

*United Nations Conference on Trade and
Development (UNCTAD)*

*Regulating the Carbon
Impact of Companies in
the Face of Fast-Shipping
Mechanisms and the
Development of
E-Commerce*

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I. INTRODUCTION

UNCTAD, also known as the United Nations Conference on Trade and Development, is a permanent intergovernmental body led by Rebeca Grynspan since September 2021. UNCTAD was created by the General Assembly on December 30, 1964, with the purpose of “helping countries in development to have access to benefits of a globalized economy and a fair and effective manner” (DCED, 2016). “This committee also provides help for developing countries areas of the economy and trade analysis, facilitates consensus-building and offers assistance with the aim for these nations to use the trade, investments, finance, and technology for sustainable and inclusive development” (UNCTAD, n.d). It helps by "accelerating commercial and economic development, with special emphasis on developing countries" (UNCTAD, n.d). This intergovernmental body was created because of all the concerns that were among developing nations and to improve and take action in any circumstances regarding the economic systems and global situations. The headquarters of this organization are established in Geneva, Switzerland, with some offices that can be found in New York and Addis Ababa (UNCTAD, n.d).

Some actions that UNCTAD has taken are helping with international trading, and promoting international policies and strategies with the intention that development can be conducive and supportive to countries with the use of action plans. “UNCTAD contributes to international debates of globalization and the management of any consequence for developing countries” (UNCTAD, n.d). The organization is dedicated to building consensus among the international community mostly about any trade and negotiation-related issues. It is directed to policies, laws, and protection assignments for businesses of each nation to have adequate conditions and regulations for their consumers. It seeks to strengthen the capacities and promote partnerships for trading policies, trading negotiations, trades in goods and services, competition law, and consumer protection (ICPEN, n.d). UNCTAD looks forward to improving the resolution of management issues arising at the junction of trade, the environment, and climate change (UNCAD, n.d).

UNCTAD has established actions with the purpose of solving these issues, for example, the implementation of international expertise in fields of research and policy analysis, technical assistance, inter-governmental common consent establishment, in most consideration to investment and enterprise; and enhance the economic development and

competitiveness in developing countries in regards to science, technology and innovation, trade logistics and human resources development (DCED, n.d).

Taking into account the relationship between the slogan of PASMUN 2025 "Tomorrow shines through" and this topic, it is important to highlight the present advancements. This is an important and present concern since regulating the carbon impact of companies in the face of fast-shipping mechanisms and the development of E-Commerce is a topic that is quite present nowadays. Due to the Covid-19 pandemic, the rate of online purchases increased and took an unexpected leap so companies had to make fast deliveries, which has created a carbon footprint in recent years. Not to mention the impact that fast shipping has on the environment and the economy since prices have increased between 15 and 61 percent due to the demand for shipping. In the case of the environment, a lot of damage has been created since carbon dioxide emissions have increased due to the burning of fossil fuels that are necessary for the transportation of products (El País, 2019).

This conference aims to discuss the possible measures we can take to reduce the carbon footprint due to fast shipping with the expectation of meeting the goal of reducing the environmental and economic impact. It is essential to have a mentality towards the future to be able to solve this problem that is continually affecting us globally. The main objective is to find solutions for nations that will lead to the reduction of the production of carbon dioxide and the impact generated in the environment, whilst not tampering with the development of businesses and economic growth.

II. HISTORY OF THE PROBLEM

Home deliveries began in the 1950s as a result of the invention of television. Commercial marketing began to be relevant to citizens and businesses, transforming the way of living. Mainly food restaurants took advantage of the new industry and began to make food deliveries for people's houses as a new type of service and economic opportunity. For several decades this continued until the technological revolution in the 2000s. The technological revolution took place when people began to buy products online because of e-commerce, which developed more and more with time. The great leap in online shopping occurred in 2021 due to the Covid-19 pandemic. Citizens could not leave their homes, and as

a result, turned to online shopping, transforming control habits, and drastically increasing the market value of e-commerce. With all the e-commerce activity, businesses needed to develop their delivery services to provide a faster service for consumers. (Nuñez, P, 2024)

Without shipping the trade industry wouldn't develop nor generate an impact on people's consumption. Consumers spend approximately \$600 billion on online purchases and this figure is increasing annually. All these purchases generate a great environmental impact which buyers do not realize. The shipping and fast deliveries have provoked a huge carbon footprint that consumers and businesses seldom consider. This consumption generates from 3 to 7 percent of carbon dioxide emissions. The numbers have increased since 2020 and from then, the expectation of rapid delivery has been increasing as well as the stress in the supply logistics, chain and storage, and distribution problems (Nuñez, P, 2024).

E-Commerce:

E-commerce is the exchange of goods, purchases, and services through the Internet and online market, it includes all types of digital platforms such as social networks, websites, and mobile applications. E-commerce began in 1982 on an internet site where people sold and bought used computers. From that time on it began the creation of online shopping companies as we know them today. This modality grew rapidly due to its effectiveness and speed of purchasing, competition, and low cost. Soon the business began to make improvements in different areas such as the security of online payments. Currently, a large part of the population prefers to buy online than go to physical stores (WConect, 2023).

In 1995 two of the giants of e-commerce were launched, Amazon and eBay. Later in 1999, Alibaba was introduced to the competition in the market. As a consequence of the great impact that online shopping was generating, companies had to adapt and accelerate their delivery process without taking much consideration about the carbon footprint. E-commerce is extremely important for companies and their economic development. As long as e-commerce continues to grow, inflation will decrease due to cost savings coming from lower costs of products and services in e-commerce. In addition to the fact that due to the accessibility e-commerce gives (allowing consumers to purchase wherever and whenever they are or want in a few minutes) there is an increasing demand for products and a increase in the development of e-commerce making it a change in the costs it provides (Technopedia, n.d.). In addition, the new generations (Gen Z for example) feel much more comfortable buying online, unlike other generations. We must take into consideration that when buying

online you do not have that contact and emotional attachment that you have to brands when you buy in person or physical stores. This has been affecting the relationship between customers and the stores, especially for the older generation giving them a different criteria for choosing where to buy. These relationships have been leading to what makes many customers loyal and consistent with the commerce in physical stores but others due to efficiency and accessibility rather maintain loyalty with e-commerce (Technopedia, n.d.). As time passes older generations start to adapt and use e-commerce and with time the demand for it will increase causing an increase in shipping and delivery services that will impact more the environment if they aren't precautions in business.

Carbon footprint:

E-commerce has seen an outstanding presence in businesses internationally despite that this type of commerce has emitted a huge carbon footprint worldwide. Most of the trade industry, like e-commerce, has low sustainability aspects that have been affecting our environment globally. One of the most influencing factors of e-commerce in the increase of the carbon footprint is the deliveries, in particular deliveries like B2B which is the exchange that occurs between businesses, B2C which involves businesses selling products or services to the consumer who requires it, and D2C which is the shipping directly to the consumer (Wired, 2023). Fast shipping and deliveries are crucial for the environment due to all the carbon emissions generated. In 2021 a study made by Global Carbon Atlas proved that 3 countries were responsible for 51.7 percent of the total carbon dioxide emissions, these countries were the United States of America, China, and India. In the same study, it was demonstrated that of the total carbon emissions, 10.4 percent were coming from countries of Europe, 48.3 percent from Asia, 16.1 percent from North America, and 25.3 percent from the rest of the globe. In 2022 the transportation of returned products in the United States ended up producing 24 million metric tons of carbon dioxide emissions. In the same year, the International Energy Agency reported that the amount of greenhouse gasses released because of fossil fuels burning was off 36.8 gigatonnes. Due to e-commerce, transportation, and other activities, carbon emissions have resulted as a consequence there has been a considerable increase in global warming. Despite the huge amount of carbon emissions, e-commerce has been helpful in the trade industry.

China:

The report provided by Wired in 2023 points out that China is the largest emitter of CO₂ in the entire globe. In 2021, it generated 30.9% of greenhouse gas emissions with 10,668 million metric tons (Wired, 2023). One of the factors that has contributed to the increase in carbon dioxide numbers is the greenhouse effect and the burning of fossil fuels, which are used as fuel for fast shipping trucks, of which China is a great leader because it has the most visited companies on the internet and well-known fast shipping companies on the market (Wired, 2023).

The environmental impact they generate due to carbon dioxide is impressive, it exceeds other countries by a huge amount and continues to increase. "If China does not make major reductions in the release of pollutants into the environment, experts say, the world cannot win the fight against climate change" (BBC News, 2024).

In China, fast shipping companies stand out, nevertheless, one that has become popular both in China and in other places in the world is Temu. Temu is an e-commerce company with fairly low prices. This company does not have much environmental awareness owing that on average it sends around a million packages daily and the impact it has is impressive. With the growth of e-commerce and online platforms, daily shipments are increasing more and more as time passes by, which also increases carbon dioxide in the environment. This does not only increase on land: shipments by sea and by air have also been increasing. Sky shipping has been generating even more CO₂, and meanwhile, consumers are looking forward to faster orders (The Logistics World, 2024).

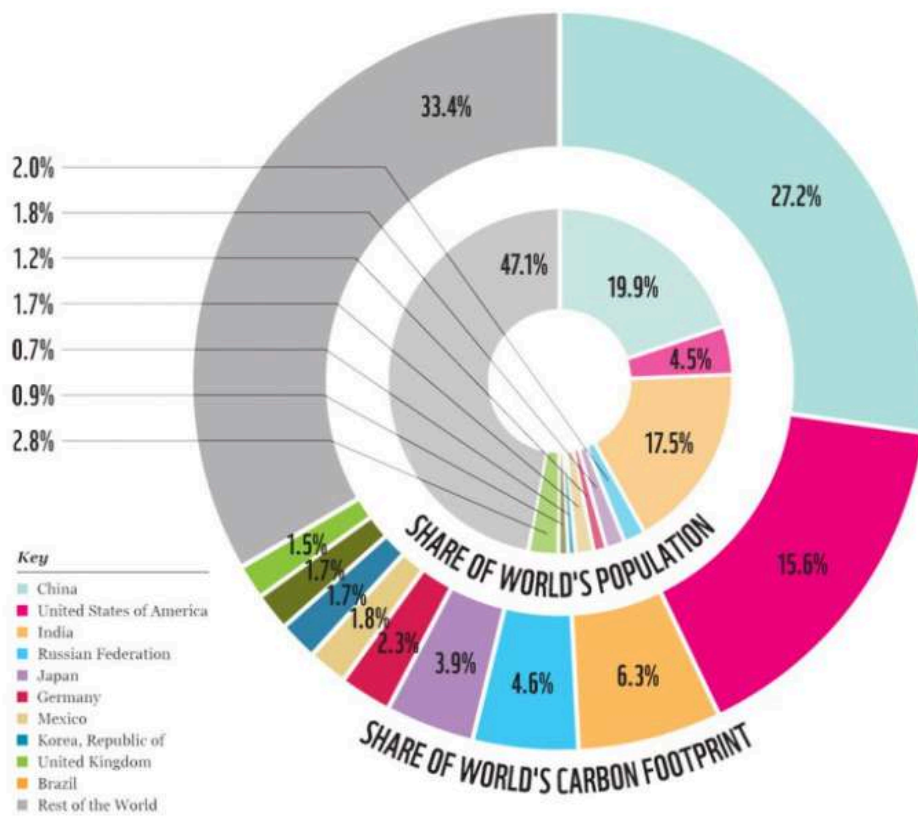
United States of America:

The United States is, after China, the country with the highest carbon dioxide emissions and the main cause is the burning of fossil fuels for electricity and transportation. The situation is that citizens increasingly want faster deliveries, without considering the impact they are generating. This is mainly because consumers are not aware of this situation and they do not see the point in spending so much time shopping when they can do so from the comfort of their homes but "the faster we want our packages delivered, the more impact our orders have on the environment" (UCDAVIS, 2024). Companies are also preferring the speed of delivery over quality and efficiency, thus they send many vehicles and few packages, which increases traffic, the use of fuels, and therefore carbon dioxide emissions (UCDAVIS, 2024).

During the pandemic, e-commerce increased a lot because it was the only way to obtain certain products that we use on a daily basis. At the top of this situation is the online shopping company "Amazon", which promises to drastically reduce its carbon footprint when in reality it is a constant emitter. From 2019 to 2021 there was a 40 percent increase in CO2 emissions; these emissions are generated by their electricity, their use of vehicles, and their offices. Even though Amazon is a company with a huge carbon footprint, it is not responsible for emissions generated by the manufacturers of products that are not the company's own, nevertheless, it does leave a carbon footprint (Day, M, 2022) Although this problem is not only the responsibility of the company, it is also a consequence of the lack of communication between manufacturers and intermediaries about how the distribution of the responsibility that comes with leaving such a large carbon footprint will be carried out.

III. CURRENT SITUATION

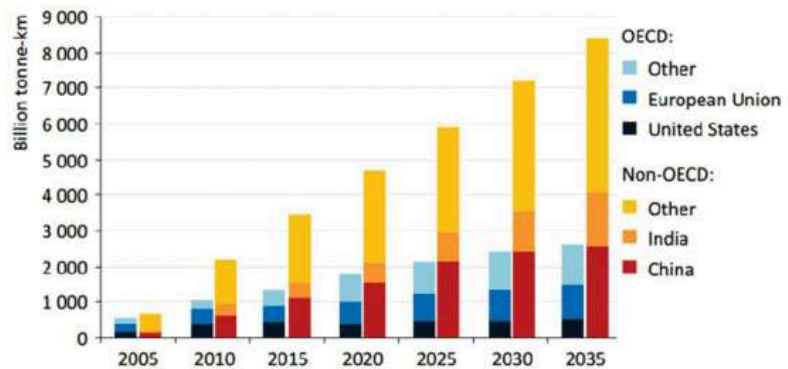
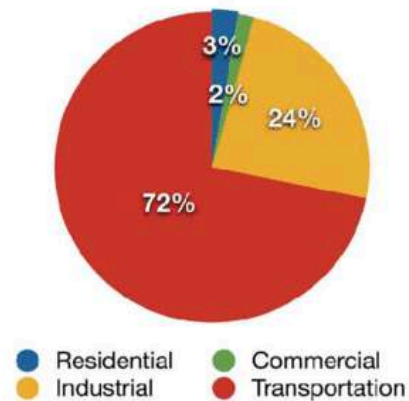
In recent years, CO2 emissions, climate change, and the carbon footprint have increased considerably as a result of the online shopping industry and the Covid-19 pandemic. The increase of platforms that promote e-commerce and the way users increasingly demand faster deliveries of their products has given as a consequence higher levels of CO2 emissions. According to the statistics given by Statista in the year 2023, e-commerce and online purchases have increased by 90 percent since 2020. This acceleration of fast shipping has created an impressive carbon footprint worldwide, with a total of 6 million tons of carbon dioxide emissions. (GISA, n.d)



A

(Ghaffar Ali, 2018)

This issue is of utmost importance because e-commerce is not going to disappear, but rather it is going to become increasingly stronger and more developed. It is relevant to discuss possible solutions because if the carbon footprint continues to increase, in some years global warming and high temperatures will harm the global population. Although the burning of fuels used to transport products is not the only thing that increases the carbon footprint, it is one of the factors that produces a huge amount of it. (GISA, 2023)



B

(Murgia, F, 2016)

The Impact

If fossil fuel burning continues it will cause major issues worldwide such as the increasingly constant growth of CO₂, therefore climate change will continue to accelerate. It is expected that CO₂ emissions will increase by a huge amount provoking health issues, and danger in biodiversity, among many other consequences. Due to the huge amount of CO₂ emissions, climate change is worsening radically, and it does not only affect the weather but also many other aspects such as the rise in sea level, which is believed by Descubre WWF to increase radically by the year 2100. In the same year, Descubre WWF also believed that corals will be at risk of degradation. This is because climate change generates an increase in high temperatures, also increasing the temperature of the sea, which causes the symbiotic relationship that exists between corals and algae to break, causing the coral to expel the algae, so the Corals lose their color and become increasingly weaker. (Creary, M, n.d) The Arctic and the poles will thaw faster than they should. The poles are one of the most affected factors because shipping generates large CO₂ emissions, which is why global warming increases more and more, damaging the state of the poles. At least every 20 years we will be exposed to extreme heat waves affecting millions of people and animal species. Extreme heat will increase heart disease; and worsen air quality, which leads to the growth of risk in respiratory diseases such as asthma, and kidney failure, among others. The risk of flooding will also increase due to the intensity of the downpours while the water will increasingly be more polluted. This will create a greater possibility of obtaining diseases through water, whether residual or potable. It will also affect the quality of foods consumed daily, for example, wheat and rice. It will increase the risk of losing more than half of the natural habitats of animals.

Clearly all of this is not just a product of shipping and its large carbon emissions, although it is a large percentage, it also affects other factors such as ourselves and our lack of care for the planet. Climate change will also increase the risk of large fires, which will also impact natural habitats and our daily lives; therefore the cases of species in danger of extinction and definitive extinction will also increase massively. “On average, the carbon dioxide concentration associated with extinction events in biodiversity is 870 parts per million by volume (ppmv). Currently, a concentration of 421 ppmv of the gas on Earth is estimated” (González F. 2023).

Consumers Statistics

Because of the COVID-19 pandemic, companies had to face a huge change for which they were not prepared. Companies were not prepared to meet consumer desires, therefore they did not think about the consequences fast shipping would provoke in the future. Consumers are aware of the implications of fast shipping, however they increasingly ask for faster deliveries and better services. According to statistics presented by Ware2Go, 33 percent of users have high expectations for fast shipping, and 42 percent wait approximately two days for each purchase they make (Ware2Go, 2022). Most of these percentages arise because when consumers have the option of being sustainable or having their product faster, they choose to have their product faster even when taking into account the consequences of their actions. Although users are aware of the consequences, very few do anything to stop this impact. According to consumer statistics, 88 percent of shoppers say sustainability is of utmost importance in their decisions, and 66 percent state that sustainability is increasingly important (Ware2Go, 2022). A Harvard study has shown that 65 percent of consumers think that it is important to take care of the environment and say that something must be done to help it, yet only 25 percent actually do something. (Jackson, P, 2022)

E-commerce Industry

E-commerce has been a controversial industrial mechanism due to the impact it has on the environment. Nevertheless, e-Commerce has been beneficial as a market tool for people especially from the increment of users during the years of the Covid-19 pandemic. E-Commerce provided ways of getting products, globally and locally during the years of the pandemic. The Internet and purchases through online businesses were the only way in which people could get items that were not available in established stores. E-commerce and online purchases accounted for revenues of around 4,2 billion dollars in 2020 and in the following

years, the industry has seen impressive growth. Even after the pandemic and the opening of many physical stores, many consumers stuck with e-commerce services proving that it would be an industry that would be permanent for upcoming years. The development of e-commerce has established new ways and opportunities for consumers to buy products or services having a lot of online sites in which they can look for products and services without regard to the hour or location. Many businesses use the model of B2B in their deliveries (Business to business) but also there are still many dedicated for use by particular customers which can cause a different management in transport. There are many businesses that are dedicated to B2C (Business to Consumer), as an example, there is one of the leading marketplaces online that uses mostly that model, Amazon, which on average recorded around 5,000 million monthly views in 2023. Businesses that are B2C in their deliveries manage their transport differently as it is more diverse, being particularly for consumers affecting the efficiency in shipping. E-commerce has attracted many consumers due to the free shipping and attention services. Most purchases come from smartphones, making shopping accessible for people. E-commerce is a huge industry beneficial for many people and markets, however, there still needs to be restrictions regarding fast shipping and as a consequence of carbon emissions as well. E-commerce has given huge economic benefits but it also has been forecasted to produce 25 million CO₂ metric tons by 2030 due to distribution and transportation of goods (Coppola D, 2024). Because e-commerce has been leaving a huge carbon footprint, some countries worldwide started to take action to reduce the carbon emissions this industry generates (González, F, 2023).

As an example of the actions is the Paris agreement in which we have the participation of more than 29 countries. Other examples include Spain, which recently declared a climate and environmental emergency and the draft of a new climate change law that guarantees net emissions. For its part, the European Union also declared an environmental emergency and urged everyone to act correctly in the situation. It has also implemented the European climate law and the European Green Pact, which includes around 50 solutions to combat climate change and their causes. Germany, the United Kingdom and France have also shared their solutions, which include the implementation of laws, committees and projects with the purpose of reducing carbon emissions and fossil fuel consumption by up to 60% by 2030 (Robaina, E, 2020).

IV. UN ACTIONS

The United Nations has expressed its concern about the recent increase in environmental changes, global warming, and CO₂ emissions, especially due to shipping. Even though initiative has taken place to solve this global issue, the actions that have been taken still can be developed in order that there is improvement in the execution and provides better results. For that reason, the United Nations has contributed to the creation of numerous campaigns that promote and support countries to reduce their carbon footprint. It is well known that in 2012 the United Nations created the 17 Sustainable Development Goals (SDGs) as a call to action and one of the first steps to generate a change (ACE, 2023).

In 1964, concern was expressed about the use of financial and technological resources in order to have sustainable and inclusive development (MAEUEC, n.d), therefore the United Nations Conference for Trade and Development was created. Since its creation, UNCTAD has taken numerous actions to find a solution to this problem. It has created a sustainable development plan which is estimated to be carried out by the year 2030. The given report consists of the request for changes in political areas and the banks, with the main purpose of the economy being led in the right direction by strengthening financially and generating better jobs (UNCTAD, 2023). Not only the change in the economy would help in employment but also it will lead to solutions and improvements for environmental issues with the given support in the change of political and economical areas for business.

The UN also created organizations, as an example, the International Maritime Organization (IMO) on March 17, 1958. The organization is a United Nations specialized agency with the main responsibility for the safety and security of shipping and the prevention of marine and atmospheric pollution by ships (IMO, n.d). In July 2023, a new strategy was implemented to reduce climate change. This strategy includes the goal of having 0 percent greenhouse gas emissions by the year 2050. The International Maritime Organization, while attempting to achieve net-zero emissions, has established different targets for the years 2030 and 2040. The target forecast cutting emissions by 20 to 30 percent in 2030 and 70 to 80 percent in 2040, taking into account reference levels from 2008 (IMO, n.d.).

Although many of their projects have been successful, they have not been able to achieve the goal of directing the maritime sector to the agreements and objectives of the Paris Agreement. IMO has also participated in the creation of the Energy Efficiency Design Index (EEDI) in July 2011, the first globally binding design standard aimed at reducing climate change related to maritime transport (T&E, n.d). This organization aims to promote the use of more energy-efficient equipment and machinery (IMO, n.d). Owing to this organization, the efficiency of transportation by boat has increased in effectiveness, although it is also due to changes in the market. As a result of the EEDI, the ships' standards have risen in efficiency, looking forward to an improvement in the use of energy. This organization has put together a plan divided in phases for different years with the purpose of fulfilling the standards established for ship efficiency in following years. In order to carry out the estimations the organization evaluated and considered the average efficiency in ships that were built in the years 2000 to 2010, with that information they forecasted the standards for their plan (OMI, n.d).

The Paris Agreement was signed on December 12, 2015. It is a treaty that has the purpose of taking action against climate change internationally. It was generated after the SDGs, looking forward to promoting a bigger change and an improvement in achieving the objectives established. Its overarching goal is to hold “the increase in the global average temperature to well below 2°C above pre-industrial levels” and pursue efforts “to limit the temperature increase to 1.5°C above pre-industrial levels” (UN, n.d). This treaty seeks economic and social transformation in order to achieve true change globally. The countries support each other not only financially but also, the treaty encourages them to share their ideas for possible solutions against climate change and carbon emissions (UN Climate Change, n.d).

This is achieved through a transparency framework (ETF) in which countries report on their progress, experiences, and achievements on the topic. What this treaty has done is impressive, after all, it has made countries like China, Japan, and the United States of America, which are the ones that statistically generate the most carbon dioxide emissions, join together and allow them to work to neutralize carbon dioxide and reach their net zero targets, which means that each country must make an effort to achieve as much as possible 0 carbon dioxide emissions (Nahm, J. 2023). Part of the focus point in the agreement has been

the establishment of co-financial support for the green transition; lowering the use of fossil fuels and being able to fulfill the SDGs. The Paris Agreement has allowed financial aid to countries that need it with the necessary support in different areas plus the main purpose of reducing carbon dioxide emissions and greenhouse gas emissions (Nahm, J. 2023).

The UN has been somewhat involved in e-commerce. It has created various organizations which seek the development of e-commerce, such as UNCTAD and UNDP, which have said that they are seeking the development and exploitation of electronic commerce. Not to mention that he has also made various reviews and reports on the subject. These reports provide us with information on opportunities and challenges regarding electronic commerce and the digital economy.

V. POSSIBLE SOLUTIONS

Regulating the carbon impact of companies in the face of fast-shipping mechanisms and the development of e-commerce is a critical economic, social, and environmental issue. The following are possible measures that can be considered to address this problem, expecting to reduce the carbon impact and sustainably achieve growth in the market.

1. Considering liquid natural gas (LNG) as an alternative to fossil fuels:
 - a) As studies have suggested, liquid natural gas is a main alternative to fossil fuel burning. LNG is mostly forecast to replace shipping machinery with the use of easy fuels, diesel, marine gas oil (MGO), and even conventional heavy fuel oil due to its efficiency. As research has shown, liquid natural gas is able to reduce greenhouse gas emissions by 10 percent in comparison to diesel.
 - b) Despite the great advantage liquid natural gas has shown, in some studies presented there are still considerations before its implementation as an alternative for fossil fuels. There have been analyses that have shown they are worst-case scenarios in which LNG may generate an increase in greenhouse gas emissions in comparison to MGO and diesel fuels. Nevertheless the LNG is in studies and with the help of research it will prove its usage and efficiency as an alternative. If the liquid natural gas is proven to have advantage as an alternative by reducing greenhouse emissions, its use should be promoted.

2. Strengthening the application of solutions provided by the Paris Agreement:
 - a) In 2015, the Paris Agreement was established and signed by 196 parties at the UN Climate Change Conference to commit to taking action against climate change (Climate Trade, 2023). With this treaty, countries have made efforts to achieve the measure limits like Sweden that is expecting to cut greenhouse gas emissions to 59%, Norway that has concentrated on reducing greenhouse gas emissions by half, Denmark that is working to cut 70% of greenhouse gas emissions, inter alia, most of them established by the year 2030. Greenhouse gas emissions will need to be reduced by 43 percent.
 - b) In the treaty, it is established that nations must have a transparency frame worldwide and make contributions in order to fulfill the determined objectives. Countries are encouraged to accomplish more ambitious goals every 5 years with the use of strategy plans. Shipping is an industry that should be taken more into consideration for countries to take action in order to reduce emissions.
3. Developing more efficient designs for transport ships:
 - a) Even though the development of new designs and their production would take a demanding economic value for countries (mostly for developing nations), the development of these designs would be able to improve the efficiency shipping has allowing to have a great quality in services while decreasing the carbon dioxide emissions generated by the transportation in takes on the market. The use of new designs with new technologies allows them to be energy efficient, having better results at the environmental and market aspects.
 - b) In order to take action in the development of new technologies and designs for shipments, countries can establish regulations, restrictions or specifications for the development and applications of ships and transports dedicated to deliveries with which enterprises can take consideration while making designs and decisions. As an example countries can provide regulations for how much carbon emissions their ships are allowed to emit. Plus nations may require the use of R&D plans (Research and Development) with which they can find criteria for their new designs based on information and with time be able to

develop the designs and their outcomes with a better use in technology and efficiency.

- c) Data has shown that the shipping industry has fallen into contradictions regarding the environmental performance they have. Instead of reducing the carbon footprint, the machinery of 2013 was 10 percent less efficient than around a century ago. The development of new designs will allow the performance of shipping to keep growing as a customer service in the development of a more sustainable use of shipping without leaving behind the E-commerce market.

4. Encouraging the e-commerce industry to use renewable energies:

- a) The use of renewable energy comes with many advantages even though in business it might have critical opinion due to the economic demand it has as a starting point. Renewable energy allows businesses to decrease the carbon footprint they leave while having better efficiency in most of the machinery and services they use and provide.
- b) Renewable energy is one of the most common alternatives for energy usage however is one of the most complicated to persuade to use due to the installations and modifications it comes with. It is necessary to provide encouragement so the E-commerce industry develops the use of renewable energies in their services and installations having a much better environmental impact fulfilling with consumer expectations and with the growing of the market worldwide.

VI. COUNTRIES INVOLVED

1. People's Republic of China

China has been involved in the controversial topic of fast shipping, e-commerce, and its consequences; mostly in the environmental area. This is because it has been proven that China is the largest emitter of CO₂ globally. The number of CO₂ emissions gradually increased as a result of the COVID-19 pandemic due to the great leap that online shopping took and consumer expectations towards increasingly faster delivery. China is known for having the largest express delivery companies in the world, although not many people nor consumers know that most of these companies in the market have no environmental

awareness or responsibility for the damage they do. As important information, it is relevant to know that in the year 2023, a meeting was held with the head of UNCTAD and the Chinese vice prime minister in which the current situation was discussed, speaking in terms of economy and trade, as well as China's cooperation with UNCTAD (UNCTAD, 2023). In order to reduce the carbon footprint China invested around 758 Billion US Dollars in renewable energy from 2010 to 2019 (Climate Trade, 2023).

2. United States of America

According to statistics, the United States is in the number two position after China in CO₂ emissions per country, with approximate emissions of 5,011,686,600 tons emitted annually (Worldometer, n.d). This is mainly due to the burning of fuels in order to provide electricity and transportation at a low economic cost without any notion of environmental damage it provokes. Also, this country is in second place after China in the top 10 Largest E-Commerce Markets in the World (Farlie, 2024). The United States is as well at second place in exporters and first place in importers with its top destinations being Canada, Mexico, China, Japan, and the United Kingdom (World Options, 2022). The United States has taken action to reduce carbon dioxide emissions, investing from 2010 to 2019 around 356 Billion US Dollars in renewable energies.

3. Japan

Japan is in position number three of relevance due to many facts. One of the facts is that statistically, Japan is in position number five for the highest CO₂ emissions globally with 1,239,592,060 tons emitted annually. It is in fourth place in the top 10 Largest E-Commerce Markets in the World, while also being number 5 in top exporters and position number 3 of importers worldwide. This is because it exports mostly automobile parts and imports clothing and oil mostly from the United States, China, South Korea, Taiwan, and Hong Kong (World Options, 2022). The Tokyo metropolitan government launched a new strategy in 2020 with the aim of achieving net-zero carbon emissions. Likewise, Japan is aware that to achieve the desired changes, it is also necessary to focus on other factors including the reduction of climate pollutants, the elimination of plastic waste in the seas and food waste, as well as increasing hybrid means of transportation, and encouraging companies to reduce vehicle emissions. According to a 2020 report made by JP Morgan, Japan's ecommerce market is set to be worth \$150.1 billion, with a compound annual growth rate of 6.2 per cent. Also it has a

big dominance since Japan is characterized to know about the management of business and how to grow focusing on customers and their needs. (C. Diep, 2023)

4. Republic of Korea

Statistics say that South Korea is in the number two position in CO2 emissions globally with 604,043,830 tons of emissions. It is in position number five of the top 10 Largest E-Commerce Markets in the World with \$147.4 billion in annual sales, position number six in exporters, and position number five in importers. Its main trading partners in terms of exports in 2022 were China, the United States, Vietnam, Japan, and Hong Kong (World Options, 2022). In general, the Asian region is number one in e-commerce. The Ministry of Government Administration and Home Affairs (MOGAHA) and UNCTAD have cooperated closely since 2011 to improve the capacity of developing countries to benefit from information and communications technologies (ICTs), notably with regard to e-government (UNCTAD, 2014). Korea is implementing a new policy to achieve zero emissions, starting with the immediate halting of construction of coal-fired factories and replacing them with renewable energy factories. According to the ICEX, e-commerce sales have gradually increased in recent years and are expected to continue increasing. E-commerce and fast shipping have elevated technological development in South Korea since many citizens consider fast shipping and E-commerce as an opportunity for large companies (ISEX, 2022)

5. Republic of India

The Republic of India is ranked number three on the list of CO2 emissions by country with 2,533,638,100 tons of emissions annually. It is ranked number six in the top 10 Largest E-Commerce Markets in the World with \$118.9 billion in annual online sales. In addition, E-commerce in India is complicated due to several factors, which include low economic resources, logistics problems, delivery problems, etc.. India works cooperatively with UNCTAD to create durable public goods through different types of technologies. Despite continuing to continuously support UNCTAD, India has expressed its position on the organization's actions, since although it is known that it is complicated to deal with the current problems, India argues that the support and relevance given by the organization could increase. The Republic of India is willing to reduce its CO2 emissions, however, it assures that in order to achieve these objectives it will be necessary to provide financing from nations with more financial resources.

- 6. Federal Republic of Germany**
- 7. United Kingdom of Great Britain and Northern Ireland**
- 8. Dominion of Canada**
- 9. French Republic**
- 10. Republic of Indonesia**
- 11. Russian Federation**
- 12. Islamic Republic of Iran**
- 13. Commonwealth of Australia**
- 14. United Mexican States**
- 15. Federative Republic of Brazil**
- 16. Kingdom of Saudi Arabia**
- 17. Italian Republic**
- 18. Kingdom of the Netherlands**
- 19. Republic of Turkey**
- 20. Republic of South Africa**
- 21. New Zealand**
- 22. Kingdom of Sweden**
- 23. Kingdom of Norway**
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