

NATO

Background Guide



VANCOUVER YOUTH MODEL UNITED NATIONS 2021

North Atlantic Treaty Organization

Director: Harry Zhu Chair: Eric Li

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Dear delegates,

My name is Harry Zhu, and it is my utmost pleasure to serve as the North Atlantic Treaty Organization director for VYMUN 2021. This weekend, I hope to foster an intense, educational experience alongside Eric and Dani, your Chair and Assistant Director, respectively. This year, we will be exploring two distinct topics: China's Impact on NATO and Transatlantic Security and Energy Security.

Our first topic, China's Impact on NATO, is an urgent global issue. China has, both now and in the present, initiated developments worldwide to expand its powers. A key example of this would be the Belt Road Initiative. Given that NATO's fundamental goal is to safeguard the Allies' freedom and security by political and military means, the actions committed by the Chinese government should not be ignored by NATO. As the weekend develops, delegates will have to be wary of Post-Soviet states, which have developed strong relationships with the Chinese government. Other delegates should also consider that China is most likely a prominent figure in their economies, either for exports and imports. They should act in the best interest of their own countries over NATO.

Our second topic, Energy Security, is a fairly novel phenomenon to the international community. The first issue results from national grids and devices having various vulnerabilities due to sensors and connections. This problem gets further exacerbated when focusing on the transition to green energy, which heavily relies on adding even more sensors and connections through components such as a smart meter. Moreover, volatile oil markets and instability in exporting countries puts developing countries in a dangerous position. While NATO is delving into this topic, delegates will have to consider the cost and effectiveness of various preventative measures and renovations, and whether these measures are in line with NATO's political and economic incentives.

Some of you will be first-time delegates, and to those who are, I would like to welcome you with words of encouragement. Going into my third year of Model UN, I have experienced what you may be going through. The start of your MUN journey might be intimidating, but I am confident that VYMUN 2021 will be a memorable experience for all of you.

To all delegates, if you have any questions or concerns, feel free to contact me at nato@vymun.com. I look forward to seeing everyone in October.

Sincerely,

Harry Zhu

Director of NATO | VYMUN 2021

TABLE OF CONTENTS

Questions to Consider	4
Overview	4
Timeline	5
Historical Analysis	6
Past Action	8
Current Situation	9
Possible Solutions	11
Bloc Positions	13
Sources Cited	15
TOPIC B: Energy Security	
Questions to Consider	20
Overview	20
Timeline	21
Historical Analysis	23
Past Action	24
Current Situation	25
Possible Solutions	27
Bloc Positions	28
Sources Cited	29

China's Impact on NATO

Questions to Consider

- 1. What economic or diplomatic relationship does your country have that may affect its decisions relating to China?
- 2. Would it be more effective to slow down or counter China's expansionism?
- 3. What would militarization result in?
- 4. Given that many NATO members are beneficiaries of the BRI, how could NATO support the development of Western expansionism rather than Chinese expansion?
- 5. Is all information about China's BRI unbiased and accurate on Western media sources? Or is there a necessity to use diverse news sources for research?

Overview

Since its inception, Russia has long been an adversary of NATO. However, with the rapid industrialization of a relatively new country, many other concerns are rising. China's rise in influence economically and politically dismisses any chance for NATO to ignore its development. Various investments into foreign countries allow it to gain influence into different essential items within a country. This is due to China's new president, Xi Jinping, who has an ambitious vision of the future of China.

Xi Jinping entered office in 2013 and has mentioned and incorporated the BRI into many of China's policies.² The BRI, based on the ancient Silk Road, is a large-scale infrastructure project in which China is investing. Since then, the BRI has invested in more than 170 countries and international entities, with trade routes all leading back to China.³ Many of these countries connected by the policy, such as the Czech Republic, are beneficiaries of this project; however, given increased concerns from NATO and the EU regarding member states joining this project, tensions are high as affected countries decide on whether to continue with traditional alliances or begin to expand globally.⁴

Throughout the late twentieth century, the Soviet Union split apart into many different republics.⁵ Since then, many of these republics have joined NATO as member states. These countries, namely Albania, Bulgaria, Czechoslovakia, East Germany, Hungary, Poland and Romania, have also begun to ramp up their relationships with China through initiatives such as China's "16+1" comprising CEE countries and China.⁶ This initiative focuses on the development of the BRI. In line with its historical ties, China's relationship with Russia is prominent.

¹https://www.thediplomat.com/2019/03/mapping-chinas-investments-in-europe

²https://www.economist.com/china/2020/06/04/the-pandemic-is-hurting-chinas-belt-and-road-initiative

³https://www.yidaiyilu.gov.cn/info/iList.jsp?tm_id=126&cat_id=10122&info_id=77298

⁴https://natoassociation.ca/the-belt-and-road-initiative-what-does-it-mean-for-nato/

⁵https://www.nato.int/cps/en/natohq/declassified 136603.htm

⁶https://thediplomat.com/2019/03/chinas-161-is-dead-long-live-the-171/

Russia and China bonded together after communist ideologies overtook their countries. With the bonds between these power-hungry countries growing stronger by the day, NATO must conduct action before doctrines from the Eastern Bloc defeat its fundamental goal.

Although many within NATO wish to handle China as they have with Russia, the situations comparatively are entirely distinct. Although Russia is quite a powerful country, they do not have as much power over the global economy as China does. China is the EU's top importer and third largest exporter, only behind the US and UK.⁷ Thus, delegates should not be surprised if a country, due to concern over its economy, does not agree to any policies that should arise.

Timeline

130 B.C.: The Han Dynasty officially open trade with the Western world starting the Silk Road.

1453 A.D.: The Ottoman Empire captures Constantinople, gaining significant control over Silk Road trade routes. The Ottoman Empire raises trading tariffs and boycotts trading with China, effectively shutting down the Silk Road.⁸

1839-1949: The "Century of Humiliation", also known as the hundred years of national humiliation occurs. ⁹ China suffers significant internal fragmentation, loses almost all of the wars it fights and is annexed by Western colonial powers. ¹⁰

July 1st, 1921: Following the May Fourth Movement, various radical intellectuals establish the Communist Party of China—commonly referred to as the Chinese Communist Party (CCP).

April 4th, 1949: Following the end of World War II, Western European powers, along with the US and Canada, create the North Atlantic Treaty Organization to provide collective security against the USSR and communism.

December 7th, 1949: The Communists—with Soviet support—win the Chinese Civil War and establish the People's Republic of China.

June 1950: The Soviet-backed North Korean People's Army invades its pro-Western neighbour to the South, starting the first conflict between Western democracies and communist countries—in a series of battles known as the Cold War.

1988 - 1991: Growing unrest in the USSR's various constituent republics splits the former USSR into its modern Post-Soviet states.

April 26th, 2012: Leaders of the China-CEEC member states initiate their first meeting to expand cooperation between Beijing and a group of 16 other European/Balkan countries in Warsaw. 11, 12

⁷https://trade.ec.europa.eu/doclib/docs/2013/december/tradoc 151969.pdf

⁸https://www.history.com/topics/ancient-middle-east/silk-road

⁹https://onlinelibrary.wiley.com/doi/10.1111/j.1976-5118.2010.01039.x

¹⁰https://web.archive.org/web/20100323033925/http://app1.chinadaily.com.cn/star/2003/1120/cu18-1.html

¹¹http://www.china-ceec.org/eng/msc 1/dsj/t1410557.htm

¹²https://www.csis.org/analysis/will-chinas-161-format-divide-europe

November 15th, 2012: Xi Jinping is elected to the post—by the 18th Central Committee of the Communist Party of China—to be the general secretary of the Communist Party and chairman of the CCP Central Military Commission.

March 14th, 2013: The 12th National People's Congress in Beijing elects Xi Jinping as the fifth President under the 4th Constitution of the People's Republic of China.

September 7th, 2013: Xi Jinping proposes to build a Silk Road Economic Belt with Central Asian Countries at Kazakhstan's Nazarbayev University.

October 24, 2017: Xi Jinping writes the Belt and Road Initiative into the Constitution of the Communist Party of China.

June 14, 2021: NATO releases an official press release with one of its clauses detailing multifaceted threats, systemic competition from assertive and authoritarian powers that NATO may face, along with China's growing influence and international policies, and Russia's aggressive actions. ¹³

July 12, 2021: European Union foreign ministers agree to launch a global infrastructure plan linking Europe to the world titled "A Globally Connected Europe." ¹⁴

Historical Analysis

Pre-Communist China

The Silk Road was a key economic trade route between states in the Eurasian African continent. China—under the Han dynasty—was the second richest world power, behind India. ¹⁵ Through the Silk Road, various goods were traded that were desirable to all. The East brought different metals, carefully crafted delicates and specialties, along with spices while the West brought domesticated goods, multiple plants, and oil. ¹⁶

Constantinople was the capital of the Roman Empire (not to be confused with Ancient Rome) and was a key point in the Silk Road. When the Ottoman Empire captured this city in an event known as the Fall of Constantinople, it affected trade in the Eurasian continent substantially. The Ottoman Empire dissolved the Silk Road connection to China shortly after capturing key trade routes, effectively closing the 1,500 year long Silk Road. However, the idea of the Silk Road stayed and later became China's inspiration for the Belt and Road Initiative.¹⁷

Almost two millennia after the creation of the Silk Road, China has developed radically. During this time, China experienced its most humiliating defeats, known as the century of humiliation. China faced unfair treaties and was the victim of numerous other abuses. The Chinese perception of the West deteriorates from this point, and future generations of China from then on possess a negative

¹³https://www.nato.int/cps/en/natohq/news 185000.htm

¹⁴https://www.reuters.com/world/china/after-g7-pledge-eu-seeks-rival-chinas-belt-road-with-own-infrastructure-plan-2021-07-12/

¹⁵https://www.visualcapitalist.com/2000-years-economic-history-one-chart/

¹⁶https://openendedsocialstudies.org/2016/06/25/the-silk-road-international-trade-and-global-prosperity/

¹⁷https://www.fmprc.gov.cn/mfa_eng/topics_665678/xjpfwzysiesgjtfhshzzfh_665686/t1076334.shtml

image of the West.18

It is essential to also talk about China's relationship with Russia. China and Russia are allies in the present day; however, this was not the case throughout history. Russia, along with various Western powers, annexed properties and concessions from China. As China progressed into a more communist country, their relationship with the Russians, which became a communist country following the victory of the Red Army, developed significantly.¹⁹

The Developments of the West

As a relatively recently formed country, the United States of America is a pivotal member of the coalition known as NATO. Even as a relatively new sovereign nation, it has quickly made a name for itself on the world stage. Through rapid industrialization, the US was able to keep up with the immense colonial powers and the Eastern Bloc during the Second World War. Due to this strength, the US developed stronger relations with the Western Bloc and formed NATO after World War II.

Although Western Europe and Eastern Asia were definite on their positions of either communism or capitalism, the stances of the Middle East, Africa, and South America remained ambiguous due to different economic and political changes. Due to this, NATO and countries in the Western Bloc frequently use tactics to convince these countries to believe in Western ideologies. For example, in Vietnam, the US and other countries invaded to support what is known as the "domino theory." This theory believed that if Vietnam had transitioned into communism, many other countries within Southeast Asia would transition as well, significantly weakening the Western democracies.²⁰

The Cold War

The Eastern Bloc began to spread and attempt to retain more communist ideologies across the world. This resulted in a conflict known as the Cold War.²¹ Although many believe that the Cold War was a relatively peaceful conflict, this was far from the truth.²² This war was a chance to show world powers like America, China, and Russia how influential they and their ideologies were. A large number of casualties and conflicts around the world were only a part of that process.

After the war, the Soviets also helped the CCP win the Chinese Civil War and become the People's Republic of China. Although the USSR split into 15 different countries shortly after, China continued to maintain a stable and developing relationship with most of these countries.²³ Furthermore, China's bond with Russia over communism did not fade. Although both countries today are capitalist, they are both agreeable on topics such as expansionism—note that China still identifies with communism.²⁴

The People's Republic of China

Although the CCP has been around for over 100 years, the People's Republic of China (PRC) has only been a country since the Chinese Civil War.²⁵ Despite this, through economic-focusing leaders

¹⁸https://www.jstor.org/stable/42704174

¹⁹https://www.jstor.org/stable/41639036

²⁰https://www.jstor.org/stable/25163717

²¹https://www.jstor.org/stable/20039280

²²https://www.jstor.org/stable/40106852

²³Ibid.

²⁴https://www.jstor.org/stable/10.1086/671342

²⁵https://www.jstor.org/stable/2158969

like Deng Xiaoping, the PRC has seen the most extensive and most rapid growth of any country in the world.²⁶

This is most likely due to China's large population and the lack of regulation within its industries. To illustrate, manufacturing was a sector that contributed to China's rapid industrialization. With cheap goods due to expansive, low-cost labour, everyone chose China as a primary supplier. However, with concerns raised by the international community—either due to worries regarding actual human rights violations or due to the Western Bloc's fear of its rapid industrialization—Chinese factories were forced to heighten conditions of factory workers. Despite the fact that many consumers have shifted to other Asian countries for factory production, the growth domestic product (GDP) that China gained from this industrialization has not gone to waste. Instead, China has reinvested this money into various other fields. These fields are technology, education, cultural relations, and diplomacy.

Inside these four fields are two pairs. For China to increase knowledge in technology, it must first upgrade the education either within the country or for its citizens. In the past, the Western Bloc, and more specifically, the US, has denied Chinese citizens the right to education in the US.³⁰ This forces China to increase the conditions of its teaching rather than relying on other countries' education systems. However, this might not all be negative. Education within the country could also prevent brain drain: where more ideal work conditions exist outside the country, migrating talent from within a country outwards.³¹ Moreover, China has been denied technology manufactured outside of the country numerous times.³² This forces China to rely on itself to manufacture items like computer chips.

Cultural relations are a form of diplomacy and are one of the ways China is initiating the BRI.³³ Due to the immense power of countries from the Western Bloc, China will likely lag behind should they not compete. This is the cause of China's recent focus on diplomatic relations. In contrast, the Western Bloc has done business in between itself throughout history.³⁴ On the other hand, China has relied chiefly on itself and other Asian countries in the past. This is the cause of China's international outreach to groups—such as the CEEC—to gain political and economic influence globally.³⁵

Past Action

Despite the various demonstrations of expansionism and power that China has shown, NATO has not responded in meaningful ways. NATO's fundamental goal is only to safeguard the Allies' freedom and security by political and military means, a position that China has only recently began to threaten.³⁶

²⁶https://www.jstor.org/stable/654099

²⁷https://foreignpolicy.com/2020/05/19/dont-let-china-steal-your-steel-industry/

²⁸https://www.jstor.org/stable/23562835

²⁹https://www.jstor.org/stable/3181371

³⁰https://www.chinadaily.com.cn/a/202107/06/WS60e3ccbba310efa1bd660020.html

³¹https://www.jstor.org/stable/27739735

³²https://www.cnbc.com/2021/04/29/biden-100-days-china-tech-battle-sees-sanctions-remain-alliances-made.ht ml

³³https://www.jstor.org/stable/48573474

³⁴https://www.jstor.org/stable/25106226

³⁵ Ibid.

³⁶Ibid.

However, NATO is beginning to recognize that China, more than ever before, is a threat to the Western World—possibly because of its strong alliance with Russia or its rapid expansionism. During the 2019 NATO summit, Jens Stoltenberg—the Secretary-General of NATO—emphasized that China "recently displayed a lot of new modern capabilities, including long-range missiles able to reach all of Europe."³⁷ While there, Stoltenberg also noted that Russia is still a "threat to Euro-Atlantic security"³⁸ It is clear that—as Joe Biden, the US' 46th President put it—the divide between NATO and the Eastern Bloc is more than simply an economic or a military rivalry. ³⁹ However, Stoltenberg remarks that this is "about taking into account that China is coming closer to us—in the Arctic, in Africa, investing heavily in our infrastructure in Europe, in cyberspace," rather than taking action against a rival. ⁴⁰

As NATO begins to ramp up their efforts against Chinese expansionism, alongside their already distinct rivalry with Russia, many inside NATO fear that, "even more widened threat perceptions could result in slower and more incisive decision-making" The UK's leader, Boris Johnson, noted that, "I don't want this country to be unnecessarily hostile to investment from overseas." The rivalry and hostility held between NATO and Russia and China may be more of just the US. However, it has to be mentioned that Europe is also occupied with their actions against the Eastern Bloc. Even though Western Europe is not unnecessarily hostile towards China, they are not naive. For example, many European countries have mentioned previously that they do not wish to see China on the agenda of NATO—although this was approved due to the sway that immense countries held and NATO being a consensus committee—however, they are still making progress towards an economic battle against China in the EU. This can be seen in the recent mutual agreement to create "A Globally Connected Europe." Moreover, the EU frequently argue whether or not they should continue traditional trading measures or begin to branch out internationally, especially with China and its BRI.

Current Situation

Over the last four decades, China has developed rapidly in every aspect of the country, ranging from its economy to its international political influence. This is further exacerbated when acknowledging that China has challenged countries like the United States to trade wars and has increasingly spent more of its annual budget towards national security. When discussing possible remedies towards this issue, it is hard to find a solid place to start. Therefore, it is crucial to consider China's new BRI as three pillars combined into one: the Silk Road Economic Belt, the Maritime Silk Road, and the more recently established, "Digital Silk Road."

³⁷https://www.euractiv.com/section/global-europe/news/with-new-focus-on-china-nato-patches-up-stormy-summ it/

³⁸https://www.cnbc.com/2021/06/14/nato-members-unite-to-face-evolving-threats-from-russia-and-china-.html ³⁹Ibid.

⁴⁰Ibid.

⁴¹Ibid.

⁴²Ibid.

⁴³Ibid.

 $^{^{44}} https://pf.debateus.org/blog/2019/06/24/the-importance-of-the-european-union-joining-the-bri-and-growing-argument-outline-6-24-19/$

⁴⁵https://www.jstor.org/stable/23290282

⁴⁶https://www.jstor.org/stable/27008975

⁴⁷https://www.jstor.org/stable/42704692

⁴⁸https://www.nato-pa.int/document/2020-revised-draft-report-chinas-belt-and-road-initiative-strategic-and-econ omic

The Silk Road Economic Belt (Overland Exchange)

The Silk Road Economic Belt, along with the Maritime Silk Road, comprises six economic corridors throughout East Asia, Central Asia, the Middle East, Eastern Africa and Europe, areas that China wishes to establish trade relations in.⁴⁹ Within these corridors are envisioned oil pipelines, roads and railways, and various industrial securities enabled by this infrastructure.⁵⁰ China also seeks to initiate at least fifty special economic development zones: small sub-regions within a country governed by unique commercial and trading rules that collectively aim to facilitate securities and strengthen China's ties within those regions.⁵¹ These would be similar to the numerous in the Guangdong Province; however, it would allow for even more favourable conditions by China and benefit the host country.⁵² Within this infrastructure, China seeks person-to-person exchange and is adapting such infrastructures through programs such as an envisioned scholarship program whereby foreign citizens are brought to Chinese universities with grants to support said citizen's education and development.⁵³

The Maritime Silk Road (Seaborne Exchange)

The Maritime Silk Road was a conduit for trade and cultural exchange between China's south-eastern coastal areas and foreign countries.⁵⁴ Much of the planning related to the future Maritime Silk Road is similar in structure to the Silk Road Economic Belt and based on the previous route of the same name two millennia earlier. A very historical course, the Maritime Silk Road was initially comprised of just the East China Sea Silk Route and the South China Sea Silk Route, routes within Asia.⁵⁶ Using the same idea, the 21st century Maritime Silk Road will be a crucial component of China's Belt and Road Initiative, connecting China with Asia, Africa and Europe.⁵⁷

The Digital Silk Road (Digital Exchange)

The third pillar of the BRI, the Digital Silk Road, is potentially more consequential insofar as the digital world will possess a dominant role globally over the coming decades. Declared during the first BRI forum in 2017, the Digital Silk Road will include: laying undersea internet cables and delivering "advanced IT infrastructure to BRI countries," which would supposedly include "broadband networks, e-commerce hubs and smart cities." It is driven by China's Big Tech, which wishes to extend its market valuation and establish a dominant position in emerging and more developed markets for further development and growth. Through this pillar, China seeks to construct telecommunications networks and smart cities, e-commerce, nano-technology, quantum computing and a comprehensive multi-functional satellite system. China's "Made in China 2025" hopes to set Chinese leadership in global tech fields while its "China Standards 2035" initiative demonstrates that it is adamant on investment into emerging technologies, including 5G and artificial intelligence. An article from the state press described China's aspirations

⁴⁹https://mepc.org/speeches/geoeconomic-implications-chinas-belt-and-road-initiative

⁵⁰ Ibid.

 $^{^{51}}https://www.nytimes.com/interactive/2019/01/29/magazine/china-globalization-kazakhstan.html?mtrref=undefined\&gwh=7FB49EFB62D639F31783CA6B49D59FDA$

⁵²https://www.britannica.com/topic/special-economic-zone

⁵³https://www.worldpoliticsreview.com/articles/28136/china-s-belt-and-road-reboot-is-really-a-foreign-influence-campaign

⁵⁴https://www.chinahighlights.com/travelguide/maritime-silk-road.htm

⁵⁶Ibid

⁵⁷https://www.e-unwto.org/doi/epdf/10.18111/9789284418749

⁵⁸https://www.chathamhouse.org/expert/comment/promise-and-peril-digital-silk-road

⁵⁹Ibid.

⁶⁰https://www.clingendael.org/publication/unpacking-chinas-digital-silk-road

for the BRI as focused on "five connectivities and three communities": connectivity in infrastructure, trade, finance, "people's hearts" and policy; and the community of interest, destiny and responsibility. The Digital Silk Road, in turn, seeks to improve regional and international connectivity in infrastructure, trade, finance and "people's hearts." China sees this pillar within the BRI as fundamental to its emergence as a full technological competitor and power to global superpowers such as the United States. 62

The BRI also has implications for space policy, a stadium of rising strategic importance and international rivalry. Space weaponization, including legislation governing the deployment of anti-ballistic missile systems, satellite protection, and conflicting ideologies on potential laws governing space, has resulted in tension among the United States, Russia, and China for the past couple of years. Satellites are particularly concerning due to the large variety of surveillance and communications systems that utilize the satellite's commercial and military digital networks. Overall, the Western Bloc would currently win in an economic, political or military battle with the Eastern Bloc; however, the BRI is another chance for China and its allies to gain leverage against the Western superpowers.

Possible Solutions

Diplomatic Pursuit

With China and NATO both being mighty entities, it would be precisely the opposite of either's intention should a conflict of any kind arise. Although it may not necessarily be favourable to a country such as the United States wishing to leverage a "threatening" country such as China, it would be a win-win solution. Both bodies benefit from the profit of more robust economic and political bonds. ⁶⁴ Delegates should find that negotiations with China would prove unnecessarily tricky due to the long-standing fractures and ideological differences between the two.

An additional solution that could be incorporated into the former would be NATO, creating yet another cooperation with China's related bodies. Partnership through this method is not foreign to NATO, as can be seen in 2002 when the NATO-Russia Council was created to ease tension. ⁶⁵ The council could follow similar guidelines to the NATO-Russia Council but tinkered to fit the economic stresses rather than the military pressure in 2002. Not only would this council permit the chance for China to converse with countries, but it would also force China to describe its actions when questioned in front of the council.

Military Mobilization

Taking a contrarian approach to the first possible solution, NATO could also mobilize its powerful military against China. However, China will most definitely not back down in the case of a conflict. Instead, there will be a backlash towards NATO if delegates choose to pursue this route; however, the severity of the backlash would be unknown—it would most likely be an equal or even harsher response. If so, this would result in various armed conflicts between the two superpowers, possibly

⁶¹http://www.xinhuanet.com/world/2015-03/29/c 127632204.htm

⁶²Ibid.

⁶³ Ibid.

⁶⁴https://www.bloomberg.com/news/articles/2020-12-03/u-s-spy-chief-calls-china-greatest-threat-since-world-war-ii

⁶⁵https://www.nato.int/nrc-website/en/about/index.html

leading to a second war, similar to the Cold War. This would be highly unfavourable to the world as we know it due to both entities possessing nuclear weapons.⁶⁶ NATO would also most definitely receive backlash from the international community.

Nevertheless, this solution has some potential use. For example, should NATO not be highly aggressive yet continue to mobilize troops, it could force China to communicate should they have previously not desired it. Furthermore, it would show China—who has been taking action more aggressively—that NATO is not afraid to back down from any potential challenges.

Economic Mobilization

The root of a necessity to provide a solution to the BRI stemmed because China is both an economic superpower and seeks to continue this development. Therefore, it only comes naturally that threatened countries bind to brake the giant's growth. As the world's second-largest economy, China may seem threatening to challenge; however, if delved into, it can be seen that China's global GDP income results from exports and trade. China's exports make up 18.42% of its GDP, making it the largest exporter in the world. These exports—which amount to over 2.5 trillion USD—are mostly technological systems, machinery, and furniture. Therefore, it comes as no surprise that NATO, which comprises the world's largest countries, can sanction or tariff 30% of China's annual exports. He should be warranted that China will most likely respond with trade wars as seen in the US' case, so delegates should only use this before solution two, "Military Mobilization."

Adding on to this solution could be an economic mobilization, but not necessarily of the sanctioning kind as previously mentioned. Looking at how China has gained power in the past, it can be seen that situations such as the debt faced by Sri Lanka could have been easily prevented or treated by NATO should the proper legislation have been put in place. Sri Lanka borrowed money from China but accumulated a negative cash flow, leading to a large, unpayable debt. Not being paid back, China settled for a ninety-nine-year loan of a key port inside Sri Lanka. NATO could, in the future, act as an international body that lends loans to these developing countries similar to China. Problematically, this would be extremely expensive for NATO. Furthermore, if loans default, how would NATO look in the public view should they choose to pursue the missing money similarly to China? Nevertheless, this could be a relatively good way to strengthen bonds between countries within NATO and loan-seeking countries. This could slowly phase these countries into democratic and Western ideologies, opposing the Eastern Bloc beside NATO. Should delegates seek to pursue this solution, they should ensure that their countries have security within these investments through instruments such as credit swaps. Furthermore, NATO is a biased entity and therefore should use an external body to govern the loans and their guidelines.

 $^{^{66}} https://www.global times.cn/page/202106/1226163.shtml\#:\sim:text=As\%20 for\%20 nuclear\%20 we apons\%2C\%20 the, principle\%20 of\%20 nuclear\%20 we apons\%20 at$

⁶⁷https://tradingeconomics.com/china/exports-of-goods-and-services-percent-of-gdp-wbdata.html#:~:text=Expor ts%20of%20goods%20and%20services%20(%25%20of%20GDP)%20in%20China,compil ed%20from%20officially%20recognized%20sources.

⁶⁸https://www.statista.com/statistics/263661/export-of-goods-from-china/#:~:text=In%202019%2C%20China%20exported%20approximately,compared%20to%20the%20previous%20year.

⁶⁹https://tradingeconomics.com/china/exports-by-country

⁷⁰https://www.jstor.org/stable/26608823

⁷¹http://www.adaderana.lk/news/42225/hambantota-port-agreement-to-be-signed-tomorrow-pm-

Bloc Positions

The Americas

Comprised of the US and Canada, these countries are arguably one of the most powerful countries in NATO; however, they are small in number. Furthermore, this bloc has sour relations with China and may seek to discontinue a relationship and pursue previous actions.

The US has almost irreparably damaged relationships with China through its various actions during the administration of Donald Trump. As part of Trump's "America First" plan where isolationism is promoted, he placed tariffs on solar panels and washing machines.⁷² Not long after, he put 25% tariffs on steel and 10% tariffs on aluminum.⁷³ This proved to be a fatal act. Following the introduction of these tariffs, China puts 34 billion USD to retaliate and compensate for the money the US gained.⁷⁴ Moreover, the tariffs weren't even a good idea for the country or Trump and his administration. It ultimately pushed money out of the US and lost Trump potential voters for the 2020 US election due to his unnecessary hate against China. 75 As the trade war raged, another issue became rampant. Ever since the coronavirus that inflicted COVID-19 was declared a global pandemic, Trump has repeatedly named the virus the "Chinese virus." Although this may have been a minor issue, Trump also blamed China for advancing the pandemic, blaming its secrecy as the cause of the pandemic. 76 Lastly, the US banned WeChat and TikTok from mobile app stores to "protect national security." This all stemmed from the cybersecurity breaches happening in Asia with the hackers' IPs—which could be easily changed or faked—tracing back to China. 77 It isn't just the US in this bloc that has issues with China. Canada also got into a brawl with China, although on a smaller scale than the US did. After Huawei's CFO, Meng Wanzhou misled the Canadian bank HSBC regarding Huawei's business dealings in Iran; she was arrested. 78 This led to high tensions between Canada and China. Due to Canada and the US having a strong and growing opposition with China, these countries would find that more aggressive solutions would be passed as they have been shown before peaceful solutions do not work. Although the US is still in a trade war with China, it would be favourable for Canada and the rest of NATO not to aid the US in an economic sanction solution—which it would mostly favour—due to their own domestic needs.

Western Europe

The Western Europe bloc is comprised of members within the western side of Europe ranging from Germany and France all the way to the UK. This bloc holds similar views to the US and Canada; however, due to recent advancements in ties between China and the Western European bloc, they may not be as conservative as the North American bloc would like. For example, the three countries mentioned earlier have received significant investment over the recent years, primarily due to the BRI, and may be hesitant to put any economic sanctions in place. Moreover, some countries in the

 $^{^{72}}https://www.npr.org/sections/thetwo-way/2018/01/22/579848409/trump-slaps-tariffs-on-imported-solar-panels-and-washing-machines$

⁷³https://www.reuters.com/article/us-usa-trade-trump-rhetoric-analysis/trumps-trade-tariffs-long-on-rhetoric-shor t-on-impact-idUSKBN1GH37N

⁷⁴https://www.reuters.com/article/us-usa-trade-china-ministry/trump-sets-tariffs-on-50-billion-in-chinese-goods-beijing-strikes-back-idUSKBN1JB0KC

⁷⁵https://doi.org/10.1257%2Fjep.33.4.187

⁷⁶https://www.cnbc.com/2020/03/18/coronavirus-criticism-trump-defends-saying-chinese-virus.html

⁷⁷https://www.washingtonpost.com/technology/2020/09/18/tiktok-wechat-ban-trump/

⁷⁸https://www.reuters.com/article/us-huawei-iran-sanctions-exclusive-idUSKBN20P1VA

Western European bloc hold very tiny economies that are dependent on China's resources, meaning that their economies could be wrecked or debt-trapped should they do anything China sees unfavourable.⁷⁹ Due to the previously mentioned factors, this bloc would not seek to enforce any economic sanctions but rather diplomatically communicate. However, this does not mean that this bloc is not willing to use economic sanctions or engage in political/military conflict. Should conditions worsen, they would not be afraid to use economic/political influences. If any of the countries within the Western European or North American blocs engage in military conflict with China, the rest of those countries within these blocs will follow suit.

One Belt One Road Beneficiaries

This bloc, composed of Albania, Bulgaria, Croatia, Czech Republic, Estonia, and Greece, is highly funded through Chinese investment projects such as the BRI. These countries support the development of the BRI for China and receive infrastructure and monetary aid. 80 Regardless of what the other blocs do, this bloc would seek to remain on the good side of China. This bloc also has to be mindful to maintain healthy relationships with Western Europe and North America while defending its positions within China's investments. Countries from this bloc would highly support anything that does not include action against China's policies or political ideologies.

⁷⁹https://thewire.in/world/china-debt-trap-diplomacy-bri

⁸⁰Ibid.

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Energy Security

Ouestions to Consider

- 1. What are some advantages and disadvantages of switching from fossil fuels to renewable sources of energy?
- 2. Are there any present threats and weaknesses of modern-day energy security?
- 3. What are some of the currently active frameworks in place to solve this issue, and how can they be improved upon?
- 4. How can NATO assist developing countries in their switch to renewable energy which comes with more vulnerabilities?

Overview

From providing convenience to powering life-saving medical machines, it goes to show that the present-day era is becoming more and more reliant on energy. However, due to geopolitical instability and the lack of consistent guidelines in place, there are times when a volatile market or disruption in the supply chain leads to a crisis that heavily affects energy-reliant economies, possibly causing even more devastating effects to them if not dealt with immediately. This is especially true for countries that import energy sources. These countries typically source from large, cheap providers which reside in unstable and corrupt areas, frequently threatening their energy supply. This is extremely dangerous for said countries, for if they face a shortage, it could easily cause a reduction in GDP growth and loss of political favour, should the supply not be restored quickly and effectively.

This problem is further exacerbated by the fact that oil, as with anything, has a limited supply. Countries that import oil are also industrializing at a rapid pace, therefore increasing demand. With the combination of increased demand but decreased supply, oil prices will only continue to rise. This leaves only one solution: the switch to renewable energy sources, and sourcing from one's own country. Although it may seem obvious to switch to green energy, especially with the threat of climate change, this energy also has its disadvantages. With the introduction of green energy, there comes the risk of cyberattacks. According to two experts of energy security currently at NATO, clean energy systems such as wind farms "are managed by industrial control systems that act like nerve centers, connecting individual turbines, substations and other equipment to a single computer." This highlights the risk that the entire system faces from just a single vulnerability. They also note that this is due to the fact that "many of these systems were designed with efficiency and not security in mind. An increasing number are also connected to the internet of things, which makes them 'smarter' and more cost-effective, but also increases their vulnerability to hackers." As countries begin to rapidly adopt these new technologies, it only makes sense that they buy the most cost-efficient systems to provide power for their country, but with the cyberattacks countries and individual

 $^{^{81}} https://assets.thalia.media/doc/43/54/4354d69c-560a-42a4-a23b-34db9643947e.pdf$

⁸² Ibid.

⁸³https://www.api.org/news-policy-and-issues/safety-and-system-integrity/achieving-energy-security

⁸⁴https://www.jstor.org/stable/43202785

⁸⁵https://www.politico.eu/article/opinion-cyberattacks-are-the-new-challenge-for-renewable-energy/

86Ibid.

87Ibid.

organizations launch, it will force countries to subside efficiency for self-protection.

The easiest method to solve both these problems, at least, for the most part, is to establish a clear guideline or framework for countries to follow, preventing the breach of each other's energy security; however, countries that import and export oil seem to have opposing views on this definition. While the International Energy Agency (IEA), an intergovernmental organization for energy security and importing countries agrees that energy security means stable price and supply, exporting countries favour a different view. Instead, the Organization of the Petroleum Exporting Countries (OPEC) seeks the long-term continuation of higher demand and prices. This juxtaposition also endangers many developing countries. Developing countries are forced to use fossil fuels due to their low initial investment cost. These countries also use fossil fuels because of how easy it is to harness energy from them: combustion. With the risk they face, it is up to the job of developed countries to aid in their transition to clean energy and to protect them from any volatility present in the oil market.

Timeline

May 26th, 1908: A British company strikes oil in Persia—presently referred to as Iran—transforming the Middle-East's region permanently as innovators and investors flock to the region. This eventually leads to many events such as the 1953 Iranian coup d'état through the rapid growth in said area. 92

September 9th, 1932: Bolivia and Paraguay fight over land containing oil starting the first of many conflicts over oil, also sometimes referred to as "oil wars."

March 17th, 1951: The Majlis—more commonly known as the Iranian Parliament—verify the nationalization of the Iranian oil industry. The United Kingdom, which previously held a majority stake in the industry, imposes economic sanctions and sends soldiers to further pressure the democratic government to falter.⁹³

October 29th - November 7th, 1956: Israel invades Egypt in an effort to retain Western influence over the Suez Canal and remove Gamal Nasser, the leader of Egypt who recently nationalized the Suez Canal, from power. This causes a shortage of oil in Western Europe where 60% of their oil imports come from tankers going through the Suez Canal.⁹⁴

September 1960: The OPEC is established by oil-producing countries to coordinate sales and production, and prevent the decline of oil prices.⁹⁵

⁸⁸https://www.iea.org/areas-of-work/ensuring-energy-security

 $^{{}^{89}}https://www.energycharter.org/fileadmin/DocumentsMedia/Thematic/International_Energy_Security_2015_en. \\pdf$

⁹⁰https://doi.org/10.1016/0140-9883(89)90041-8

⁹¹https://www.forbes.com/sites/kensilverstein/2021/03/16/can-emerging-countries-afford-to-make-the-clean-energy-transition/

⁹²https://www.wired.com/2008/05/dayintech-0526/

⁹³IBSN: 978-0470185490

⁹⁴https://www.britannica.com/event/Suez-Crisis

⁹⁵https://www.britannica.com/topic/OPEC

October 6th, 1973 - November 1973: The Arab coalition composed mostly of OPEC countries launches a surprise attack on Israel starting what is known as the Yom Kippur War. Shortly after, the US sides with Israel and is, along with the rest of the Western Bloc, imposed costly oil embargos.⁹⁶

November 18th, 1974: The Organisation for Economic Co-operation and Development (OECD) composed mainly of the Western Bloc creates the IEA by the Agreement on an International Energy Program. This is in response to the first oil crisis that presented itself in the aftermath of the Yom Kippur War. 88

February 11th, 1979: Revolutionaries overthrow the Iranian Shah, also known as the king, and Iran decreases its oil output.⁹⁹ This, combined with panic regarding the government's instability, causes a squeeze in prices, more than doubling the price of oil in the following twelve months.¹⁰⁰

September 22nd, 1980: Iraq invades Iran, a fellow OPEC member, and increases volatility of the oil market, still affected by the Iranian Revolution. ¹⁰¹ As a direct result of this, non-OPEC countries begin to produce their own oil and trade this commodity amongst themselves, reducing OPEC's oil market share from 50% in 1979 to 29% in 1985. ¹⁰²

August 2nd, 1990: Iraq invades Kuwait, its second time against an OPEC member, and causes concern over the long-term supply of oil, doubling the prices of oil over the course of the summer. ¹⁰³ Prices stabilize soon after the US and its coalition joins and begin to defeat Iraq.

December 17th, 1994: The Energy Charter is opened for signature in Lisbon establishing a multilateral framework for cross-border cooperation in the energy industry covering all aspects of commercial energy activities including trade, transit, investments and energy efficiency. 104

March 20th, 2003: The US invades Iraq during a time of increased demand for oil. With the subsequent invasion, Iraq decreases its oil production and oil prices dramatically rise until 2008. 106

December 23rd, 2015: Russian hackers initiate the first known successful hack against an energy grid.¹⁰⁷

March 23rd - March 29th, 2021: The Ever Given is buffeted by strong winds, ultimately pushing it into a wedge that blocks flow of the Suez Canal. This causes a bottleneck in various commodities.

⁹⁶https://www.britannica.com/event/Yom-Kippur-War

⁹⁷https://www.iea.org/about/history

⁹⁸Ibid.

⁹⁹https://scholarsarchive.byu.edu/ccr/vol42/iss42/10

¹⁰⁰https://web.archive.org/web/20080307085655/http://www.time.com/time/magazine/article/0%2C9171%2C946222%2C00.html

¹⁰¹ISBN: 978-1249584735

¹⁰²https://energystudiesreview.ca/esr/article/viewFile/322/283

¹⁰³http://pages.stern.nyu.edu/~nroubini/papers/OilShockRoubiniSetser.pdf

¹⁰⁴https://web.archive.org/web/20131024073327/http://www.encharter.org/fileadmin/user_upload/document/EN.pdf#page=141

¹⁰⁵http://www.sfgate.com/cgi-bin/article.cgi?file=/chronicle/archive/2005/03/20/MNGJKBS9PM1.DTL

¹⁰⁶http://tfc-charts.com/chart/OM/W

¹⁰⁷https://www.wired.com/2016/03/inside-cunning-unprecedented-hack-ukraines-power-grid/

Historical Analysis

Post Industrial Revolution

Ever since the industrial revolution began, technological advances like no other before have been witnessed. This applies especially true to the warfare of the modern era, namely mechanized and industrial warfare. These types of warfare introduced weapons capable of mass destruction with the cost of two cheap prerequisites. The first is an energy commodity, and the second is metal. Although some weapons like machine guns do not necessarily need any fuel to function, it is necessary in some part of its manufacturing, especially because they are made in an industrial factory. With this in mind, it can be seen how important oil is for the course of a war, especially when the most dangerous weapons like armored vehicles and aircraft require this as fuel. Due to this, many wars held crucial operations dictating the security of this commodity.

After the two major oil wars, World War I and II, oil demand continued to rise and display its importance for not just war, but industry. As economies develop, the share of the energy mix taken by their industrial sectors tend to increase. ¹⁰⁹ In fact, the demand for these energy commodities have more than doubled since 1970, and continues to increase at a rapid pace. ¹¹⁰ This could have been further exacerbated by the conflict between the Western Bloc and the Warsaw Pact during the Cold War. Countries in both blocs looked to rapidly industrialize and discover new technology which could have heightened demand from regular levels.

Not only is oil useful, but it is also an extremely profitable commodity. With money and power in mind, Western investors flocked to these exporters greedily. This created a large wealth disparity in these countries, and left the citizens with much less profit than the investors. This eventually led to a rise in nationalistic thinking and events such as Iran's oil industry nationalization. With many oil-producing countries being tired of abuse from the West, OPEC was born. Of course, this presents some challenges. The cooperation between these countries can devastate economies. For example, during the Yom Kippur War, many countries sided with Israel. With the OPEC countries being on the opposing side, they easily imposed various sanctions on Israel's allies causing volatile surges in oil prices and immediate economic effects. This is especially detrimental to importing countries due to how long recovery from recessions take. Recessions introduce various negative feedback loops that only economic plans and bills can change. Not only can OPEC countries make enemies rethink their stances, but they also generate large profits with panicking investors increasing price and demand, making it very beneficial to commonly use this tactic. This is one of the reasons that many countries today source oil from neighbours and

continue to increase their domestic production of oil. 116

 $^{^{108}} https://www.eia.gov/energy explained/use-of-energy/industry.php$

 $^{^{109}} https://www.oxfordenergy.org/wpcms/wp-content/uploads/2010/11/SP20-EnergyThelLongView-MalcolmKeauy-2007.pdf$

¹¹⁰ Ibid.

 $^{^{111}}https://www.oxfordenergy.org/wpcms/wp-content/uploads/2010/11/SP20-EnergyThelLongView-MalcolmKea~y-2007.pdf$

¹¹²Ibid.

¹¹³ Ibid.

¹¹⁴https://www.gsb.stanford.edu/insights/why-was-last-recovery-slower-usual-actually-it-wasnt

¹¹⁵ Ibid

The Computer Age

With so many issues faced due to the importance of oil, an obvious solution would be to use another form of energy. This would protect countries from volatile oil prices and open new jobs, positively impacting the economy. It would also aid in the fight against climate change, an issue that negatively affects the economy. 117 This does not mean that renewable energy is the holy grail of energy sourcing and security. Renewable energy is too new and one of the main issues with new technologies is large upfront costs, low efficiency, and low scalability. 118 In an attempt to solve this problem, many companies have begun modernizing their technology. Although this works to improve efficiency, it has resulted in another problem. With efficiency being the only thing in mind, the security of these technologies have worsened over time and become extremely vulnerable to cyber attacks. 119 For example, in late 2015, a group of Russian hackers committed the first publicly-known breach into an energy grid. This left 230,000 Ukranians without electricity for a period of 1 to 6 hours, with some missing electricity for days. 120 This breach taught the hackers much about the security in these systems, and this breach has opened up the potential for exploitation to many other systems. Since then, many breaches have happened targeting the energy sector. These breaches range from stealing company information to ransoming the data of systems in charge of transporting energy. 121 It has become obvious that the green energy sector, which produces 21% of the world's energy, has to invest more into security and work with governments to ensure energy security. 122

Past Action

Due to various countries's energy security being affected by the same catalysts, various intergovernmental organisations discuss energy security, and form new coalitions and frameworks regarding energy security. ¹²³ An example of this would be the IEA which was formed in the wake of the 1973 oil crisis by the OECD. ¹²⁴ The IEA prevents disruptions to oil supplies and advises member nations on energy policy. Many energy experts criticize the IEA for not considering technologies such as renewable energy or climate change in the fight without realizing that the organization was not established for this purpose. Moreover, these technologies have yet to be shown as reliable for national scale projects as is needed for energy security and merely are a pursuable opportunity to get there. However, recently the IEA has begun to focus on plans that tackle climate change more aggressively. This is most likely due to a deadline that the Intergovernmental Panel on Climate Change (IPCC) placed on climate change which says that global warming above 1.5°C by 2030 will be unresolvable. Due to these reasons, the IEA is still a reliable organization to work with when trying to establish energy security, as shown in the virtually unanimous adoption of the obligation to hold emergency oil stocks equivalent to at least 90 days of net oil imports, something suggested by the IEA. ¹²⁵

¹¹⁶Ibid.

 $^{^{117}} https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2016/IRENA_Measuring-the-Economics_2016.pdf$

¹¹⁸https://e360.yale.edu/features/green_energys_big_challenge__the_daunting_task_of_scaling_up

¹¹⁹Ibid.

¹²⁰ Ibid.

¹²¹https://www.vox.com/recode/22428774/ransomeware-pipeline-colonial-darkside-gas-prices

¹²²https://www.eia.gov/energyexplained/renewable-sources/

¹²³ Ibid.

¹²⁴Ibid.

¹²⁵https://www.iea.org/areas-of-work/ensuring-energy-security/oil-security

The Energy Charter Treaty (ECT) is a multilateral framework that promotes global cooperation in the energy industry. Initially, it was simply a medium that the Western Bloc used to aid Post-Soviet states in their transition to the broader European and world markets. ¹²⁶ However, in the modern era, it is no longer a tool for East-West cooperation. Instead it works to promote honesty in global energy markets and equality to stimulate foreign direct investments and global trade through legal instruments. ¹²⁷ Although it emphasizes the use of legal instruments, it, like many other frameworks formed by intergovernmental organizations such as the UN, leaves clauses open-ended for signatories. Moreover, it is ineffective in solving the problems present in the energy industry. Nevertheless, the ECT is still useful and provides innovative solutions and advice that countries should look to reuse or continue pursuing. For example, it recommends extending protection to foreign business interests, introducing an international conflict resolution plan, ensuring security of energy during transit, and keeping sustainability in mind. ¹²⁸ All of these ideas are good starts for national rules relating to the future of energy security.

Current Situation

OPEC's Share in Energy

In the current oil market, factors such as trader sentiment and inflation cause fluctuations in oil price, but not to the amount that the OPEC can. According to 2018 statistics, OPEC owns a share of nearly 80% of all crude oil reserves in the world. With this power, OPEC can easily influence prices by coordinating a decrease or increase in production (supply) of oil. This can be devastating to some investors due to the nature of how oil is usually sold: futures. Futures grant buyers the right to purchase a set amount of materials at a specific price by a certain date. Another factor is the general region member nations of OPEC are located in. Geopolitical issues in just one corner of the Middle East can spread like wildfire and involve numerous international parties, subsequently influencing oil and the overall market. So why not start diversifying to various exporting countries, or even domestically producing oil? An advantage of the oil present in the Middle East is the low production cost and initial investment compared to countries like Canada. The crude oil in the Middle East is much more plentiful and requires less refining compared to Canadian oil sands. Moreover, the equipment is already readily available in oil-producing countries.

Natural Vulnerabilities

As mentioned previously, some areas are more rich than others regarding oil resources. This, and many other factors are natural and unpredictable. For example, when Hurricane Katrina hit the southern US, it shut down oil and gas production from the Gulf of Mexico, the source for 25% of U.S. crude oil production and 20% of natural gas output. This increased prices of oil to a maximum of 15% and most likely influenced future price increases during the War on Terror and 2008 Financial Recession. Although natural vulnerabilities seem to be unpreventable, many have predictable effects that can be quickly resolved with the current plans in place. One such example is the route in which oil travels. There are usually two different routes, pipelines and by sea. When travelling through the

¹²⁶https://www.energycharter.org/fileadmin/DocumentsMedia/Legal/1994 ECT.pdf

¹²⁷ Ibid.

¹²⁸ Ibid.

¹²⁹https://www.opec.org/opec_web/en/data_graphs/330.htm

¹³⁰https://ceri.ca/assets/files/Crude Oil Report June 2016.pdf

¹³¹https://www.oe.netl.doe.gov/docs/gulf coast/gulf 102105 1500.pdf

¹³²https://www.eia.gov/international/analysis/special-topics/World Oil Transit Chokepoints

sea, various maritime chokepoints are usually included in tanker routes due to the decrease in distance they can offer. The Strait of Hormuz is the world's most important oil transit chokepoint and transfers more than 21 million barrels per day (bpd). This is not to undermine the other chokepoints such as the Suez Canal, which transferred 1.74 million bpd of the 39.2 million bpd transferred through maritime routes, almost 5%. Although this may not sound like much, a closure of this chokepoint for even a short length of time could drastically change the supply and demand of oil. This was clearly shown in March 2021 when the Ever Given had been blown off course by strong winds and wedged itself into the banks of the Suez Canal. Although not even lasting more than a week, it reversed the bearish momentum in the oil market. The supply and demand of the suez Canal.

The Rich's Responsibility

The industrialization of developing countries necessitates stable fuel sources for a large population, something that is incredibly difficult to achieve without using fossil fuels. Even when using fossil fuels, it has been shown countless times in the past that these developing countries cannot rely on OPEC countries to provide oil with energy security in mind, yet, they cannot afford anything else. Another factor exacerbates this issue. It is predicted that 97% of population growth will be attributed to developing countries, forcing an even larger population to unsustainable and unstable energy sources. Therefore, it is the job of the developed countries and industrialized nations to provide the adequate resources for developing countries to provide for themselves and their rapidly growing economies sustainably.

The damages faced globally, especially due to energy, are mostly attributed to developed countries. However, it is usually the developing countries who face the most harm and who cannot save themselves. Although the issue of ensuring energy security for their growing population is already a daunting task, climate change presents an even greater threat. Besides the 2030 goal presented by the IPCC, climate change's damage is not something we should be worrying about for the future, but rather something that should be dealt with immediately. A new IPCC report on climate change, the largest yet written, has indicated that a hotter future is certain, and that the symptoms from this summer are "code red for humanity" With this in mind, developed countries could sponsor the development of renewable energy infrastructure in developing countries with the possibility of further support in their ideologies and politics.

Technological Vulnerabilities

With the introduction of more green technology, there also comes smart meters and other backdoors that increase effectiveness but decrease security. These backdoors have very unreliable security systems due to the fact that they have been developed with maximum efficiency in mind, but not

 $^{^{133}} https://www.eia.gov/todayinenergy/detail.php?id=39932\#:\sim:text=the\%20Arabian\%20Sea.-, The\%20Strait\%20 of\%20Hormuz\%20is\%20the\%20world's\%20most\%20important\%20oil, of\%20global\%20petroleum\%20liquid\%20consumption.$

¹³⁴https://www.reuters.com/article/egypt-suezcanal-oil-idINKBN2BI26C

 $^{^{135}} https://www.aljazeera.com/economy/2021/3/24/bb-suez-canal-blockage-sends-oil-prices-rebounding-after-sell-off$

¹³⁶https://www.consultancy.uk/news/2191/97-percent-of-population-growth-to-be-in-developing-world

¹³⁷https://www.international.gc.ca/world-monde/issues_development-enjeux_developpement/environmental_pro tection-protection environnement/climate-climatiques.aspx?lang=eng

¹³⁸https://www.reuters.com/business/environment/un-sounds-clarion-call-over-irreversible-climate-impacts-by-h umans-2021-08-09/

139Ibid.

security. ¹⁴⁰ If companies had not done so, they would have lost against their competitors who would release new technologies into the market, already establishing their place in the market. Not only do these backdoors cause issues for a single part of the energy system, but they can also cause issues to the whole system due to how modern green technology systems are linked today. ¹⁴¹ Hackers looking to infiltrate these networks are usually looking for one of two things: destruction, and money. In the past, various cyberattacks in the energy sector have traced back to Russia, and many cyberattacks will continue to do so. ¹⁴² These attacks have mostly only caused destruction, and as such, warrants concern from national security that they are attacking for economic damage rather than personal benefit. ¹⁴³ These hackers usually infiltrate with different malware than those looking for money. Hackers looking for a profit infiltrate networks with a ransomware that encrypts a system's files, discontinuing its use, until some form of payment is gathered. Either way, both these hackers are extremely dangerous to companies and the future of renewable energy.

Possible Solutions

Energy Self-Sufficiency

With the countless crises caused in the past by oil-producing countries, it comes as no surprise that energy self-sufficiency is one of the most efficient ways to increase energy security. Nations looking to improve their energy self-sufficiency could achieve this through investing towards domestic energy production. Through this method, countries will be able to slowly both diversify their energy sources, and source their own needs, eliminating the interference of external geopolitical issues. Further out in this solution, some countries will eventually be able to hedge their own and other countries oil reserves through being net exporters, as the UK has recently done. ¹⁵⁵ One downside of this solution is that only developed countries can pursue this solution. Developed countries usually do not have massive growth in energy demand and have the resources to invest in energy self-sufficiency.

Energy Diversification

The previous can be even further improved upon when considering other energy sources, namely renewable and green energy sources. While the suggestions above could provide diversification to disruptions in the oil market, utilizing a different energy source will provide even more diversification. Some green energy sources can even be traded, namely hydrogen and nuclear. Using green energy improves the economy in both preventative measures and future growth. With the development of green energy comes lots of new jobs, a slowing of climate change and the reduction of a country's oil necessities. A developed country would be able to utilize renewable energy in its solution of energy self-sufficiency; however, the same cannot be said for developing countries. The only possible solution for the developing countries that includes green energy would be a sponsorship from developed countries. This solution is less desirable for delegates representing developing nations due to the power that a developed country would gain; however, it may still be beneficial depending on the country's energy demands and financial availability. For example, a developing country may be more technologically advanced, and therefore more compatible with the benefits received from the sponsorship than a typical developing country. Another reason why a developing country may choose to get a sponsorship would be due to good relationships with the country.

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¹⁴¹Ibid.

¹⁴² Ibid.

¹⁴³ Ibid.

This would work especially well in an environment like NATO that encourages diplomacy and cooperation.

Global Cooperation

Recognizing the importance of oil in every nation around the world, there should be more cooperation relating to its management, yet there has barely been any legally binding framework as of yet. Many frameworks, such as the ECT, that host preventative measures fail to involve global cooperation and only skim over the possibility of cooperating with financial entities. This solution would look to more heavily regulate trading and management of oil as to stabilize prices and create a stable, predictable price and demand. This solution could also introduce an intergovernmental forum similar to the G20 that discusses the handling of energy and hosts sub-forums that search for findings in a specific area, such as climate change in relation to energy security.

Bloc Positions

Oil-Importing Countries

This bloc, which includes the majority of NATO, includes large energy net-importers such as a large part of the EU as well as the US. This bloc's main concern is the securing of stable prices and supplies, at least until they are widely unaffected by the lack of energy security that comes with oil. Although countries in this bloc hold differing views on renewable energy and the future of oil, they all seek maximum economic development, which can be achieved through self-sufficiency and improvement in energy efficiency. As such, these countries should use their large economies to fund development towards infrastructures that would aid in this process, such as nuclear power plants. Should developed net-importing countries succeed in this process, it will greatly benefit their economy. With lower demand for oil, volatility in the oil market will decrease and the worry of oil affecting other commodities and items will vanish. While coordinating this solution, these countries should work together to provide some sort of international framework that would work with domestic measures to prevent an oil crisis from happening in case of an emergency increase or decrease in either supply or demand. Countries within this bloc could also attempt to form a nation-wide grid making it easier to update hardware, hotfix hardware vulnerabilities and coordinate checkups.

Oil-Exporting Countries

Composed of countries such as Canada and Norway, this bloc is much smaller than the first. This bloc seeks to continue to increase the demand for oil and the steady, long-term increase of oil prices. Although limited in number, they are the largest exporters to large countries such as the US and UK. These countries would seek to create relationships with developing countries in frameworks and expand to new markets that would extremely benefit the future oil prices. This bloc would want to continue supplying oil while also focusing to hide any political instability, which would prevent more alarm regarding energy security.

Due to the large disparity between importers and exporters of oil in NATO, it would not be a surprise if multiple blocs began to rise that focused on how aggressive the solutions are, what type of energy would be used, etc. The interests of NATO's member nations are extremely diverse, and although their general interests align with the blocs above, there are large individual solutions that some countries just cannot or should not pursue. Delegates should act in the best interests of their country and seek partnerships with countries that have near-identical interests.

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