

National Defense College

48th class 2020-2021

**Energy and National Security in Israel and the International System**

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**Course Abstract**

This course will analyze long-term trends in international energy markets and examine how they shape the country's national security. During the course we will focus on how fossil fuels (oil, gas and coal) affect conflicts and collaborations in the global arena and in the Middle East in particular. We will also ask why countries blessed with an abundance of energy resources tend to be characterized by authoritarian regimes and low indices of economic and human development. We will discuss the essential principles for ensuring a continuous supply of energy to the local economy, how a country determines its energy mix, and whether energy resources can be used as an effective "weapon" in the international arena. We will also deal with the global transition to renewable energies and the role of nuclear energy in these trends, also in the Middle East. Finally, we will deal with the energy needs of the State of Israel and how they shape its perception of security in the past and present, and we will analyze the challenges and opportunities created following the discovery of natural gas reserves in its territory.

This course gives students of the National Defense College the ability to:

1. To understand in depth how international energy markets operate and what affects them in the short and long term.
2. To use energy markets as an intelligence tool to identify political, economic and security trends in the international system and the Middle East in particular.
3. To analyze (and perhaps even predict) breaking news and current developments in energy markets (price changes, new technologies, conflicts in oil-rich countries) and how they may affect the national security of Israel and its neighbors.

**Mandatory assignments for receiving a final grade:**

1. Reading the mandatory article before the lesson each week.
2. Submission of a final assignment (in the form of a policy paper) 7-10 pages (double spaced, regular margins) on a topic concerning energy security in Israel or in the world. The assignment will be examined according to the clarity of the claims, use of principles / concepts learned in class, use of academic sources (from the syllabus and outside it) and not only journalistic sources (or research institutes), and use of at least one primary source to substantiate the claim (example: raw data from a report by the International Energy Agency or the Central Bureau of Statistics). The claims raised at a paper do not have to be original, but they must be of value to the policy makers to whom you are referring the document. The reader should conclude that this is an important subject to which he should pay attention and designate resources. The assignment will be written in accordance with the accepted structure in policy papers - executive summary, background, test cases and conclusions. The topic of the paper must be approved by the lecturer before starting. **Submission date: February 25th, 2021.**

**Reception hours**: The lecturer is available for personal conversations over zoom by appointment most days of the week (preferably in the evening).

**Course Program**

**Session 1 December 8th, 2020 (13:00-16:00): Introduction to the World of Energy**

In the first session, we will perform a historical review that will illustrate how the need for a continuous supply of fossil fuels defines our modern life and is essential for the security of the country and its economy. We will examine how fuel prices are determined, who are the main suppliers and energy consumers in the international system, where the energy market is heading in the coming decades, and how technological developments such as renewable energies and electric cars affect these trends in Israel and around the world.

**Class exercise:** During the session we will do an exercise in groups to find reliable databases on energy for independent and more accurate analysis based on primary sources.

Mandatory reading: U.S. Energy Information Administration (October 2019). “[World Oil Transit Chokepoints](https://www.eia.gov/international/analysis/special-topics/World_Oil_Transit_Chokepoints)”.

Reading for enrichment: International Energy Agency (2020), “[Key World Energy Statistics 2020](https://www.dropbox.com/s/kcfb9dy728amtdf/Key_World_Energy_Statistics_2020.pdf?dl=0)”.

* Tip: Focus on graphs and tables on pages 6-26. Note who are the largest producers, exporters and consumers for the different types of fuels (oil, coal, gas, nuclear, renewable). Notice the areas in the world where each type of fuel is consumed and how it has changed since the 1970s.

Video: John Oliver, “Coal”, *Last Week Tonight with John Oliver* (June 2017): 24:20 minutes. [Watch here](https://www.youtube.com/watch?v=aw6RsUhw1Q8)

**Session 2 December 17th, 2020 (8:20-12:00) : "The Oil Curse" of the Middle East**

In the second session we will examine the profound impact that energy resources have on economic development, national security, governmental stability, the type of regime, and even on the rights of women in the state. We will ask why countries rich in oil and natural gas in the Middle East suffer from high levels of corruption, dictatorial rule and few human rights, even compared to similar countries without energy resources (for example: Saudi Arabia / Iraq / Libya vs. Tunisia / Lebanon / Morocco). We will also examine what the means are to overcome the "curse of resources" and whether Israel is now exposed to its symptoms that it has found natural gas in its territory.

Mandatory reading: Humphreys, M., Sachs, J. D. & Stiglitz, J. E. (2007). “Chapter 1: Introduction”, in *Escaping the Resource Curse*. New York: Columbia University Press, pp. 1-20.

Reading for enrichment: Ross, M. L. (2008). “Oil, Islam, and Women,” *American Political Science Review* Vol. 102, No. 1, 107-123.

Video**:** The Economist, “[Women and the Saudi Revolution](https://www.youtube.com/watch?v=xuaR6zjQauE)” (July 10, 2018): 7:32 minutes.

**Session 3 January 5th, 2021 (8:30-12:00) : Energy Security and National Security**

How do countries balance their need to ensure energy sources that are both available, cheap and sustainable for their local economy, and what can be learned from this about their national resilience and political priorities. How long does it take to switch from one fuel type to another in an emergency, and what are the obstacles to this? We will examine how these questions are relevant to intelligence agencies while analyzing the power and stability of enemy states and allies. We will also examine Israel's energy mix and address the security challenges it poses through a guest lecture from the Ministry of Energy.

**Guest Lecture**: Mr. Shaul Zemach, former director general of the Ministry of Energy, served as a chairman of the "Zemach Committee" for examining the government's policy on natural gas exports, and currently serves as CEO of Energean Israel, which controls the "Shark" and "Crocodile" reservoirs.

Mandatory reading: Shaffer, B. (2017). [A Guide to the Application of Energy Data for Intelligence Analysis](https://www.cia.gov/library/center-for-the-study-of-intelligence/csi-publications/csi-studies/studies/vol-61-no-4/pdfs/energy-as-analytic-tool.pdf). *Studies in Intelligence* Vol. 61 (4), pp. 43-52.

Reading for enrichment: Sovacool, B. K (2016). "How long will it take? Conceptualizing the temporal dynamics of energy transitions." Energy Research & Social Science 13: 202-215.‏

Michaels, L. and A. Tal (2015). "Convergence and conflict with the ‘National Interest’: Why Israel abandoned its climate policy." *Energy Policy* 87: 480-485.

**Session 4 January 19th, 2021 (8:30-12:00) : "The Oil Weapon" - Energy and Foreign Policy**

We will discuss the role of energy resources in shaping foreign policy. We will look at how countries that export energy try to use their resources to advance their interests in the international system, and how large energy consumers try to gain an advantage through sanctions and other economic leverages. We will also look at the significant difference between oil trade and natural gas trade when it comes to politics between countries, and challenge popular assumptions regarding "oil weapons" and which side holds the advantage when using them.

**Class exercise:** We will delve into the dependence of the European continent on Russian gas. During the lesson, we will conduct a data retrieval exercise to help the US president decide whether to impose sanctions on the Nord Stream II pipeline between Russia and Germany**.**

Mandatory reading: Shaffer, B. (2009). “Chapter Two: Foreign Policy”, in Energy Politics. Philadelphia: University of Pennsylvania Press, pp. 28-46.

Reading for enrichment: Hughes, L., & Gholz, E. (2016). Energy, Coercive Diplomacy, and Sanctions. In The Palgrave Handbook of the International Political Economy of Energy. Palgrave Macmillan, London. pp. 487-504.

Shaffer, B. (2015), “Europe’s natural gas security of supply: Policy tools for single supplied states,” Energy Law Journal.

**Session 5 January 26th, 2021 (8:30-12:00) : Energy, War and Peace**

In this session we will break down many myths regarding oil and wars in the international system. We will discuss civil wars over natural resources and ask whether energy trade can also be used as a tool to promote peace. We will examine in depth the issue of conflicts around maritime borders following the discovery of oil and gas deposits in the deep sea in recent years, and we will also address the fear that climate change will lead to more wars in the future (and whether this can really be proven).

**Guest Lecture:** Dr. Ron Adam, former Special Envoy of the Ministry of Foreign Affairs and the Israeli representative at the International Agency for Renewable Energy IRENA. Currently Israel's Ambassador to Rwanda.

Mandatory reading: Ross, M. L. (2004). "What Do We Know About Natural Resources and Civil War," Journal of Peace Research, Vol. 41, No. 3.

Reading for enrichment: Colgan, J. D. (2011). Oil and resource-backed aggression. Energy Policy, 39(3), 1669-1676.

Documentary: Rachel Boynton, “[Big Men](https://vimeo.com/ondemand/bigmen)” (2014), 100:00 minutes. [See trailer here](https://www.youtube.com/watch?v=TTMx-O6CS5w).

**Session 6 February 2nd, 2021, (8:30-12:00) : Israel's Energy Security - Challenges and Opportunities**

In the last session we will deal with Israel and how its energy needs affect its foreign policy and national security. We will delve into the issue of oil imports and future challenges, as well as its ability to use natural gas exports as a tool to advance its goals in the eastern Mediterranean (and the interest this generates with foreign powers in the region). Finally, we will deal with the issue of nuclear energy, barriers to its entry into Israel, and the challenges it brings to the Middle East.

**Guest Lecture**: Merav Zafary-Odiz, Chief Instructor of the INDC and former Israeli Ambassador to the International Atomic Energy Agency (IAEA) and the Comprehensive Nuclear Test Ban Treaty (CTBT).

Mandatory reading: Shaffer, B. (2011) "Israel—New natural gas producer in the Mediterranean." Energy Policy 39, no. 9: 5379-5387.

Reading for enrichment: Gershon Grossman and Tal Goldrath (2011). [Nuclear power station in Israel](https://www.neaman.org.il/Files/energy%20forum%2022%20abstract.pdf). Summary and recommendations of the Energy Forum at the Samuel Neaman Institute.

Rubinovitz, Z. and E. Rettig (2018). "Crude peace: The role of oil trade in the Israeli-Egyptian peace negotiations." *International Studies Quarterly* 62, no. 2: 371-382.

For fans of the HBO "Chernobyl" series: Sobotka, Lee and Suzanne Loui (2019) “[The cost of lies: A technical analysis of HBO's Chernobyl](https://chemistry.wustl.edu/news/cost-lies-technical-analysis-hbos-chernobyl?hash=lOiNn9jYdm6uu2MORQVSbuJKkIWggOAqpFGKhclsXEg)”. Department of Chemistry, Washington University in St Louis.