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OPEC CONFERENCE 2024
BACKGROUND GUIDE
TRITONMUN XXVII – APRIL 27-28TH, 2024

MODEL UNITED NATIONS AT UNIVERSITY OF CALIFORNIA, SAN DIEGO

BACKGROUND GUIDE TABLE OF CONTENTS

Head Chair Letter.....	2
Vice Chair Letter.....	3
Position Paper Guidelines.....	4
Navigating the Future of Petroleum and Global Energy	5
Background.....	5
OPEC.....	7
Oil Market.....	9
Oil Spills.....	11
Climate Change.....	12
Alternative Energy Sources.....	14
Questions to Consider	17
Rules of Procedure & Tech Policy	19
Works Cited.....	20

HEAD CHAIR LETTER

Dear Delegates,

Welcome to the Organization of the Petroleum Exporting Countries (OPEC)! My name is Tahrir Salam and I'll be your Chair. I'm a 2nd year student here at the University of California, San Diego, majoring in Neurobiology. While my major seems uncharacteristic in the sea of political science and economics majors that normally make up MUN, I do it because I've been actively doing MUN since my sophomore year of high school and it allows me to continue debating, which I also did in high school as part of Forensics (which I don't like the college level club here enough to do). This is my second year as part of UCSD MUN and continuing it at the college level has been an enjoyable experience. In terms of my own interests outside of MUN, I like going to the gym, watching and playing basketball, reading light novels/manga, spending time with the friends I've made through MUN, and listening to my currently 743 song long playlist.

When approaching this topic, I want you all to approach this topic from the perspective of your country. While the background guide tries to present an unbiased understanding of the oil market and OPEC, I want you all to also take into consideration why your country has been doing what it has been doing and how to ensure your plans do not put your country in jeopardy. While there are so many facets to consider that you should all explore, I think the three most important considerations to take into account are the environmental, economic, and geopolitical considerations of your plans. I wish you the best of luck and I'm excited to see all your approaches to this committee! If you have any questions or concerns about anything related to this committee, feel free to email me at tasalam@ucsd.edu or David Majeed, whose email can be found in his intro as well.

Best Wishes,

Tahrir Salam

VICE CHAIR LETTER

Welcome Delegates,

I am excited to welcome you to our committee on the Organization of Petroleum Exporting Countries (OPEC). My name is David Majeed and I am going to be vice-chairing this committee. I am a first year here at UCSD, majoring in Public Health with a Concentration in Medicine Sciences, minoring in Middle Eastern Studies and Biological Sciences, and I am a pre-med. I did Model United Nations during my senior year of high school and decided to continue it in college. I fell in love with the debate and the overall atmosphere of the committee. Outside of Model United Nations, I enjoy playing tennis, video games, and hanging out with friends. Since moving here to San Diego, I have always loved going downtown and exploring the city, as each district offers something new to see and enjoy. My favorite, and I recommend visiting the international houses in Balboa Park if you guys have any free time as they have mini exhibitions from countries around the world in addition to a house for the United Nations itself. Afterward, the Gaslamp district and Little Italy both have great restaurants for dinner.

My Chair Tahrir and I have worked hard together to create a topic encompassing multiple facets of not only oil but your nation's economies and geopolitics. Especially as the future of fossil fuels and oil is looking uncertain, it will be up to you guys to steer your countries and OPEC through these turbulent times.

I hope you enjoy our committee,

David Majeed

dmajeed@ucsd.edu

POSITION PAPER GUIDELINES

TRITONMUN POSITION PAPER GUIDELINES

- Position Papers are due on **April 19, 2024 at 11:59pm.**
 - Requests for extensions must be sent by the advisor to TritonMUN by **April 12, 2024.**
- Position Papers must be submitted to the **Google Form** linked here:
 - <https://forms.gle/bzSEUjkKgCKyKm1y5>
- Format
 - For committees with one topic there should be two pages for the topic with an additional page for citations, for a total of 3 pages.
 - Papers should be single-spaced in Times New Roman 12 pt. font and include no pictures.
 - At the top of each paper, include your country/person, name, committee, and topic.
 - Required* Sections: Each of these sections should be clearly labeled
 - Background
 - Past Actions by the Committee (if applicable)
 - Position of your Country/Person
 - Possible Solutions

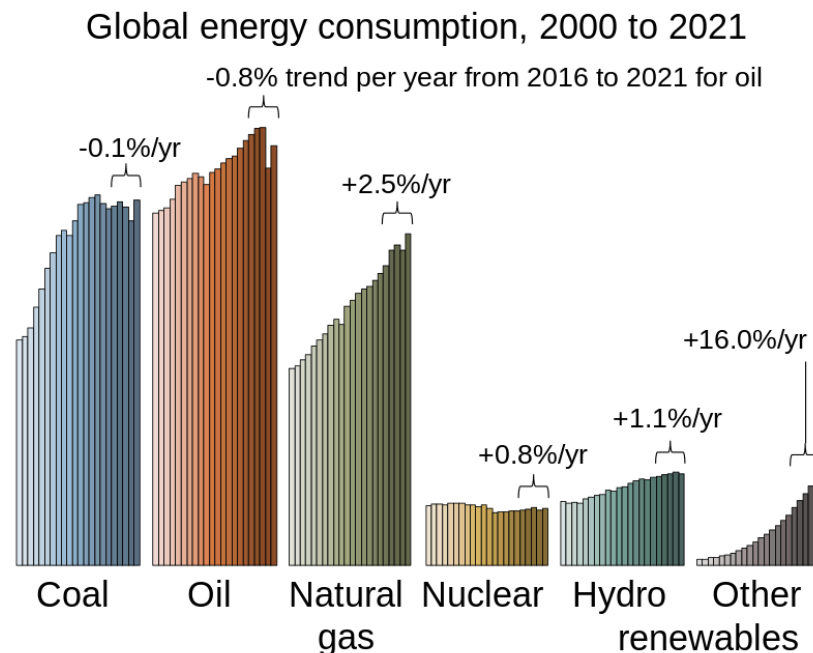
*Some committees may ask for different formatting or an alternative to a position paper altogether, this will be clearly noted in the background guide for that committee

FUELING PROSPERITY: OPEC CONFERENCE 2024

NAVIGATING THE FUTURE OF PETROLEUM AND GLOBAL ENERGY

Background

Petroleum(oil) is one of the three major types of fossil fuels and is the most consumed energy source in the world, providing 31.2% of the world's energy. Despite being the biggest contributor to global energy, the oil market is facing an uncertain future with fluctuating oil prices and the development of alternative energy sources. The Organization of Petroleum Exporting Countries(OPEC) was created to address these problems and more to control the oil market. While OPEC does not include all major oil-producing countries such as the US and China, OPEC still maintains considerable power in the market. OPEC+ was created in 2016, consisting of all OPEC members in addition to other oil producing countries with the purpose of bringing stability and maintaining control of the global petroleum market. OPEC+ currently holds 90% of the world's oil reserves.



The global oil market and OPEC+'s control over it faces a few major uncertainties and challenges in its near future. One major challenge is the price volatility. Oil spills create

uncertainty in short-term oil supply, causing prices to increase after major oil spills. Extreme geopolitical conflicts can decrease demand for oil, thus decreasing the price of oil. Since the demand for oil has low elasticity and the supply is also fairly inelastic, even small disruptions can cause major price changes. One of OPEC+'s goals is to manage its oil supply to try to minimize the volatility, but high volatility still exists in the global oil industry.

Another hurdle for the oil market is oil's effects on the environment. With increased research and awareness regarding fossil fuels and their effects on the environment, nations are being pressured to decrease their reliance on oil and other fossil fuels. India, for example, is on track to achieve at least 40% of installed power capacity from non-fossil fuels by 2030. China announced ambitions of reaching carbon neutrality by 2060. With nations' desires to decrease reliance on fossil fuels lies an additional problem— alternative energy sources. Nations have been steadily increasing development and implementation of clean and renewable energy sources as they try to shift away from oil and other fossil fuels. Following conflict in Ukraine, nations in Europe recognized the instability of oil and ramped up production of alternative energy sources. OPEC+ needs to find a way to address the issues of climate change and alternative energy sources in a way that does not damage its members' economies or geopolitical standings.

With so many problems on the horizon, members of OPEC+ will need to balance economic, environmental, and geopolitical challenges to maximize OPEC+'s interests and their own. While it may be in the world's interest to prioritize major existential threats such as climate change, many OPEC+ members do heavily rely on their oil production and may not be ready to cease oil production.



OPEC


OPEC stands for the Organization of Petroleum Exporting Countries, as the name suggests this body mostly revolves around petroleum, its production, and exportation. It is a cartel that tries to fix the price of oil, but like any cartel, the benefits of stable prices for consumers usually are outweighed by the increased profits for the suppliers. However, there are differing views on how effective OPEC is as a cartel as its power has waxed and waned over its history. Before OPEC the mostly American oil giants that dominated the global market of oil, nicknamed the Seven Sisters, worked together to manipulate the price of oil and control the oil productions of many future OPEC members. In response to falling oil prices in the 1960s and desires for national control of oil production away from colonial powers, the five founding members of OPEC came together in Baghdad, Iraq, to create OPEC allowing them (in their own words) to better “transition in the international economic and political landscape”. These nations were Iraq, Saudi Arabia, Venezuela, Iran, and Kuwait. First set up in Geneva and eventually moved their offices to Vienna in 1965. 1968 marked the signing of the Declaratory Statement of Petroleum Policy in Member Countries, which emphasized the sovereignty of each nation, allowing nations to have full control over their natural resources and how they decide to develop them. This however has allowed members of the group to act independently from the rest of the world and has weakened the group's absolute authority in regulating the oil market.



OPEC rose to international prominence during the 1970s due to its boycott of America and other Western countries in response to their support of Israel, leading to major economic pains and a fuel crisis for America, but it also led to a push to move away from Middle Eastern

oil and increase domestic productions in these nations¹. The embargo eventually ended but OPEC's influence over the oil market began to decline at this point as other countries began looking at alternatives to oil. In the 1980s and 1990s, due to the price of oil falling and infighting between members (Iran-Iraq from 1980-1988, and the Gulf War of 1990-1991), Saudi Arabia and many other members decided to move in protecting market share rather than just the price of oil. Since then, OPEC has tried to work together with non-OPEC member countries to create an oil future. This has led to the creation of OPEC +, in addition to the organization naturally expanding and losing members over time (the current OPEC list consists of Saudi Arabia, Iraq, United Arab Emirates, Kuwait, Iran, Angola, Nigeria, Algeria, Libya, Venezuela, Congo, Gabon, and Equatorial Guinea), the organization has worked with other countries making the current 10 countries in OPEC+ (Russia, Mexico, Kazakhstan, Oman, Azerbaijan, Malaysia, Bahrain, South Sudan, Brunei, and Sudan).

¹ We would like to remind delegates that discussion of current events happening around the world and the Middle East are prohibited to respect every delegate attending



Oil Market

Oil, like any commodity, is bought by consumers and sold by suppliers. For most ordinary people, they aren't buying raw oil, it must first go through a complex refining process that determines what it can be used for. Oil is of course used to create fuel for things such as cars, airplanes, and power plants. However, it is also used in the manufacture of cosmetics, plastics, chemicals, and many other household items. Over 97,103,871 barrels of oil are used every day globally, with an estimated 47 years of oil left at current consumption levels with about 1,380,000,000,000 barrels left. The price of oil as you know is mostly determined by buyers, sellers, and speculators who operate in markets.



OPEC controlled roughly 40% of global oil production in 2022, OPEC and OPEC+ combined made up over 59% of the oil market. However, OPEC's largest single-country competitor in oil production is the United States of America as it produces roughly 20 million barrels a day, or about 21% of the global supply in 2022. However, the largest consumer of Oil is the United States itself, followed by China and then India as shown in this chart from the EIA.

Country	Million barrels per day	Share of world total
United States	19.89	20%
China	15.27	16%
India	4.68	5%
Russia	3.67	4%
Japan	3.41	4%
Saudi Arabia	3.35	3%
Brazil	2.89	3%

South Korea	2.56	3%
Canada	2.26	2%
Germany	2.23	2%
Total top 10	60.20	62%
World total	97.26	

As a result of the change in oil attitudes by Western countries, a majority of OPEC and Middle Eastern oil is headed towards Asian markets and consumers, over 70%. As a result, there are now chokepoints on global trade and oil such as the Strait of Hormuz, Bab el-Mandeb, and the Strait of Malacca. The Strait of Hormuz is nestled between the United Arab Emirates, the Sultanate of Oman, and the Islamic Republic of Iran, being in the Middle East makes the location of this strait very risky, as it is responsible for over 30% of global oil. Bab el-Mandeb between Yemen, Djibouti, and Eteria also are vital to oil and global trade, being next to politically unstable countries has led to a rise of piracy in the area that can cause major disruptions. The Strait of Malacca is also a contentious site, once also had a piracy problem, but now is responsible for seeing over 30% of the world's oil, and is the energy lifelines of countries such as China and Japan, Japan importing over 80% of their oil through this one strait.

Another source of contention is the Russian war in Ukraine and the resulting sanctions that affected the entire oil market. Much of the G7 and EU placed a price limit on Russian oil in order to prevent a drastic fall in production while still aiming to hurt the Russian economy. This has affected Russia, however, the sudden increase in price made up for some of the decrease in volume, even then, they found new buyers in Turkey, China, and anyone else willing to buy. It did create a shock in the market, leading to much economic pain for Western countries, but it did revitalize efforts to create alternatives to Russian oil and even oil as a whole for more green energy. Furthermore, there have been mechanisms employed by the Russian government to get passed these restrictions such as selling to third parties.

Additionally, there is speculation about the longevity of oil. Some analysts believe that we are soon hitting 'peak oil', a point where we hit maximum production of oil and then solely

decline after that. Others argue we will hit ‘peak demand’ before we hit ‘peak oil’ due to pushes for more green energy and move past oil. However, we may have avoided peak oil for now due to new technologies such as shale and fracking. We will continue to need oil for the production of petrochemicals such as plastics and other such materials that will also be vital for the production of green energy. However, some oil companies and analysts argue that we will never reach pre-pandemic levels of demand.

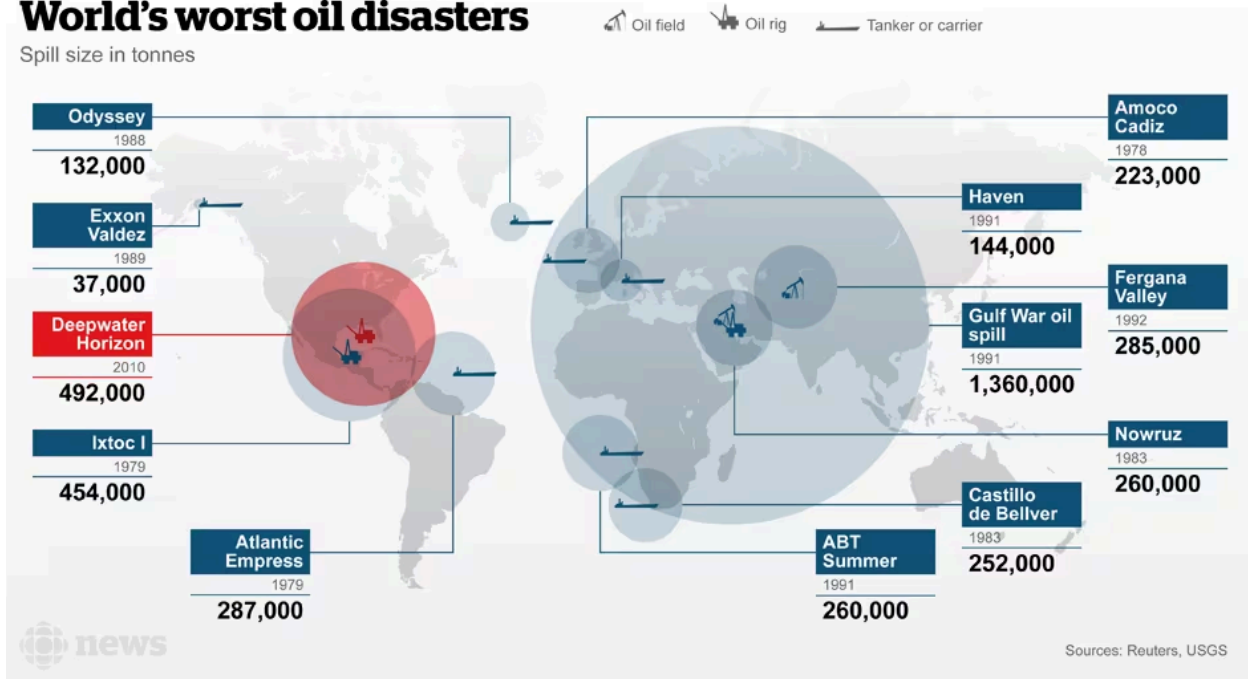
A side note to be aware of, during the 1970s, there was the creation of the ‘petrodollar’, instead of tying the United States dollar to gold, the Nixon administration made deals with Saudi Arabia to force the trade of oil in solely dollars, leading to the adoption of this practice to many other oil-producing nations. As a result, most oil is tied to dollars, but there are pushes to move past this.

Oil Spills

The largest public outcries against oil come whenever there are spills. They cause massive ecological damage to the surrounding wildlife that may take years to recover from. Although oil is naturally occurring, large amounts of it being suddenly released into the environment causes damage to the plants and animals of the area. Smaller leaks can happen and are still able to affect sensitive environments. Oil damages its chemical properties in addition to its toxicity which can prove deadly to many members of the environment. Major spills can happen anywhere there is oil involved, from drilling, transporting, or refining. Clean-up usually requires the help and organization of governments or other such agencies. The largest oil spill was during the Gulf War when over 8 million barrels were dumped into the Persian Gulf, the first-ever oil spill happened in the 1800s when oil first started getting drilled.

World's worst oil disasters

Spill size in tonnes

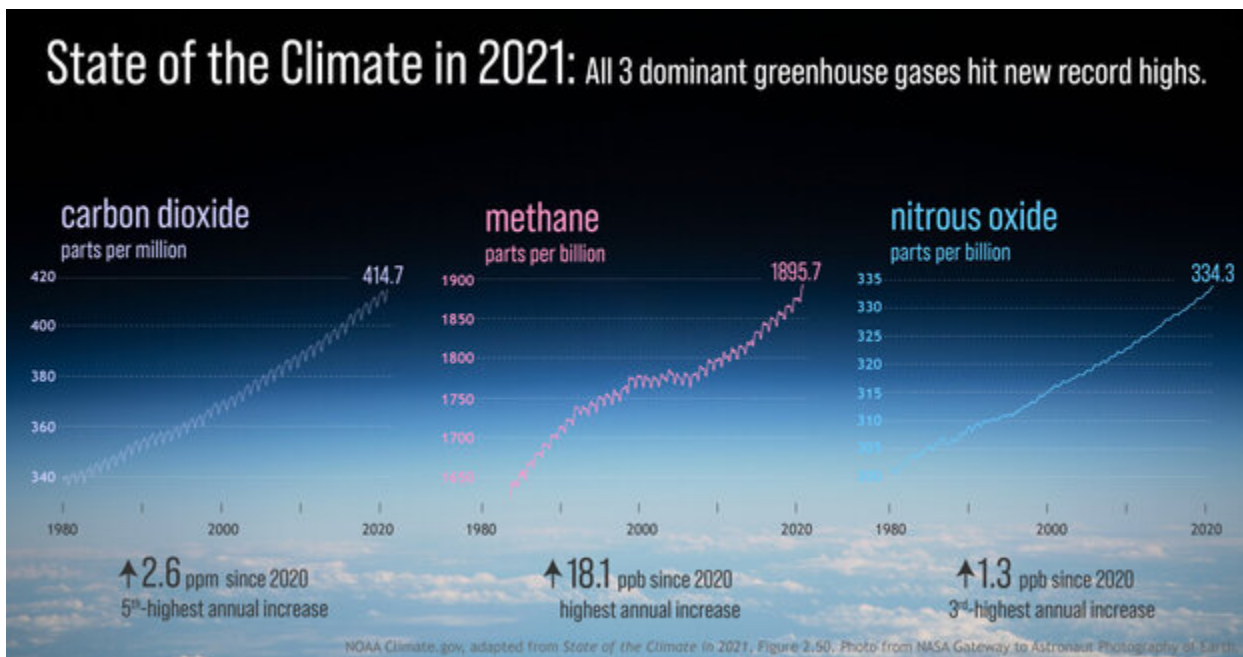


Climate Change

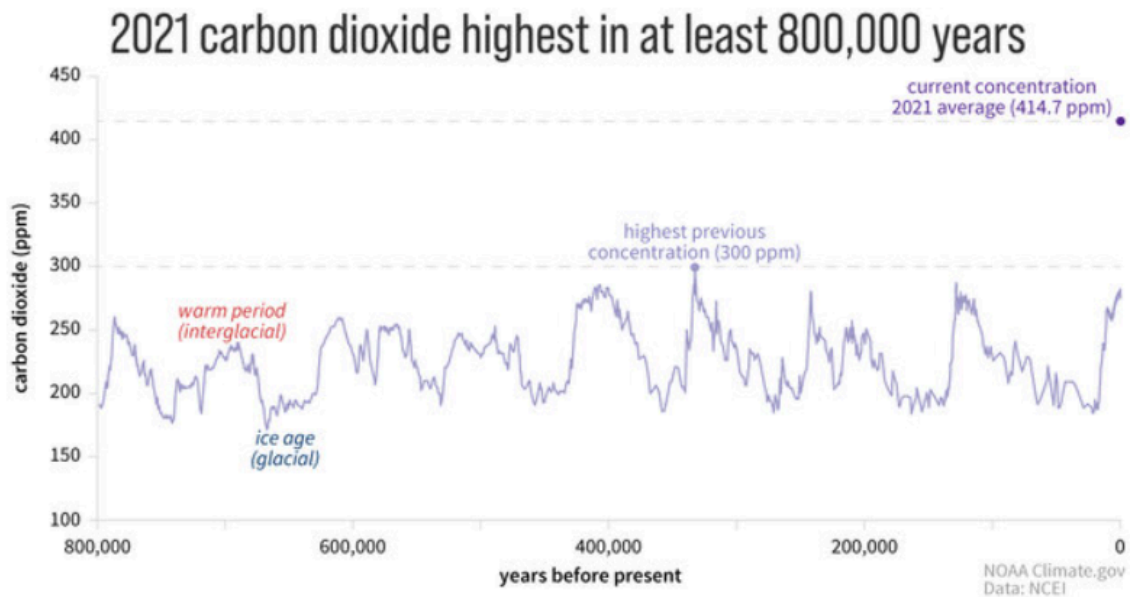


When petroleum and petroleum products are burned, carbon dioxide(CO_2), methane(CH_4), and nitrous oxide(N_2O) are emitted and released into the atmosphere. These

gasses are examples of greenhouse gasses. Greenhouse gasses block some heat from the sun and trap some of the heat that gets through the atmosphere. This leads to warmer overall temperatures, especially during nighttime when there is no heat coming externally. Greenhouse gasses are necessary for a hospitable climate as the Earth would be too cold without them. Without the greenhouse effect, the average temperature on Earth would drop from 57°F to as low as -0.4°F. The problem lies when there are too many greenhouse gasses in the atmosphere. Too many greenhouse gasses in the atmosphere lead to the Earth warming to an uninhabitable state.



Fossil fuels are by far the largest contributor to greenhouse gasses, accounting for over 75% of total global greenhouse gas emissions and over 90% of carbon dioxide emissions. Oil accounts for approximately a third of global carbon emissions. Global atmospheric carbon dioxide has reached historic highs as a result of human contribution and has risen to highs over 50% greater than the greatest previous peak. Despite this, oil consumption is still only growing.



As a result of the accumulation of greenhouse gases in the atmosphere, the Earth is turning less habitable. Since the 1980s, each decade has been increasing in average global temperatures and the ocean's increased temperature has caused rising sea levels, threatening coastal and island communities. Today, climate change is directly contributing to numerous humanitarian crises such as heatwaves, wildfires, floods, storms, and hurricanes; each is increasing in scale, frequency, and intensity. WHO predicts an estimated 250,000 additional deaths per year from 2030 to 2050 caused by climate change. The countries affected most and least able to prepare and respond are those still developing and with weak infrastructure.

Alternative Energy Sources

Nations have not been completely blind to the growing presence of climate change and have been working on the development of alternative energy sources that are cleaner and emit less greenhouse gases into the atmosphere. Many of the alternative energy sources are renewable. While there is a finite amount of oil left to mine and use, renewable energy sources harness energy from nature such as wind and sunlight to generate electricity. Generally,

renewable energy sources have high up front costs to create the infrastructure to harness the energy, but low costs for the continual generation of electricity and maintenance.

Hydropower is currently the largest source of renewable energy in the world; it harnesses the energy of water moving from higher to lower elevations. A clean energy source, hydropower is flexible and can provide power to the grid immediately, serving as an effective backup during outages or disruptions. Additionally, hydropower dams can help with flood control, irrigation support, and water supply. However, hydropower does not come without its faults; dams can damage ecosystems, negatively affect fish migration patterns, and actually worsen the risk of floods.

Wind energy is the second largest source of renewable energy in the world; it harnesses the power of wind to spin heavy turbines that generate electricity. While not as reliable as hydropower due to the variability of wind, wind energy has proven to be a major contributor to the movement towards renewable energy. Wind energy is very location-specific and certain areas with stronger winds favor wind energy more than areas with less wind. Offshore wind turbines are proving to be better than onshore wind turbines and offer much greater potential. Wind turbines can also be damaging to ecosystems though, often disrupting bird migration patterns. Offshore wind turbines also affect fish and their migration patterns.



Solar energy is the most abundantly available energy source and the third largest source of renewable energy. Solar panels take in sunlight and convert it into electrical energy either

using photovoltaic panels or through mirrors that concentrate solar radiation. Despite being known for expensive upfront costs, the cost of manufacturing solar panels has plummeted in recent years, making it one of the cheapest forms of electricity for certain communities. The environmental costs of making solar panels can be quite hefty though. The process for mining for the minerals needed to create solar panels creates greenhouse gas emissions and many of the major facilities that create solar panels rely heavily on fossil fuels. It is important to note that emissions from solar panels are still significantly lower than using fossil fuels for energy.

Nuclear energy is another notable clean energy source. While it is not a renewable energy source, it is a major alternative to fossil fuels due to its efficiency and reliability. Nuclear energy does also have high upfront costs, but is cheap to fuel and run. Despite being a promising source of energy as an alternative to fossil fuels, the use of nuclear energy globally is limited due to various stigmas such as uranium being used for nuclear energy and nuclear weapons and fears regarding nuclear waste. While nuclear waste can be a problem if mishandled, it is always handled responsibly and there are not many major complications regarding nuclear energy. Nuclear energy has the lowest mortality rate of all energy sectors. The upfront costs are very sizable though with nuclear energy, making the increase in production difficult.

FUELING PROSPERITY: OPEC CONFERENCE 2024

QUESTIONS TO CONSIDER

1. How can OPEC member states balance their economic reliance on oil revenues with the global shift towards renewable energy?
 2. What strategies can be employed to stabilize oil markets in the face of fluctuating global demand and prices?
 3. What role should OPEC play in addressing climate change, considering its members are major producers of fossil fuels?
 4. How can OPEC member countries contribute to global efforts to reduce greenhouse gas emissions while maintaining their economic stability?
 5. What are the potential impacts of large-scale adoption of renewable energy sources on the global oil industry?
 6. How can OPEC member states diversify their energy portfolios to include renewable and alternative energy sources?
 7. How can technological advancements in oil extraction and refining make the industry more sustainable and environmentally friendly?
 8. What role do emerging technologies play in shaping the future of global energy markets?
 9. How should OPEC member states address the social and ethical implications of oil production, including worker rights, community impacts, and human rights issues?
 10. What measures can be taken to ensure a just transition for communities and workers heavily dependent on the oil industry?
 11. How can OPEC adapt to unforeseen global events like pandemics, natural disasters, or geopolitical conflicts that significantly impact oil demand and supply?
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12. What lessons have been learned from past crises, such as the COVID-19 pandemic, and how can these lessons inform future strategies?
 13. What are the plausible future scenarios for the global energy landscape, and how should OPEC position itself in these scenarios?
 14. How can OPEC member states prepare for a future where oil may no longer be the dominant energy source?
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RULES OF PROCEDURE & TECH POLICY

Rules of Procedure

- Directive cycle with updates.
 - Directives and Joint Personal Directives are allowed.
 - A Maximum of 4 Directives per cycle
- Nations may be allowed to be apart of up to 1 Joint Personal Directive per cycle
- Tentative cycle duration of 45 minutes
- No personal arcs/notebooks

Tech Policy

No electronic devices are allowed during committee sessions. If you have any questions or require any accommodations, please message the chair.

WORKS CITED

“Arab Oil Embargo.” Encyclopædia Britannica, Encyclopædia Britannica, inc., 29 Dec.

2023, www.britannica.com/event/Arab-oil-embargo.

“Brief History.” OPEC,

www.opec.org/opec_web/en/about_us/24.htm#:~:text=The%20Organization%20of%20the%20Petroleum,Kuwait%2C%20Saudi%20Arabia%20and%20Venezuela. Accessed 22 Jan. 2024.

“Frequently Asked Questions (Faqs) - U.S. Energy Information Administration (EIA).”

Frequently Asked Questions (FAQs) - U.S. Energy Information Administration (EIA), www.eia.gov/tools/faqs/faq.php?id=709&t=6. Accessed 22 Jan. 2024.

Kosakowski, Paul. “What Determines Oil Prices?” Investopedia, Investopedia,

www.investopedia.com/articles/economics/08/determining-oil-prices.asp#:~:text=Like%20most%20commodities%2C%20the%20fundamental,production%20or%20consumption%20of%20oil. Accessed 22 Jan. 2024.

“Map | 12 of the Worst Oil Spills | CBC News.” CBCnews, CBC/Radio Canada, 17 Apr. 2015,

www.cbc.ca/news/multimedia/map-12-of-the-worst-oil-spills-1.3037952.

Oil Spills | National Oceanic and Atmospheric Administration,

www.noaa.gov/education/resource-collections/ocean-coasts/oil-spills. Accessed 23 Jan. 2024.

“OPEC.” Encyclopædia Britannica, Encyclopædia Britannica, inc., 22 Jan. 2024,

www.britannica.com/topic/OPEC.

“Research Guides: Oil and Gas Industry: A Research Guide: Organizations and Cartels.”

Organizations and Cartels - Oil and Gas Industry: A Research Guide - Research Guides at Library of Congress, guides.loc.gov/oil-and-gas-industry/organizations#:~:text=Historically%2C%20cartels%20have%20existed%20in,railroad%20transportation%2C%20and%20vitamin%20industri

es.&text=In%20the%20oil%20and%20gas,an%20example%20of%20a%20cartel.
 Accessed 22 Jan. 2024.

Thompson, Andrea. "FAQ: The Science and History of Oil Spills." LiveScience, Purch, 23 Apr. 2010,
www.livescience.com/9885-faq-science-history-oil-spills.html#:~:text=In%201859%2C%20the%20first%20U.S.,was%20transported%20from%20this%20well.

Tony, Team. "What Is the Petrodollar?" Tonyrobbins.Com, 12 Oct. 2021,
www.tonyrobbins.com/wealth-lifestyle/what-is-the-petrodollar/#:~:text=In%201973%2C%20the%20petrodollar%20system,would%20have%20to%20use%20dollars.

"What Is OPEC+ and How Is It Different from OPEC? - U.S. Energy Information Administration (EIA)." What Is OPEC+ and How Is It Different from OPEC? - U.S. Energy Information Administration (EIA),
www.eia.gov/todayinenergy/detail.php?id=56420. Accessed 22 Jan. 2024.

Why Calls for Oil Embargo on Israel Are Unlikely to Go Anywhere,
www.reuters.com/business/energy/why-calls-oil-embargo-israel-are-unlikely-go-anywhere-2023-11-21/. Accessed 23 Jan. 2024.

Young, Ian. "Crude Oil Crush Continues as Short Oil Etf REAP Benefits." ETF Trends, ETF Trends, 13 Apr. 2020,
www.etftrends.com/thematic-investing-channel/crude-oil-crush-continues-as-short-oil-etf-s-reap-benefits/.

"Safety in the Straits of Malacca and Singapore." The Nippon Foundation, 2 Aug. 2019,
www.nippon-foundation.or.jp/en/what/projects/safe_passage#:~:text=Almost%20half%20of%20all%20global,imports%20transported%20through%20the%20Straits.

Babina, Tania, et al. "Assessing the Impact of International Sanctions on Russian Oil Exports." CEPR, 20 Apr. 2023,
cepr.org/voxeu/columns/assessing-impact-international-sanctions-russian-oil-exports.

Gavin, Gabriel. "Russian Oil Finds 'wide Open' Back Door to Europe, Critics Say." POLITICO, POLITICO, 22 Mar. 2023,

www.politico.eu/article/russia-oil-vladimir-putin-ukraine-war-wide-open-back-door-to-europe-critics-say/.

Timperley, Jocelyn. “Is the Decline of Oil in Sight?” BBC News, BBC, 4 Dec. 2023, www.bbc.com/future/article/20230726-an-experts-guide-to-peak-oil-and-what-it-really-means.

ABC News, ABC News Network, abcnews.go.com/International/effects-climate-change-worsening-part-us-report/story?id=104830681. Accessed 26 Jan. 2024.

“Causes and Effects of Climate Change.” United Nations, United Nations, www.un.org/en/climatechange/science/causes-effects-climate-change#:~:text=Fossil%20fuels%20%E2%80%93%20coal%2C%20oil%20and,they%20trap%20the%20sun’s%20heat. Accessed 26 Jan. 2024.

“Climate Change.” World Health Organization, World Health Organization, www.who.int/news-room/fact-sheets/detail/climate-change-and-health. Accessed 26 Jan. 2024.

Contributor Prableen Bajpai. “What Is OPEC+? An Overview of Key Members.” Nasdaq, www.nasdaq.com/articles/what-is-opec-an-overview-of-key-members. Accessed 26 Jan. 2024.

The Death of the Joint Venture Exemption in Oil and Gas ..., digitalcommons.law.ou.edu/cgi/viewcontent.cgi?article=1137&context=onej. Accessed 27 Jan. 2024.

“Environmental Impacts of Wind Power.” Union of Concerned Scientists, www.ucsusa.org/resources/environmental-impacts-wind-power. Accessed 26 Jan. 2024.

EPA, Environmental Protection Agency, www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions#:~:text=Combustion%20of%20natural%20gas%20and,commercial%20sector%20in%202021. Accessed 26 Jan. 2024.

- Full Report – Statistical Review of World Energy 2021,
www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2021-full-report.pdf. Accessed 27 Jan. 2024.
- “The Greenhouse Effect and Our Planet.” Education,
education.nationalgeographic.org/resource/greenhouse-effect-our-planet/. Accessed 26 Jan. 2024.
- Hayes, Adam. “Organization of the Petroleum Exporting Countries (OPEC).” Investopedia,
Investopedia, www.investopedia.com/terms/o/opec.asp. Accessed 26 Jan. 2024.
- “Hydropower Basics.” Energy.Gov,
www.energy.gov/eere/water/hydropower-basics#:~:text=Hydropower%2C%20or%20hydroelectric%20power%2C%20is,of%20total%20U.S.%20electricity%20generation.
Accessed 26 Jan. 2024.
- Iea. “Renewable Power’s Growth Is Being Turbocharged as Countries Seek to Strengthen Energy Security - News.” IEA, 1 Dec. 2022,
www.iea.org/news/renewable-power-s-growth-is-being-turbocharged-as-countries-seek-to-strengthen-energy-security.
- Jackson, R B, et al. “IOPscience.” Environmental Research Letters, IOP Publishing, 7 Mar. 2022, iopscience.iop.org/article/10.1088/1748-9326/ac55b6/meta.
- Jaiswal, Anjali. “2020 Road from Paris: Climate Ambition Is Not Canceled.” Be a Force for the Future, 24 Sept. 2020,
www.nrdc.org/bio/anjali-jaiswal/2020-road-paris-climate-ambition-not-canceled.
- NOAA National Centers for Environmental Information. “International Report on 2021 Climate: Record-High Greenhouse Gases, Ocean Heat, and Sea Level.” NOAA Climate.Gov,
www.climate.gov/news-features/understanding-climate/international-report-2021-climate-record-high-greenhouse-gases. Accessed 26 Jan. 2024.
- “Nuclear Energy.” Education, education.nationalgeographic.org/resource/nuclear-energy/.
Accessed 26 Jan. 2024.
-

Ritchie, Hannah, et al. “Energy Mix.” Our World in Data, 4 Jan. 2024,
ourworldindata.org/energy-mix.

Team, The Investopedia. “How Do Supply and Demand Affect the Oil Industry?” Investopedia,
 Investopedia,
www.investopedia.com/ask/answers/040915/how-does-law-supply-and-demand-affect-oil-industry.asp#:~:text=Oil%20has%20a%20low%20elasticity,initially%20set%20up%20oil%20extraction. Accessed 26 Jan. 2024.

“Three Big Uncertainties Cloud the Oil Market.” The Economist, The Economist Newspaper,
www.economist.com/finance-and-economics/three-big-uncertainties-cloud-the-oil-market/21808307?utm_medium=cpc.adword.pd&utm_source=google&ppccampaignID=17210591673&ppcadID=&utm_campaign=a.22brand_pmax&utm_content=conversion.direct-response.anonymous&gad_source=1&gclid=Cj0KCQiAwbitBhDIARIsABfFYIJKH6o97nDA8dhZXPvkysZXctj2k5gCV6oexkCsLxKQFbEfQyYLBcaAnaREALw_wcB&gclsrc=aw.ds. Accessed 26 Jan. 2024.

Weisbrod, Katelyn. “As the Harms of Hydropower Dams Become Clearer, Some Activists Ask, ‘Is It Time to Remove Them?’” Inside Climate News, 20 June 2023,
insideclimatenews.org/news/15052023/as-the-harms-of-hydropower-dams-become-clearer-some-activists-ask-is-it-time-to-remove-them/?gclid=CjwKCAiA5L2tBhBTEiwAdSxJX-8AiV77_jQtNfSYXRROa8UDZnevRCI068QyiiludT6DypWRnRr0xxoCxe4QAvD_BwE.

“What Are the Different Types of Renewable Energy?” National Grid Group,
www.nationalgrid.com/stories/energy-explained/what-are-different-types-renewable-energy. Accessed 26 Jan. 2024.

“What Is Nuclear Waste and What Do We Do with It?” What Is Nuclear Waste and What Do We Do with It? - World Nuclear Association,
world-nuclear.org/nuclear-essentials/what-is-nuclear-waste-and-what-do-we-do-with-it.aspx. Accessed 26 Jan. 2024.

“What Is Renewable Energy?” United Nations, United Nations,
www.un.org/en/climatechange/what-is-renewable-energy#:~:text=Hydropower%20current

tly%20is%20the%20largest,ecosystems%20which%20impact%20rainfall%20patterns.
Accessed 26 Jan. 2024.

“What’s the Death Toll of Nuclear vs Other Energy Sources?” Engineering.Com,
www.engineering.com/story/whats-the-death-toll-of-nuclear-vs-other-energy-sources.
Accessed 26 Jan. 2024.

World Oil Demand next Year to Rise Faster than Expected ...,
www.reuters.com/business/energy/iea-raises-2024-oil-demand-growth-forecast-despite-economic-gloom-2023-12-14/. Accessed 27 Jan. 2024.

Zagame, Kristina. “The Environmental Impact of Solar Panels.” EcoWatch, 29 Nov. 2022,
www.ecowatch.com/solar-environmental-impacts.html.

