PacificMUN 2017

Group of 20
(G20)
Backgrounder Guide
Topic B: Divesting From Oil

PacificMUN 2017

Dare to Speak | February 24–26 2017

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Dear Delegates,

My name is Davin Liu and I am excited to be the Director of the G20 at PacificMUN 2017. I am currently a Grade 11 student at St. George's school. I have been participating in MUN since I was in Grade 8, and I have not only developed a passion for international relations and diplomacy, but also a fervent interest in global economics. Along with my chair Jerry Jiao, I look forward to seeing the high quality of debate at the conference. I hope you not only gain insights into the complex field of economics, but also develop an astute acumen in negotiations and rhetoric.

The G20's mandate is to promote discussion between developed and developing nations by tackling globally relevant financial issues. Given the G20's focus on sustainable economic development, the two topics, Currency Manipulation and Shifting to Renewable Energy Sources, were chosen because of their immediate relevance to the global economy. The two topics are both contentious and intricately detailed, and I recommend that all delegates conduct thorough research to prepare for the conference.

While these problems impact all nations, delegates are encouraged to search for solutions that benefit their own nation, while also work towards aiding the global economy in general. A comprehensive resolution cannot be attained without the cooperation of all of G20's members. It is up to you to shoulder the responsibility of creating a comprehensive solution to some of the world's most pressing problems.

By the end of the conference, I hope that delegates will have debated the economic, social, and political facets of each issue, and have developed resolutions that demonstrate a thorough understanding and discussion of the topics. Please do not hesitate to contact me if you have any questions or concerns. I look forward to meeting all of you at the conference to accompany you in solving some of the most difficult issues of our time.

Yours sincerely,
Davin Liu
Group of Twenty (G20) Director | PacificMUN 2017

The Group of 20 is an annual forum for the finance ministers and central bankers of governments to discuss international economic causes. Initiated in 1999, the G20 consists of Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Mexico, Republic of Korea, Russia, Saudi Arabia, South Africa, Turkey, the United Kingdom, the United States, and the European Union (EU)[1].

The G20's work is supported by many international organizations such as the World Bank, the IMF, the Organization for Economic Cooperation and Development (OECD), the Financial Stability Board the International Labor Organization (ILO), the World Trade Organization (WTO), and the United Nations[2]. The G20 takes policy recommendations from engagement groups such as B20, L20, and the T20.

The G20 focuses on strengthening the global economy, reforming international financial institutions, improving financial regulation, and discussing the key economic reforms that are needed in each of the member countries[3]. "Underpinning these meetings is a year-long program of meetings between senior officials and of working groups coordinating policy on specific issues."[4]

The first G20 Leader's Summit was held in 2008, where the head of governments convened to respond to the global financial crisis. The coordinated and decisive actions of the group were paramount to helping the global economy recover from the economic meltdown[5]. The G20 Leader's Summit has been held 8 times since 2008, as of the writing of this guide.

The Chinese Summit in 2016 continues the G20's focus on measures to support sustainable global economic growth, with emphasis on promoting job creation and open trade. It is vital for the G20 to work collaboratively to create decisive solutions to tackle the world's most pressing economic issues.

[1] http://www.g20.org/English/aboutg20/AboutG20/index.html
[2] http://www.international.gc.ca/g20/history-histoire.aspx
[3] http://www.b20coalition.org/about-g20.php
[4] Ibid
[5] Ibid

The oil industry, while often volatile, is currently at its lowest point since the 1990s. While there is a plethora of variables to consider, the reason for the drop simply comes down to the increasing supply and stagnating demand. The United States, which has traditionally been an oil consumer, has doubled its productions in the recent years[6]. As a result, oil-exporters such as Saudi Arabia, Algeria, and Nigeria that once found market in the United States are now being forced to compete for Asian markets[7]. At the same time, the Russians have continued to pump their oil at record levels because of the unstoppable nature of their Siberian oil infrastructure.

Even on the demand side, European markets and developing economies are lagging behind in their consumption of oil. The combination of rising supply and falling demand has caused the oil price to fall over 70% from 2014 levels, plunging into an abysmal $26 per barrel. As a result, over 250,000 workers, including half in the United States, have lost their jobs in this economic downturn[8].

Oil-exporting countries are now facing economic crises as their nation's main source of revenue has been crippled. Even the United States is facing economic troubles, as oil production in the U.S has been curbed because of its newfound unprofitable nature. States such as North Dakota have been struggling economically due to the decline of oil[9].

As a result, large oil corporations such as Chevron, British Petroleum, and Royal Dutch Shell have all announced major cuts to their payrolls. However, these large corporations have fared the oil crisis much better than many smaller oil companies, whose profits have been choked out by the intense competition.

The resolution brought forth in committee will address the short-term issue of cutting oil productions to benefit the global economy, since oil operations within exporting nations are no longer able to remain profitable with the violent fluctuations of the oil price. As the G20, our mandate is to promote sustainable economic growth, and the oil crisis hinders the international community from achieving that goal. In the long-run, the resolution should address how countries may begin to divest from oil into more renewable sources of energy, as solely relying on oil is an undiversified and non-sustainable method of growing an economy. By discussing how the international community can begin transitioning into the era of renewable energy, can we finally end our reliance on oil and the economic turmoil that it creates?

[6] http://www.nytimes.com/interactive/2016/business/energy-environment/oil-prices.html
[7] Ibid
[8] http://www.nytimes.com/2016/01/13/business/energy-environment/bp-jobs-oil-prices.html
[9] http://www.nytimes.com/2016/02/08/us/built-up-by-oil-boom-north-dakota-now-has-an-emptier-feeling.html

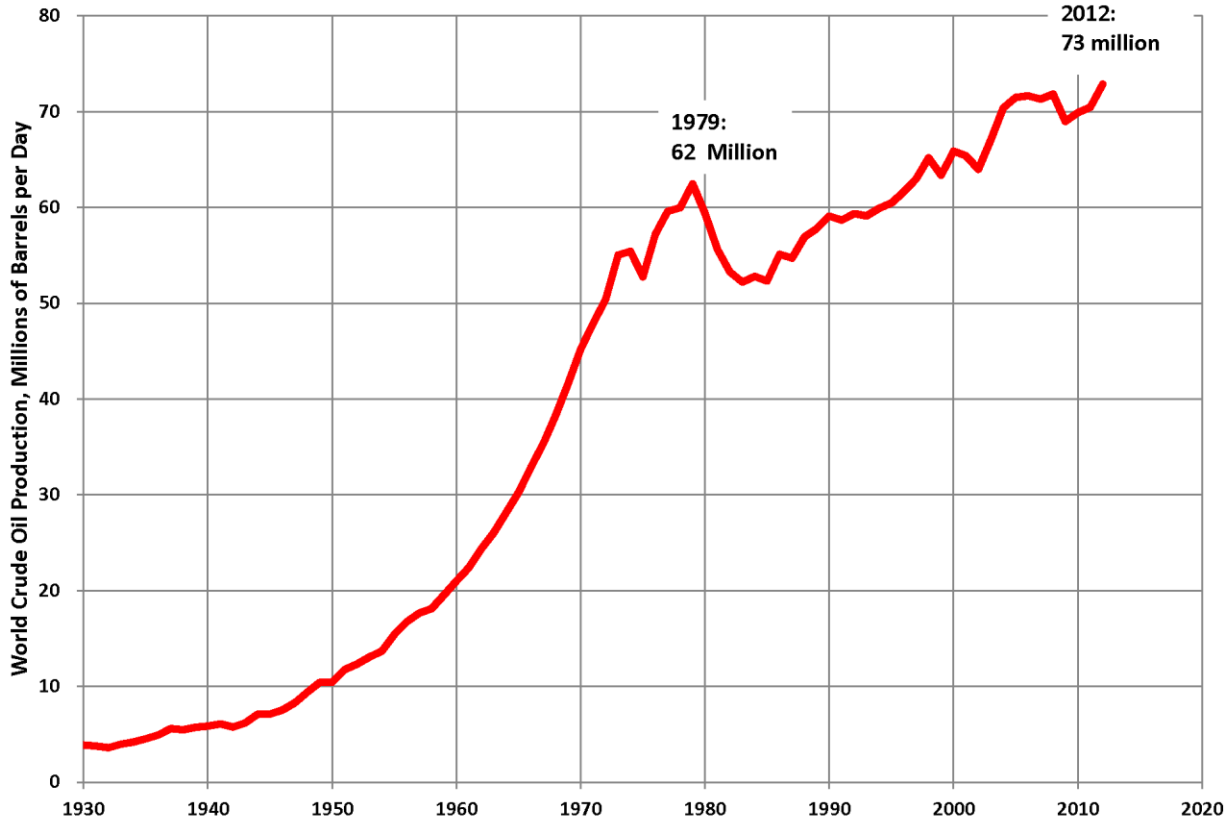
1886	Between 40 to 50 hydroelectric plants were operating in the United States and in Canada[10].
1907	Royal Dutch and Shell merge, transforming the fortunes of both companies[11]. Under the management of Henry Deterding, they became successful enterprises within twelve months
1920s	The first vertical wind turbine is invented by Frenchman George Darrieus. The design is still used today[12].
1938	Dammam No. 7, the first commercial oil well in Saudi Arabia, struck oil.
1954	Bell Labs announces the invention of the first modern silicon solar cell[13].
1956	Israel invades Egypt to gain control of the strategically important Suez Canal, which was a conduit for shipments of oil.
1957	Power was generated from a commercial nuclear plant, at California, the first time in history[14].
1960	OPEC is formed, introducing centrally planned economies to an oil market dominated by multinational corporations.
1970	The solar panel is redesigned, bring down costs from $100 to $20 per watt.
1970s	The United States government begins research into commercial wind turbines. Thirteen experimental turbines were constructed by NASA, and the research is now used by many of the multi-megawatt technologies used today[15].
1973	OPEC proclaimed an embargo against Canada, Japan, the Netherlands, United States, and the United Kingdom over American involvement in the Yom Kippur War. The embargo caused the oil price to surge to unprecedented levels.
1973	U.S. utilities ordered 41 nuclear power plants, a one-year record, seeking alternatives to lessen dependence on petroleum.
1980	The world's first wind farm of 20 turbines is built in New Hampshire. However, the scientists underestimated its power, causing its failure as the turbines break down.

[10] http://www.eia.gov/kids/energy.cfm?page=tl_hydropower
[11] http://www.ektinteractive.com/history-of-oil/
[12] https://www.theguardian.com/environment/2008/oct/17/wind-power-renewable-energy
[13] https://pureenergies.com/us/home-solar/how-solar-works/solar-energy-timeline/
[14] http://www.eia.gov/kids/energy.cfm?page=tl_nuclear
[15] Ibid

1980	The first thin-film solar panel is developed.
1984	Nuclear replaced hydropower as the second-largest source of electricity in the United States, after coal.
1991	On 23 January, Iraq dumped 400 million US gallons of crude oil into the Persian Gulf, causing the largest offshore oil spill in history at that time.
1997	The Kyoto Protocol is signed, committing state parties of the United Nations Framework Convention on Climate Change to reduce carbon emissions[16].
2002	The Global Climate Coalition, a group of corporations opposed to the Kyoto Protocol, was dissolved after a national divestment campaign by environmental activist Phil Radford[17].
2010	The Deepwater Horizon drilling rig explosion, causing an offshore oil spill which is considered the largest environmental disaster in U.S history.
2011	Hampshire College becomes the first academic institution to divest from fossil fuels.
2012	The City of Seattle commits to divest its daily operational budget from fossil fuels, the first city in the world to do so[18].
2014	Stanford University divests from coal.
2014	The Rockefeller Foundation announces divestment of its $4.2 billion assets away from fossil fuel companies[19].
2015	Oil prices plunges as U.S and Russia increase production and demand weakens in Europe.
2015	The Paris Agreement is signed, where parties to the United Nations Framework Convention on Climate Change "reached a historic agreement to combat climate change and to accelerate and intensify the actions and investments needed for a sustainable low carbon future."[20]

[16] http://unfccc.int/kyoto_protocol/items/2830.php
[17] http://www.thecrimson.com/article/2014/10/2/timeline-fossil-fuels-divestment/
[18] Ibid
[19] Ibid
[20] http://unfccc.int/paris_agreement/items/9485.php

Over the years after World War II, fossil fuels played a key role in numerous major crises. Europe experienced a coal shortage, the first modern energy crisis, immediately after the war. From the 1956 Suez Crisis to the Iraqi invasion of Kuwait in 1990, oil proved to be the most important consideration in many recent and historical wars and conflicts. This proved increasingly difficult as the United States became steadily more dependent on imported oil. The United States, throughout history and to today, consumes about two-thirds of the world's oil production[21].



Oil Production Increases In The Last Century

In the overture of the 20th century, most developed nations, predominantly the United States and the United Kingdom, were worried about their growing reliance on oil imports. The 1973 embargo on the United States and its allies led the price of crude oil to rise from $3 to $12 per barrel, quadrupling the price in one year[22]. The developed nations were hit with painful recessions and surging fuel costs, while OPEC nations were content with their newfound regional ascendancy.

The panic that OPEC created induced imminent changes to the global energy policies in the 1970s and 1980s, as developed nations sought out alternative energy sources in preparation

[21] http://www.history.com/topics/oil-industry
[22] https://www.theguardian.com/environment/2011/mar/03/1970s-oil-price-shock

for the illusory depletion of oil and gas reserves. "The effort to avoid that imaginary crisis helped the non-OPEC countries cope with a real one, leading to energy conservation and investment policies that fortuitously brought about enormous reductions in global carbon emissions."[23] The OPEC members that created the oil crisis unintentionally gave the international community a forewarning to avoid, or at least mitigate, the catastrophe of oil reliance. This supply shock caused oil-importers to begin investing in alternative energy sources such as wind energy, hydropower, solar energy, and nuclear energy.

The development of hydropower started much earlier than research on other alternative energy sources, and has served as a companion to oil in supplying power to developed nations since the 1800s. By 1860, there were already 40 to 50 dams between Canada and the United States, and the development spurred on in the beginning of the 19th century. However, the limitations of dams are that they cause geological damage, promote flooding, and are very expensive to build and therefore take a long time to make a profit. Moreover, most countries have a limited amount of rivers and lakes suitable for the construction of dams. These limitations hinder hydropower from becoming a main source of energy to power the global economy.

Nuclear power, while boasting considerable output, is a source of energy that was developed after breakthroughs in the 1940s. The continual development of nuclear power was spurred on by the 1973 embargo, as the U.S ordered the construction of 41 additional nuclear plants in that same year to curtail dependence on oil. However, nuclear energy is not always sustainable, and nuclear spills all across the world in countries such as Canada, Germany, United States, Pakistan, India, Ukraine, and Russia have caused the international community to regard this energy source with caution.

Wind energy has been a relatively new source of energy that has been under development by developed nations such as the United States and the United Kingdom. While research began in the early part of the 19th century, the trial and tribulation process dragged on through a few decades. It wasn't until the 1980s that the first wind farm was constructed, and the 2000s before it was realistic for wind farms to yield a profit.

Solar energy has been another renewable energy source that has been under development around the same rate as wind power. In 1970s, the solar panel was redesigned for the cost of production to be brought down from $100 to $20, just as the NASA begins investing into commercial turbines, which paved the way for the wind energy technology we use today. A decade later, both fields make strides as the first thin-film solar panel is developed while the world's first wind farm consisting of 20 turbines is built. The advancements in these two technologies will very well stretch into the 21st century.

[23] https://www.foreignaffairs.com/articles/north-america/2013-10-15/how-1973-oil-embargo-saved-planet

The oil price drop of 2014 serves as a vivid reminder to the international community that beyond the scarcity of oil, the turbulence of oil prices still has massive impact on the international economy. Especially for major oil-exporting countries such as members of the OPEC and Russia, the low oil prices have become a catastrophe. Citi Research estimates that OPEC members could lose $200 billion in revenue, even if prices were to stabilize at $80 a barrel[24]. On the other hand, Russia stands to lose $2 billion in oil revenue every dollar that oil price falls[25].

The slump in the oil prices is due to a multitude of factors: horizontal drilling, Libya's output, OPEC price cuts, and Russia's continual production. Horizontal drilling has allowed the U.S to increase oil productions to replace imports at an alarming rate. According to the U.S Energy Information Administration, Output surged 14 percent in the past year to 8.97 million barrels per day[26].

At the same time, Libya's production has tripled since June, producing around 900,000 barrels a day. Iraq is also continuing to pump 3.1 million barrels per day, despite being in war, while OPEC countries boosted September production to an 11-month high of around 31 million barrels a day[27]. Meanwhile, Russia produced oil at levels not seen since the fall of the Soviet Union during September, pumping an average of 10.74 million barrels a day[28].

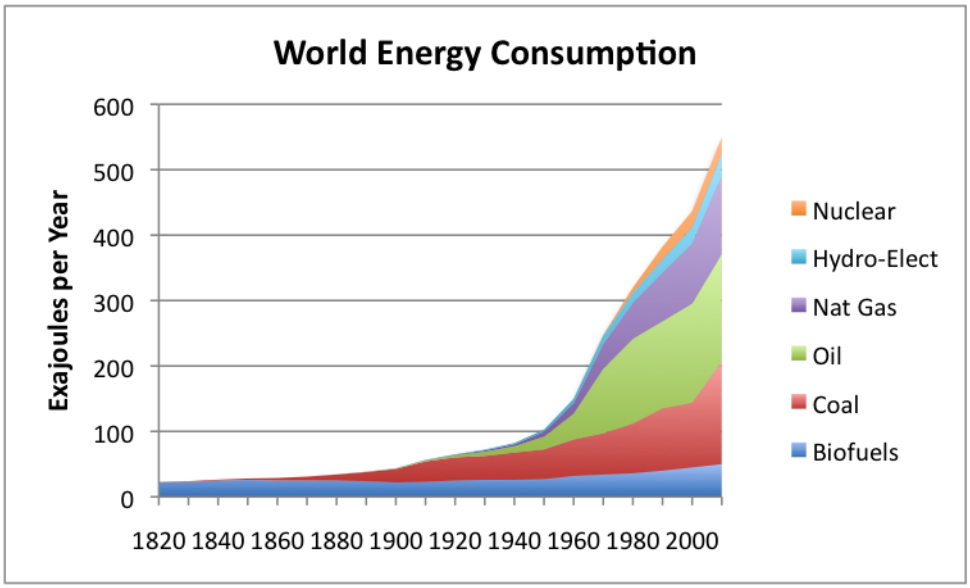
This created what many experts refer to as a price war, as both Saudi and Russia are dedicated to outcompeting the other rival despite the trimming oil prices. As Saudi Arabia tolerates lower prices to protect its market share, it is also experimenting with the level at which higher-cost U.S. shale oil production remains profitable, according to the International Energy Agency (IEA). OPEC Secretary General el-Badri recently stated that "As much as 50 percent of shale oil is uneconomic at current prices."[29]

Around 80% of the growth is fueled by fossil fuels, yet the amount of fossil fuels the global economy can produce is bound to max out by 2020[30]. To promote sustainable economic growth, the G20 should propose a resolution to curtail the world's reliance on fossil fuels and gradually transition to renewable energy.

The oil divestment movement has been trending across the globe recently, as over 2,000 individuals and 400 institutions have committed to pulling out their investments from fossil fuel companies. Together, they represent an astounding $2.6 trillion of investment. The largest divesters include the world's largest sovereign wealth fund, held in Norway, and two of the world's biggest pension funds in California[31]. The campaign, which has reached 43 countries, was

[24] http://www.atlanticcouncil.org/blogs/new-atlanticist/heres-why-saudi-arabia-has-let-oil-prices-fall-and-why-they-could-revive-by-years-end
[25] http://www.bloomberg.com/news/articles/2014-10-14/putin-loses-his-best-friend-expensive-oil
[26] http://www.bloomberg.com/news/articles/2014-10-29/why-oil-prices-went-down-so-far-so-fast
[27] Ibid
[28] http://www.wsj.com/articles/russian-oil-output-rises-to-post-soviet-high-in-september-1443777432
[29] http://www.bloomberg.com/news/articles/2014-10-29/why-oil-prices-went-down-so-far-so-fast
[30] http://www.ren21.net/Portals/0/documents/Resources/GSR/2014/GSR2014_full%20report_low%20res.pdf
[31] https://www.theguardian.com/environment/2015/sep/22/leonardo-dicaprio-joins-26tn-fossil-fuel-divestment-movement

backed by the UN's climate chief on September, 2015, who will lead negotiations for a global climate deal at Paris, which became known as the Paris Agreement.



[32]

The investment of these technologies has become a key focus in many developing and developed nations as investment in renewable energies grew up to $286 billion in 2015, which is twice the amount of investments in coal and gas[33]. United Nations Environmental Program (UNEP) Executive Director Achim Steiner recently stated "Renewables are becoming ever more central to our low-carbon lifestyles, and the record-setting investments in 2015 are further proof of this trend."[34] Out of the total investment, a staggering $156 billion came from developing countries while only $130 billion came from developed nations, which represents the first time that developing nations have topped developed nations in sustainable energy research.

However, the renewables still only represent a small minority of the world's total installed power capacity at only 16.2%, with the exception of large hydro. According to Dr. Udo Steffens, President of the Frankfurt School of Finance & Management, "despite the ambitious signals from COP 21 in Paris and the growing capacity of new installed renewable energy, there is still a long way to go."[35] Moreover, coal and oil generation stations often have an extended lifetime, which means that their productions will stretch on into the next decades or so. With the Paris Agreement echoing the positions of the international community and the collapse of oil prices, the prospect of developing sustainable energy has never become so urgent and attractive.

[32] http://extremeenergy.org/2013/07/25/defining-extreme-energy-a-process-not-a-category/
[33] http://www.unep.org/newscentre/Default.aspx?DocumentID=27068&ArticleID=36112
[34] Ibid
[35] Ibid

In 1972, the UN held the UN Science Conference, also known as the First Earth Summit, and set out principles for the conservation and preservation of the environment. Under a section of the agreement that discussed pollutants, nations were warned to be mindful of activities that could lead to climate change. Later in 1998, the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP) set up the Intergovernmental Panel on Climate Change (IPCC) to provide an objective source of scientific information[36].

One of the earliest United Nations-sponsored treaties to reduce greenhouse gasses was the Kyoto Protocol, which came through the UN Framework Convention on Climate Change (UNFCCC). It was entered into force in 2005, committing its members to binding targets. It was supposed to stabilize greenhouse emissions at a level that would not interfere with the climate system[37]. Most nations have ratified the treaty, except the United States. Since China and India did not heavily contribute to the CO2 pollution over the past century, they were not required to reduce emissions. In 2011, Canada backed out of the protocol after failing miserably to meet the targets. During the Kyoto period, (1990-2012) China and the USA, two of the largest emitters, created more than enough greenhouse gasses to reduce the positive impact made by all the other nations.

Recently, at the Investor Summit on Climate Risk held at the United Nations headquarters in 2016, Secretary General Ban Ki-moon urged investors to double their clean energy investments by 2020. This goal is intended to increase the momentum to the growing fossil fuel divestment campaign. Moreover, Christiana Figueres, the Executive Secretary of the UN Framework Convention on Climate Change, also made a powerful pitch for moving investments away from fossil fuels and towards clean energy.

While many international agreements have been done to address renewable energy, few of them look in depth at the economic issues that are created by the global changes. Also, though many of them promote reductions of greenhouse gas emission from industrialized nations, few are legally binding, and many countries are not even on close to meeting their targets in the next few years.

In 66th session of the UN General Assembly, it was concluded that "the availability of adequate, affordable and reliable energy services is essential for alleviating poverty, improving human welfare, raising living standards and ultimately for achieving sustainable development".[38] The session concluded that economic "Market mechanisms are necessary to ensure: (1) further reduction of the cost of technologies; (2) establishment of secure and stable markets; and (3) progress in the transformation of the global energy system" for the international community to transition towards a future run by renewable energy.

[36] http://www.un.org/en/globalissues/climatechange/
[37] http://www.publications.parliament.uk/pa/cm201012/cmselect/cmenvaud/1080/108004.htm
[38] http://www.un.org/esa/dsd/resources/res_pdfs/ga-66/SG%20report_Promotion_new_renewable_energy.pdf

Economic Support

Developing nations are reluctant to reduce emissions because of their belief that the wealthier nations must take more responsibility because of their advanced infrastructure. Therefore, one solution is that wealthier nations can offer financial and political help to these developing nations to encourage transitioning them away from fossil fuels and towards renewable resources. Another solution involves collaborating with the IMF to help nations through its Structural Adjustment Program (SAP), where the IMF provides economic support to a nation in exchange for the country to implement certain policies. Since many developing nations are eager to end their reliance on oil, this additional economic support will be able to expedite the process of oil divestment not only in developed nations, but all across the globe.

Rapid Research Into Green Energy Efficiency

G20 members can pledge to increase funding to renewable energy resources. Once steps are taken to increase the efficiency of renewable resources, they will become more widely used than fossil fuels. Through innovation and experimentation, green energy could become cheaper and more efficient than fossil fuels, expediting and ensuring the transition. This would be a lifeline to nations reliant on fossil fuels, ensuring their preparation for a future where fossil fuels become depleted.

Fiscal Policy

The implementation of a stringent carbon tax could help transition the world away from the consumption of fossil fuels by discouraging individuals and companies from having a large emission footprint. By raising the costs for fossil fuel producers, the aggregate supply will shift down, which will allow the oil prices to resurface and stabilize for the short-term. To bring the market back in equilibrium, the government can provide subsidies to corporations that undertake initiatives to develop renewable energy sources.

Oil Producers

U.S, Saudi Arabia, and Russia are the largest oil-producing nations in the world. Their economies are heavily dependent on fossil fuels, and therefore they would be against or cautious about renewable energy. While most of these nations have pledged to invest in renewables such as solar energy, they would be reluctant to place the development of renewable energy ahead of their current fossil fuel infrastructures.

Renewable Energy Leaders

Many EU countries, including Denmark, and Sweden, are world leaders in renewable energies. Denmark, powered by wind farms, is being built at a yearly growth rate of around 18%, and will soon supply energy to half of the country by 2020[39]. The EU is most likely to advocate for a more rapid transition into renewable energies, as Denmark's recent successes displays that a world ran 100% on renewable energy isn't simply a fantasy.

Transitioning Economies

While China, Japan and Germany may heavily rely their economies on importing oil, they have recently taken greater steps away from fossil fuels and towards renewable energy. This bloc is empirical evidence that transitioning away from fossil fuels is not only possible but practical, and is expected to advocate for further policies to increase the development of renewables.

1. How can the international community effectuate the Paris Agreement more effectively?
2. Can oil prices be stabilized in the short-term? How?
3. Can the price war between OPEC and Russia be stopped? How can the major oil producers all agree to production cuts in the short term?
4. To what extent can the international community end their reliance on oil?
5. At what rate should the global economy transition away from oil? When can the world finally end its reliance on oil? Can a timeline or agenda be created?
6. Developments in which renewable energy(s) should be prioritized in the efforts to replace oil?

[39] https://www.theguardian.com/environment/2015/jul/10/denmark-wind-windfarm-power-exceed-electricity-demand

7. Can major oil exporters, such as OPEC and Russia, sustainably grow their economies while ending reliance on oil? How?

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