Economic and Social Council

Topic: Addressing the relationship between free trade and the increase in carbon emissions due to higher levels of economic activity
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I. Committee Background

The Economic and Social Council (ECOSOC) is one of the six main organs of the United Nations (UN). Its main purpose is to coordinate the diverse economic, social, cultural, educational, and health programs of the UN. In order to do this, the council works with non-governmental organizations (NGOs), occasionally inviting them to their meetings in order to gain insight on pending problems occurring around the world. The council consists of 54 member states, and the General Assembly selects 18 new members each year who serve 3-year terms. Additionally, in order to properly address all topics, this council divides itself into a series of commissions that specialize in specific areas of social development. Some of these include the commission on Human Rights, Sustainable Development, and Narcotic Drugs. Contrary to how many organs of the UN function, ECOSOC has no binding resolution; this means that resolutions are passed on to the General Assembly to be considered as recommendations for all countries to adopt. Member countries are elected to serve in three-year terms by the General Assembly and are chosen strategically to achieve full regional representation. The Council meets once a year, during a six-week-long session held in either Geneva or New York. During these meetings, voting procedures are done by a simple majority of votes—each state having a single one.

II. Introduction

Description and Definition of the Topic

Over the years, free trade between countries has become more and more popular due to the efficiency of the transaction. Although this advancement has been beneficial for the economy, higher levels of transportation that come with free trade result in an increase in carbon emissions. The world has been in a dire climate crisis for many years now and the increasing carbon emissions have been normalized. Seeing how trade rates have increased so rapidly, it has become easy to overlook the impact that these have on the environment. From 1950 until 2006, trade rates increased from 5.5% to 20.5% due to the technological advancements that made long distance trading easier (*The impact of trade opening on climate change* n.d.). Responding to the growing environmental issues, trade economists have developed a conceptual framework for examining how trade opening can affect the environment. This framework separates the impact

of liberalization of trade into three different effects: scale, composition and technique. The scale refers to the increase of input and output due to free trade, an increase in trades will lead to an increase in economic activity, and hence, energy use (Onder, 2012). The scale is what delegates must focus on: the increase in trade around the world, leading to an increase in transportation which severely impacts the environment.

The Problem

Free trade has caused an increase in trade volumes, greater comparative advantage chances, more efficient raw material usage, stronger economic growth, and improved international cooperation. A free trade policy is one where imports and exports are not restricted and could be compared to the concept of the free market (*What is 'free trade'?* 2017).The idea of this policy is that all trade, goods, and services can be bought and sold across international borders dismissing any government taxes known as tariffs, quotas, subsidies, or restrictions that could disrupt the interchange. Some examples of free trade agreements are EFTA: the European Free Trade Association consisting of Norway, Iceland, Switzerland, and Liechtenstein; and NAFTA: the North American Free Trade Agreement consisting of United States (US), Mexico, and Canada which has evolved into USMACA, the United States–Mexico–Canada Agreement (*United States-Mexico-Canada Agreement* n.d.).

Trade liberalization boosts economic growth by increasing economic activity. Environmental change will occur when the scope of global economic activity grows; partially a result of international trade. Furthermore, if the composition of commerce and manufacturing processes remain constant, the total amount of pollution must increase, according to the research. For instance, free trade results in freight patterns being changed; whether by air, land, or sea, this is one of the most difficult sectors to decarbonize because it relies heavily on fossil fuels for propulsion: only fossil fuels have enough energy to produce this amount of power, clean alternatives are still not strong nor resistant enough for this type of transportation. The International Transport Forum (ITF) predicts that freight transport used for international trade makes for around 30% of all transport-related CO_2 emissions and accounts for more than 7% of global emissions (*The Carbon Footprint of Global Trade* n.d.). Free trade and the international exchange of goods and services implies the transportation of goods and people from the country of production to the country of consumption, increasing the use of transportation means (Korves et al., 2011). Transports' burning of fossil fuels generates around 21.2 billion tons of CO_2 per year. The main fossil fuel supplier is Petroleum, accounting for 95% of the total energy used by transports all over the world. According to the Center for International Climate and Environmental Research in Oslo, Norway: "The transport sector is responsible for a large share of gas and particle emissions that affect the climate. These emissions also threaten human health, crops, and the material infrastructure" (Korves et al., 2011).

III. History of the Topic

Chronological History of the Topic

Global trade was first recognized during the 16th and 17th centuries, when societies were moving from mercantilism to a more modernized economic structure (Juneja, 2015). With time, governments realized that global trade could be a potential trigger to boost their countries economy due to the fact that countries could get resources they could not produce from other places, through trading; also they could manage to get cheaper resources from other places. This is known as comparative advantage. The milestone that gave international trade its immense power is rooted back to the ongoing innovation of technology. First seen during the Industrial Revolution of the 1800's, the invention of the automobile marked a significant step in both, the increase of carbon emissions and facilitation of economic growth. Shortly after the automobile, the cargo trucks, ships, and airplanes came into existence; these would benefit economic growth as all of these new technologies facilitated trading. On the other hand, the new methods of trading would significantly increase carbon emissions. During the late 20th century, the release of carbon emissions due to international trade started to increase uncontrollably, increasing a total of 90% from the 1970's to 2015 (Tubiello et al., 2014).

Today, the sectors that release the most carbon emissions in the world all revolve around the transportation of vehicles; specifically those involved in the international trade business, phenomenon is the result of the trade industry machinery, which requires large motors to operate for numerous hours. To put this information into perspective, consider the following: Aviation is a worldwide industry that is valued to make up 1.3 trillion GDP of the US, one of the most potent economies of the world, and it is responsible for 11% of the worldwide carbon gas emissions (*June 2016 U.S. ... Data* 2016). Now more than ever, countries' economies have been cornered to depend on the production of goods which generate carbon gas emissions; importing goods from one country to another has never been quicker, but it has also never been so dangerous for our planet.

The earth faces a major problem with climate change and, as previously mentioned, international trade business is one major factor of this problem. On November 4, 2016, 197 countries met in Paris to sign what is known as the Paris agreement, with the main purpose of "keeping a global temperature rise this century well below 2 degrees Celsius" (*Key aspects of the Paris Agreement* 2017). With the ongoing expansion of world trade, it has raised concerns in climate change discussions. Adding on, the World Trade Organization (WTO) has yet to sign an agreement dealing with climate change. There is a lot of concern about this ongoing topic: nations are on the path to break the Paris agreement unless they start reducing their carbon emissions. Today people are trying to figure out what should be done to help climate change without decreasing the economical profit that trade brings.

Historical Case Studies

APEC: Asia-Pacific Economic Cooperation

In 1989, the countries of Australia, Brunei Darussalam, Canada, Indonesia, Japan, the Republic of Korea, Malaysia, New Zealand, the Philippines, Singapore, Thailand and the US, founded the Asia Pacific Economic Cooperation (APEC). Over the course of the 1990s, Chile, Mexico, Papua New Guinea, Peru and Russia entered the organization. The member economies of APEC are all responsible for a substantial proportion of economic activity in the world; this brought with it many benefits as there would be constant imports and exports in all member countries (*Asia Pacific Economic ... 1989* n.d.). However, the APEC agreement caused carbon dioxide emissions to increase from 12.8 billion tons in 1989 to 22.1 billion tons in 2017; easier trade meant more trade, which meant more production and transportation of goods. Climate change was already a significant problem, especially in this region that consists of an accelerating number of natural disasters, about 70% of which occur in the Asia-Pacific region; adding the man-made CO_2 emissions from the past 30 years of trade has the potential of toxifying the region of CO_2 per cubic meter. To add on, APEC accounts for 60% of the world's energy consumption (*Asia Pacific Economic ... 1989* n.d.). As the region becomes more industrialized, it is imperative to find ways for APEC to reduce the use of fossil fuels to meet its energy demands.

NAFTA: United States, Mexico, and Canada

The success of the European Economic Community in removing tariffs influenced and inspired the North American nations to attempt an implementation of such a treaty. As a result, The North American Free Trade Agreement was ratified by the national legislatures of the three countries involved in 1993 and into effect on January 1, 1994 (Bondarenko, 2020). However, US President-elect Bill Clinton had worries about the environmental implications regarding NAFTA, yet, according to the article, “Opposed from the start, the rocky history of NAFTA”, acting President George Bush signed the agreement to slow any reforms Clinton might want to implement (*Opposed from the ... NAFTA* 2017). NAFTA works to gradually dismantle trade obstacles in order to improve economic prosperity among the three countries of North America; however, it was likely that rapid development could have severe consequences, especially given Mexico's history of poor environmental controls. As a result, in 1994, the North American Agreement on Environmental Cooperation, which established the Commission for Environmental Cooperation, addressed the environmental challenges (Bondarenko, 2020). All aspects of NAFTA: natural resources, technologies, and managing systems have created more pollution; transportation through highways, railways, ports, and public water have also added to the pollution emissions. While NAFTA has been replaced with USMCA, it is of vital importance

to find a more eco-friendly solution to the exploitation of resources and technologies, as well as transportation methods.

EU Emissions Trading System

The Emissions Trading System in Europe, also known as the ETS, was the first ever emission trading system. It was created in 2005 with the main purpose of reducing greenhouse gas emissions and reaching their climate change goal (Bagchi et al., 2014). Many cities have established some solid emission trading systems for example China, the UK, New Zealand, Australia, and some states in the US; all with the purpose of reducing emissions and looking out for the future of humanity. This system works by putting out incentives: a maximum 'cap' in the total amount of emissions is set, then permits are distributed amongst companies; these permits allow for a certain amount of emissions, if the company produces more emissions they need to buy more permits or cut back their emissions (*How do emissions ... work?* 2018). This method forces companies to become more green, since in the long run the emission cap will continue to decrease forcing them to invest in making the company more sustainable. With this system it is clear how the governments are putting a price on carbon. The EU's system has been shown to work: "approximately 200 million tonnes of CO_2 or 3% of total verified emissions were reduced due to the ETS" (*EU Emissions Trading ... ETS)* n.d.). Adding on, many other governments, as previously mentioned, are also using this system in their own countries. Today the 'cap and trade' system covers 50% of Europe's emissions and 75% of the international carbon market (*EU Emissions Trading ... ETS)* n.d.).

China's one-child policy: Carbon Emissions & the Economy

After the Chinese government decided to implement the one-child policy in the late 1980's, the Chinese population, considered to be largest worldwide, started to significantly curve downwards. Although at the time the policy came into play there were no side effects, during the early 2010's, in the aftermath of this policy, the economy started to suffer (Huang, 2017). Today, the number of Chinese people eligible to work is scarce compared to the number of citizens who are above the age of 65 (*Report: China emissions ... combined* 2021). This means that the government has to provide and maintain them, while there is high demand for people in the workforce; the country's economy is suffering due to this situation. However, China has still managed to dominate the manufacturing field, meaning that the number of factories in China is still greater than any other part of the world; in terms of carbon gas emissions, China still has a great influence on climate change. China still produces over 27% of the world carbon gas emissions and maintains the manufacturing economy afloat, in other words, the population was reduced and the economy did suffer, but the number of carbon emissions is still ranked #1 on a worldwide scale (*Top 10 Manufacturing ... World* 2021). China is facing the challenge of

balancing their manufacturing based economy with the reduction of greenhouse gas emissions, but its government is currently being open to investments in green energy in order to increase the life quality of its citizens.

Recent Innovations & Impacts of Trade

As in most industries, the innovations in technology regarding trade have grown exponentially in the past 20 years and continue to grow at an increasing rate. For example, the automation of tasks has become more and more of a norm: things can be done quicker and more efficiently. There have also been immense changes in the way that people transport goods which makes the process more efficient and time-saving. Moreover, new technologies also have indirect and unexpected impacts on trade flows (Lund & Bughin, 2019). Since new technologies can lead to more production and more efficiency, trade flows are forced to adapt to the sheer amount of products that need to be transported in a matter of days. This concerns the actual physicalities of the transportation, but the organization of such transportation. A good world trade route cannot function if there is no proper organization: in trade, there has had to be a lot of innovation in data analysis and organization (Lund & Bughin, 2019). Although all of these innovations have helped humanity thrive, they are factors that will contribute to its extinction. These innovations have helped people produce more goods in factories, which are commonly known as an immense part of the carbon emissions of the world. In addition, the increase in transportation, regardless of the means, contributed immensely to carbon emissions (Lund & Bughin, 2019). In conclusion, even if these innovations are important to trade, they are causing massive impacts on our environment that greatly affect people and their lives.

Past UN Actions

A lot of the damage being done to the environment results from free trade and its immense increase of transportation usage. With alarming rates of CO_2 coming from transportation, the United Nations Environment Programme (UNEP) created a program in 2002 called The Partnership for Clean Fuels and Vehicles (PCFV) that promotes cleaner alternatives to fossil fuels to fade out the use of this dangerous energy source. This program mainly tackles gas emissions from road transport; the global car fleet is foretold to triple by 2050 which prompted another UNEP initiative called The Global Fuel Economy Initiative (*Global Fuel Economy Initiative* n.d.). The program encourages developing and transitional countries to use greener, more energy-efficient vehicles. These programs, prompted by the UN, are the first approach to having clean energy for freight transportation, and reducing the increase of pollution in recent years due to free trade.

In the past the UN has worked to create agreements that work for a sustainable future: the "Paris Agreement, consisting of 196 nations who are working to reduce their production of

emissions in all areas, including trade" is an example of such teamwork (Kusnetz, 2021). This agreement is supposed to be finalized by the end of 2024, having reduced significant amounts of emissions and lengthening the future of life on earth; however, statistics are proving the treaty to be unsuccessful due to a lack of active participation from numerous nations. However, the increasing amount of awareness that has been settled in different countries demonstrates the extent to which the agreement has impacted daily life of people and enterprises; the slow implementation of green energy in vehicles, factories, and even homes of third world countries (*The Paris Agreement* n.d.). Although working to create a cheap, yet efficient and viable form of energy for both developed and developing countries is still a work in progress, research on it has started and given encouraging hope for developing accessible solar panels and easier access to different forms of energy including hydro and geothermal power.

IV. Key Players and Points of View

United States of America

The US recently had many problems concerning increasing carbon emissions. Ex-President Donald Trump has been known for his lack of action in combating climate change; on June 1, 2017, he announced that the US would be withdrawing itself from the Paris agreement that was signed by former president Obama in 2015. However, acting President Joe Biden, has officially signed an executive order to rejoin the Paris Agreement. This demonstrates the US' new initiative towards helping decrease the carbon emissions within their country in any way possible. Due to the COVID-19 pandemic there was a "10.3 percent decline in greenhouse gases last year but experts expect levels to rebound in 2021" (Storrow, 2021). Regarding trade in the US, several states have worked on a cap-and-trade program such as the one implemented in several European nations. For example, in California, "an extensive cap-and-trade program, which gives companies allowances, or caps, for how much carbon they can emit each year", was implemented; "over time, the caps get lowered, forcing companies to either pay to emit more" or decrease their emissions (La Shier, 2018). The US is currently working towards a better future with less emission and more alternative energy sources for energy production and consumption.

People's Republic of China

China is one of the world's trading powerhouse; its main export being manufactured goods. In 2019 alone, its trade with the US amounted to $558.1 billion USD (*The People's Republic of China* n.d.). The country also has an agreement with the Association of Southeast Asian Nations (ASEAN): the ASEAN-China Free Trade Area; this is a region comprising southeastern asian countries (*China-ASEAN FTA* 2018). Regarding environmental advances, China has a long way to go in order to significantly reduce its CO_2 levels. The country has had

issues with its environment for decades and there is little forecast of improvement in this situation (Zhao, et al., 2017). One of the major factors of pollution in China is air pollution, and this is mostly due to the amount of manufactured goods that they produce, especially in factories (Maizland, 2021). The lockdown caused by the COVID-19 pandemic, made China's "quarterly [CO_2] emissions" drop during "January-March 2020" (*Coronavirus: Week of ... conference* 2021). Fast forward a couple of months and the country's emissions fell again during the third quarter of 2021; the first time after China reactivated its economy (*Coronavirus: Week of ... conference* 2021). China has tried to make advancements regarding the very prominent issue of pollution through treaties such as the Paris climate accord.

United Kingdom

The United Kingdom (UK) has had some great initiatives towards the carbon emissions caused by free trade; however, they have an increasing demand on trade and are currently ranked as the third when it comes to trading activity. It is important to notice that after the UK left the European Union, several trading regulations changed due to the nature of Brexit: "The Trade and Cooperation Agreement was signed on 30 December 2020, was applied provisionally as of 1 January 2021 and entered into force on 1 May 2021" (*The EU-UK ... Agreement* 2021). However in 2018 the United Kingdom along with other countries decided to place a tax on carbon. This is with the purpose of discouraging fossil fuel emissions and promoting clean or other types of energy. In 2015, the average carbon-emissions per person in the country was 6.2 tons per person, this amount multiplied by the population of the UK added to the emissions from the government and private institutions would significantly add up (La Shier, 2018). Adding on, these measures have encouraged companies to invest in other alternative energy sources since in the long run, having a cleaner energy source will be cheaper than constantly paying the carbon tax each year.

Japan

Japan is considered to have one of the cleanest societies when compared to other countries in the world. The decarbonization plan that the Japanese government is planning to reach before 2050, focuses on reducing carbon gas emissions to reach net-zero (Shinjiro, 2021). As of 2020, the Japanese House of Representatives and the House of Councillors declared a climate emergency, which prioritized the use of renewable energy in all of Japan's sectors. This climate emergency came into action seeing how climate change accelerated, creating the need for systemic global action (Shinjiro, 2021). Japan's goal for 2050 is made up of three separate phases which are named the 'Three Transitions': they focus on a decarbonized society, a circular economy, and a decentralized society. Currently, the Japanese local governments are deeply dedicating their investments into the renewable energy and electric vehicles mainstream. Japan is a part of 21 signed Free Trade Agreements (FTA) and it's economy is based on a free market;

also, it is considered the third largest economy in the world by nominal GDP (*Country statistical profiles: ... OECD* 2013). This country is evidence that free trade and climate protection can coexist with each other.

Mexico

Mexico does not have a good past when it comes to CO_2 emissions, unfortunately "[i]n 1992, the UN declared Mexico City to be "the most polluted city on the planet" (*How Mexico City ... air* n.d.). However, this was almost 30 years ago, since then, Mexico City has been working on improving their CO_2 emissions; regardless, there has not been any major improvement in the past years. In 1994, after being declared as one of the most contaminated places, Mexico joined the North American Agreement on Environmental Cooperation. When it comes to trading, this agreement has helped to encourage pollution prevention, enhance compliance with environmental laws and regulations, and, most importantly, work towards the UN's Sustainable Development Goals (SDGs). Adding on, Mexico forms part of NAFTA, which was made the same day as the North American Agreement on Environmental Cooperation on January 1, 1994. NAFTA was created to establish a free trade zone between the US, Canada, and Mexico. This agreement brought many benefits to Mexico: "NAFTA boosted Mexican farm exports to the United States, which have tripled since the pact's implementation" (Chatzky et al., 2020). However, the trade also left many farmers, especially corn farmers, out of a job as they could not compete with the lower prices from US sellers. As a result, Mexico's production of corn decreased, and seeing how agricultural products are a significant part of the country's exports, it negatively affected the economy (Germano, 2009). Not only in Mexico, but overall, NAFTA has made a huge impact in North America: "Regional trade increased sharply over the treaty's first two decades, from roughly $290 billion in 1993 to more than $1.1 trillion in 2016" (Chatzky et al., 2020). Due to the expected high trades within Mexico, US, and Canada. That is why the North American Agreement on Environmental Cooperation was created with the purpose of not exceeding emissions in any of these places once NAFTA was implemented.

V. Possible Solutions

As the day where the damage done to the environment becomes irreversible gets closer, it is of vital importance to protect the ecosystems and the climate as much as possible from the growing agreement of free trade. Around 80% of world trade in goods is carried by the international shipping industry; this form of transport emits around 940 million tons of CO_2 every year. A possible solution to this problem would be for all shipping companies to incorporate scrubbers into the engines, this way the CO_2 emissions would be reduced as much as possible without doing any actual change. A way to meet clean-air requirements is having clean

fuel, and the scrubbers work to convert nitrous oxide gases into nitrogen and water (Doblin, 2017). This will also be helpful for ship companies as they will be able to comply with pollution regulations without having to change their fuel to low-sulfur type which is typically more expensive. Scrubbers are a cheaper and more accessible option. Likewise, support from the UNEP, WHO, and NGOS such as earthjustice, or Coalition for Clean Air will help companies better adapt their equipment and processes to fall under the maximum amount of emissions allowed by their nation (Helen, 2021).

Another proposal would be to have an agreement between countries where there is support of trade and environmental policies. The committee should come up with a structured plan that every country wishing to work within the free trade framework must follow. Participants can adopt regulations that the committee generates to protect the environment. Such measures could include fuel-efficient vehicles, strategies to reduce the miles traveled, amongst others (*Trade and environment* n.d.).

VI. Current Status

The emissions caused by free trade have become a problem that is getting more severe by the second. The fact that companies are constantly developing new technologies and others consistently use it irresponsibly has made it easier for trade to affect the amounts of carbon gas emissions that are released. However, the UN along with other first world countries including the US, have developed a 'green' approach to trade, where the use and implementation of clean energy is used to power all sorts of vehicles including: trailers, trucks, and hopefully one day even jets (Friedman, 2021). The COP26, which is the UN climate change conference, reached the conclusion that countries like China, who have the largest production of CO_2 and release of carbon gas emissions, will work to cut the number of fossil fuel pollution this 2020-2030 decade (Friedman, 2021). The US has become a key player for the reduction of carbon gas emissions, having President Joe Biden be an active advocate about the damage that is caused due to the release of carbon fuels; the country has made significant progress towards developing green energy around the world. In manufacturing, the US has companies, like Tesla, working towards the development of green energy for transporting goods, with the CEO, billionaire Elon Musk, notifying that he is working towards, the creation of a solar jet for imports and exports to reduce the number of greenhouse gasses release by the air travel industry (Kane, 2021). All in all, the current situation of this topic is very real and is affecting the livelihood of future generations by the second. It is important to recognize the urgency of this matter and take into consideration both sides of the conflict, the economic prosperity and the environmental damage it causes.

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