: none"> 1. EIA (DOE) International Energy Outlook 2008 Highlights and Chapters 1 & 2 http://www.eia.doe.gov/oiaf/ieo/pdf/0484(2008).pdf 2. IEA World Energy Outlook 2007, Chapter 1 3. IEA Energy Technology Perspectives 2008 Executive Summary http://www.iea.org/G8/2008/ETP_2008_Exec_Sum_English.pdf 4. IEA Towards a Sustainable Energy Future - IEA programme of work on climate change, clean energy and sustainable development June 2008 http://www.iea.org/G8/2008/G8_Towards_Sustainable_Future.pdf 5. IEA Fact Sheet Blue Scenario http://www.iea.org/Textbase/techno/etp/fact_sheet_ETP2008.pdf 6. OPEC, World Oil Outlook 2008, section one http://www.opec.org/library/world%20oil%20outlook/WorldOilOutlook08.htm
February 23	International Oil: Reserves, Production, Technology	<ol style="list-style-type: none"> 1. API – All About Petroleum 2. C.J.Campbell and J.H. Laherrère, “The end of cheap oil” Scientific American March 1998 3. M.Adelman “The Genie out of the Bottle” Ch. 2 4. IEA World Energy Outlook 2006 Chapter 3 5. Arnott and Skinner paper for EUROGULF project (OIES WPM29) http://www.oxfordenergy.org/pdfs/WPM29.pdf 6. Skinner “World Energy Trends: Recent Developments and their Implications for Arab Countries” OIES SP19 http://www.oxfordenergy.org/pdfs/SP19.pdf 7. Mabro “The Peak Oil Theory” OIES Comment September 2006 http://www.oxfordenergy.org/pdfs/comment_0906-2.pdf 8. Alberta Royalty Review Panel Report “Our Fair Share”, pages 44-54 http://www.albertaroyaltyreview.ca/panel/final_report.pdf
March 2	Playing with the molecules: oil refining and more	<ol style="list-style-type: none"> 1. File “Information from Wikipedia.doc” 2. OPEC, World Oil Outlook 2008, section two http://www.opec.org/library/world%20oil%20outlook/WorldOilOutlook08.htm 3. RAND “Oil Shale Development in the US” http://www.rand.org/pubs/monographs/2005/RAND_MG414.pdf 4. “Refining and Price” in OEF#62 August 2005 page 3-9
March 9	The International Oil Market: Functioning	<ol style="list-style-type: none"> 1. Mabro e Hornsell “Oil Markets and Prices” Chapter 3, 12 & 15 2. Mabro “The International Oil Price Regime: Origins, Rationale and Assessment” JEL XI,1 June 2005, pages 3-20 3. Luciani paper for task 2.2 EUROGULF project 4. Platt's Methodology and Specifications Guide – Crude Oil http://www.platts.com/Oil/Resources/Methodology%20&%20Specifications/crudeoilspecs.pdf?S=n 5. Bassam Fattouh: “Prospects of the DME Oman Crude Oil Futures Contract” OIES Monthly Comment March 2008 http://www.oxfordenergy.org/pdfs/comment_0308-1.pdf 6. Bassam Fattouh “The Drivers of Oil Prices: The Usefulness and Limitations of Non-Structural model, the Demand–Supply Framework and Informal Approaches” OIES WPM 32 March 2007 http://www.oxfordenergy.org/pdfs/WPM32.pdf

Session	Topic	Readings
March 16	National and International Oil Companies	<ol style="list-style-type: none"> 1. Valerie Marcel "Oil Titans" RIIA Chapters 1,9,10. 2. Baker Institute "The Changing Role of National Oil Companies in International Energy Markets" Executive Summary April 2007 http://www.rice.edu/energy/publications/studies/BI_Study_35-1.pdf 3. S.Heller, P.Hartley, K.Medlock III "Empirical Evidence on the Operational Efficiency of National Oil Companies" Baker Institute http://www.rice.edu/energy/publications/docs/NOCs/Papers/NOC_Empirical.pdf 4. M.Chen "National Oil Companies and Corporate Citizenship" Baker Institute http://www.rice.edu/energy/publications/docs/NOCs/Papers/CC_Chen.pdf 5. J.Barnes and M.Chen "NOCs and U.S. Foreign Policy" Baker Institute http://www.rice.edu/energy/publications/docs/NOCs/Papers/US-ForeignPolicy_Barnes-Chen.pdf 6. Robert Arnott "Fiscal Tightening: Striking the Right Balance" OEF #63 7. Robert Arnott "The Private Oil Companies: From Consolidation to Growth" OEF#60 February 2005 pages 10-12 8. "National Oil Companies and International Oil Companies" OEF#57 May 2004 pages 12-18 9. Bernard Mommer "Sovereignty and Oil" OEF#50 August 2002 page 16-17 10. "Vertical Integration" OEF#47 November 2001 page 13-17 11. "National Oil Companies – Managers and Shareholders" OEF#46 August 2001 page 3-8
March 23	Natural Gas: Reserves, Production, Technology, Perspectives	<ol style="list-style-type: none"> 1. Vivek Chandra "Fundamentals of Natural Gas" Excerpts available online at http://www.natgas.info/index.html 2. IEA World Energy Outlook 2006 Chapter 4 3. EIA (DOE) International Energy Outlook 2007 Chapter 4 4. Jensen "The Development of a Global LNG Market" OIES 2004 http://www.oxfordenergy.org/bookdetails.php?ng5 5. J.Stern "Is There A Rationale for the Continuing Link to Oil Product Prices in Continental European Long-Term Gas Contracts?" OIES NG19 http://www.oxfordenergy.org/pdfs/NG19.pdf 6. M. Foss "United States Natural Gas Prices to 2015" OIES NG18 http://www.oxfordenergy.org/pdfs/NG18.pdf 7. ENCOURAGED "Future EU gas demand and external supply options: volumes, costs and transit issues" Chapters 1-3
March 30	MIDTERM	
April 6	Geopolitics of Gas	<ol style="list-style-type: none"> 1. Baker Institute & Stanford "Geopolitics of Natural Gas" available from Baker Institute website http://www.rice.edu/energy/publications/geopoliticsofnaturalgas.html – especially Hayes "Algerian Gas to Europe" and Victor "The Belarus Connection" 2. J. Stern "The Future of Russian Gas and Gazprom" 3. J. Stern "The New Security Environment for European Gas: Worsening Geopolitics and Increasing Global Competition for LNG" OIES NG15 http://www.oxfordenergy.org/pdfs/NG15.pdf 4. J. Stern: "The Russian-Ukrainian gas crisis of January 2006" OIES January 2006 http://www.oxfordenergy.org/pdfs/comment_0106.pdf 5. J. Stern "Gas-OPEC: a Distraction from Important Issues of Russian Gas Supply to Europe" Oxford Energy Comment February 2007 http://www.oxfordenergy.org/pdfs/comment_0207-1.pdf 6. ENCOURAGED "Future EU gas demand and external supply options: volumes, costs and transit issues" Chapter 4
April 20	Russia & the Caspian.	<p>Russia:</p> <ol style="list-style-type: none"> 1. R. Ahrend and W. Tompson "Realising the Oil Supply Potential of the CIS: the Impact of Institutions and Policies", OECD Economics Department

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		<p>Working Paper No. 484</p> <ol style="list-style-type: none"> 2. Stern, Luciani, Yenikeyeff: "Is Russia a Threat to Energy Supplies?" Oxford Energy Forum August 2006 3. Yenikeyeff and Krysiak "The Battle for the Next Energy Frontier: The Russian Polar Expedition and the Future of Arctic Hydrocarbons" Oxford Energy Comment August 2007 http://www.oxfordenergy.org/pdfs/comment_0807-3.pdf 4. IEA World Energy Outlook 2004 Chapter 9 http://www.iea.org/textbase/nppdf/free/2004/weo2004.pdf 5. E.L. Morse & J. Richard "The Battle for Energy Dominance" Foreign Affairs March/April 2002 6. Baker Institute papers from project "The Energy Dimension in Russian Global Strategy", 2004, available from Baker Institute web site http://www.rice.edu/energy/publications/russiaglobalstrategy.html 7. Whiskey & Gunpowder "Russia: Oil and Energy Report" http://www.whiskeyandgunpowder.com/ppc/RussianOilReport2.html 8. M. Brill Olcott "Kazmunaigaz" Baker Institute http://www.rice.edu/energy/publications/docs/NOCs/Papers/Kaz_Olcott.pdf 9. N. Poussenkova "Lord of the Rigs: Rosneft as a Mirror of Russia's Evolution" Baker Institute http://www.rice.edu/energy/publications/docs/NOCs/Papers/Rosneft_Nina.pdf 10. I. Gorst "Lukoil: Russia's Largest Oil Company" Baker Institute http://www.rice.edu/energy/publications/docs/NOCs/Papers/Lukoil_Gorst.pdf
April 27	Saudi Arabia, and the Mediterranean	<p>MENA general: IEA "World Energy Outlook 2005: Middle East and North Africa Insights" Chapters 3-5, 7, 16 http://www.iea.org/textbase/nppdf/free/2005/weo2005.pdf</p> <p>Saudi Arabia:</p> <ol style="list-style-type: none"> 1. IEA "World Energy Outlook 2005: Middle East and North Africa Insights" Chapter 16 http://www.iea.org/textbase/nppdf/free/2005/weo2005.pdf 2. A. Myers Jaffe "Saudi Aramco: National Flagship with Global Responsibilities" Baker Institute http://www.rice.edu/energy/publications/docs/NOCs/Papers/SaudiAramco_Jaffe-Elass.pdf 3. Y. Kobayashi "Corporate Strategies of Saudi Aramco" Baker Institute http://www.rice.edu/energy/publications/docs/NOCs/Papers/Kobayashi%20SAramco.pdf 4. Abdallah Jum'ah "The Road to Our Energy Future: A Candid Assessment" 5. Abdallah Jum'ah "Achieving Energy Security: Toward A More Holistic Approach" 6. Abdallah Jum'ah "The E&P Challenge: Achieving the Four Trillion Barrel Vision" 7. Ali al Naimi "A Roadmap to the Energy Future: Saudi Arabia's Perspective" 8. Cordesman, Obaid & Rodhan "Global Energy Demand and Capacity Building in Saudi Arabia's Petroleum Sector" CSIS May 2005 http://www.csis.org/media/csis/pubs/050502_saudioilcapacity.pdf 9. Ali al Naimi – speech at CSIS conference May 2005 http://www.csis.org/media/csis/press/050517_energytranscript%5B1%5D.pdf 10. B. Fattouh "How Secure are Middle East Oil Supplies?" OIES WPM33 http://www.oxfordenergy.org/pdfs/WPM33.pdf <p>* These, and other informative speeches, can be downloaded from the Saudi Aramco portal (www.saudiaramco.com) by clicking on "News Room" and then "speeches".</p>

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May 4	Iraq	<ol style="list-style-type: none"> 1. IEA "World Energy Outlook 2005: Middle East and North Africa Insights" Chapter 12 http://www.iea.org/textbase/nppdf/free/2005/weo2005.pdf 2. A. Myers Jaffe "Iraq's Oil Sector: Past, Present and Future" Baker Institute http://www.rice.edu/energy/publications/docs/NOCs/Papers/Iraq_Jaffe.pdf 3. Iraq Oil Law – recent debate – excerpts from MEES. <p>Older documents:</p> <ol style="list-style-type: none"> 1. Khadduri in Hanelt, Luciani & Neugart "Regime Change in Iraq" 2. CFR Guiding Principles for US Post-Conflict Policy in Iraq 3. Cohen The Road to Economic Prosperity for a Post-Saddam Iraq The Heritage Foundation 4. Michael Prowse: Give Iraq's oil to its people 5. "Post-war Iraq" OEF#55 November 2003 6. Khadduri in MEES 48 29 November 2004 7. Muttitt "Crude Designs: The Rip-off of Iraq's Oil Wealth", Platform 8. ITIC "Petroleum and Iraq's Future: Fiscal Options and Challenges" Fall 2004 9. Open Society – Iraq Revenue Watch – Open Letter and Iraq Oil Wealth Report - 2005
May 11	Venezuela and Iran	<p>Venezuela:</p> <ol style="list-style-type: none"> 1. Mommer "The New Governance of Venezuelan Oil" OIES April 1998 2. http://www.oxfordenergy.org/pdfs/WPM23.pdf 3. Mommer "Fiscal Regimes and Oil Revenues in the UK, Alaska and Venezuela" OIES June 2001 http://www.oxfordenergy.org/pdfs/WPM27.pdf?PHPSESSID=a5f4cd5bfe859f3d446c41b8462aae35 4. Boue' "The Internationalisation Programme of PDVSA" http://www.oxfordenergy.org/pdfs/Internationalisation.pdf 5. D.Mares and N.Altamirano "Venezuela's PDVSA and World Energy Markets" Baker Institute http://www.rice.edu/energy/publications/docs/NOCs/Papers/NOC_PDVSA_Mares-Altamirano.pdf
May 18	Energy Policies in the US and Europe: Security of Supply and Competition	<ol style="list-style-type: none"> 1. European Commission Green paper of 2005 (Doing More with Less) http://ec.europa.eu/energy/efficiency/doc/2005_06_green_paper_book_en.pdf 2. European Commission Green paper of 2006 http://ec.europa.eu/energy/green-paper-energy/doc/2006_03_08_gp_document_en.pdf 3. EU OPEC Energy Dialogue 4th Meeting http://www.opec.org/opecna/Press%20Releases/2007/4EUOPEC.htm 4. Energy Policy for Enlarged EU + Neighbours http://ec.europa.eu/dgs/energy_transport/international/doc/2003_communication_en.pdf 5. Developing Energy Cooperation with Neighbouring countries http://ec.europa.eu/dgs/energy_transport/international/regional/euromed/energy/doc/conference_3/2003_05_13_ten_e_memo_en.pdf 6. Solana-Piebalgs Paper on External Energy Policy http://www.consilium.europa.eu/ueDocs/cms_Data/docs/pressdata/EN/reports/90082.pdf 7. European Commission "An Energy Policy for Europe" January 10, 2007 http://eur-lex.europa.eu/LexUriServ/site/en/com/2007/com2007_0001en01.pdf 8. European Commission Final Report Gas and Electricity Competition Inquiry January 2007 http://eur-lex.europa.eu/LexUriServ/site/en/com/2006/com2006_0851en01.pdf 9. European Council, Presidency Conclusions of the Brussels European Council (8-9 March 2007)

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		<p>http://www.consilium.europa.eu/ueDocs/cms_Data/docs/pressData/en/ec/93135.pdf</p> <p>10. Roberts "Energy as a Security Challenge for the EU" EU ISS 2004</p> <p>11. Mitchell "Renewing Energy Security" RIIA July 2002</p> <p>12. INDES project papers: Executive Summary, CEPS Policy Briefs n. 49, 50, 51, 52, 53</p> <p>13. IEA "Security of Gas Supplies in Open Markets", 2004 http://www.iea.org/textbase/nppdf/free/2004/security.pdf</p>
May 25	The comeback of nuclear energy	<p>1. IAEA Nuclear Technology Review 2007 http://www.iaea.org/OurWork/ST/NE/Pess/assets/ntr2007.pdf</p> <p>2. Pierre-René Bauquis "A reappraisal of energy supply and demand in 2050" Available at: http://ogst.ifp.fr/index.php?option=article&access=standard&Itemid=129&url=/articles/ogst/pdf/2001/04/bauquis_v56n4.pdf</p> <p>3. Pierre-René Bauquis from Peak Oil to Nuclear Energy OEF February 2007</p> <p>4. Martin I. Hoffert, and others "Advanced Technology Paths to Global Climate Stability: Energy for a Greenhouse Planet" <i>Science</i> Nov 1 2002: 981-987</p>