– технології», які пропонує враховувати концепція енергетичної пенталемми, є перехід до нової моделі ресурсозберігаючого енергоефективного типу соціально-економічного розвитку. Важливим інтегруючим висновком із наведених відповідних спостережень є те, що досягнення цілей сталого розвитку може відбуватися без істотного збільшення енергоспоживання за одночасного досягнення прийнятного рівня національної енергетичної безпеки.

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THE IMPACT OF CLIMATE CHANGE ON INTERNATIONAL TRADE AND INVESTMENT IN THE POST-PANDEMIC PERIOD

Climate change and the COVID-19 pandemic are two global crises that have had significant impacts on various aspects of our world. While the pandemic has disrupted economies and international trade, climate change continues to pose a threat to the planet's ecosystems and social systems. As the world seeks to recover from the pandemic, it is crucial to examine how climate change will impact international trade and investment in the post-pandemic period. This thesis seeks to analyze the intersection of climate change and international trade and investment, exploring the potential implications for businesses and policymakers in the post-pandemic era

International trade refers to the exchange of goods and services between countries. It is the backbone of the global economy and has been a driving force behind economic growth and development for centuries. On the other hand, international investment refers to the movement of capital across borders in order to acquire assets or establish business operations in foreign countries. It is an important source of capital for many countries and can help promote economic growth and development. International trade is the lifeblood of the world economy, providing the goods and services that are traded across borders to bring wealth and prosperity to nations.

International trade flows along hugely complex supply chains between nations that source raw materials, to manufacturing countries that make and process them, and then on to consumer nations, which put the final products to use. When trade is allowed to flourish, the nexus of supply routes, suppliers, processors and consumers behaves like a living thing. When change happens at any one link in the chain, say, when a miner of iron ore goes bust, or when the price of the metal suddenly rises – that will reverberate along the chain.

Climate change has a profound impact on people's lives across the world. Mitigating and adapting to climate change will require major economic investment and coordinated action to transition to a sustainable, low-carbon economy. Fighting climate change is vital to equitable global development and poverty reduction—and international trade can have an important role to play in this endeavor. Trade can help countries adapt to higher average temperatures and more extreme weather events by offering consumers lower-emissions goods and services and facilitating the use of renewable energy(1)(2). Under current trade barriers, a pessimistic scenario of high global warming (+4 °C by 2100) with no benefits from enhanced atmospheric CO 2 on crops could cause up to an additional 55 million people to be at risk of hunger by 2050(3).

Climate change has been a major global issue for several years, and the COVID-19 pandemic has further emphasized the need for concerted action to address its impacts. The post-pandemic period is likely to see a significant impact on international trade and investment due to climate change, with some of the key effects discussed below.

1. Increased demand for renewable energy. One of the most significant effects of climate Change in international trade and investment is the shift towards renewable energy. As countries seek to reduce their carbon emissions, there will be a significant increase in demand for renewable energy sources such as solar and wind power. According to the International Energy Agency (IEA), renewable energy use increased by 3% in 2020 as demand for all other fuels declined. The primary driver was an almost 7% growth in electricity generation from renewable sources. Long-term

contracts, priority access to the grid, and continuous installation of new plants underpinned renewables growth despite lower electricity demand, supply chain disruptions and construction delays caused by the COVID-19 pandemic (4).

Renewable capacity is expected to further increase over 8% in 2022, reaching almost 320 GW. However, unless new policies are implemented rapidly, growth remains stable in 2023 because solar PV expansion cannot fully compensate for lower hydropower and steady year-on-year wind additions(5).

Renewables are set to account for almost 95% of the increase in global power capacity through 2026, with solar PV alone providing more than half. The amount of renewable capacity added over the period of 2021 to 2026 is expected to be 50% higher than from 2015 to 2020(6)

2. Increased regulation and compliance costs. As the impact of climate change grows the governments seek to tackle it as effectively as possible and this will lead to an increase in regulation and compliance costs for businesses. This will affect international trade and investment as companies may face additional costs and requirements when exporting to other countries. Countries may also impose trade barriers on products that do not meet their environmental standards, which could further complicate international trade. Increased regulation and compliance costs in international trade can be caused by various factors such as the need for more documentation, inspections, and certifications and these costs can be incurred by both importers and exporters. The pandemic has also driven up compliance costs. According to a study, global compliance costs increased $33 billion from 2019 to 2020, totaling $213.9 billion last year. More than 89% of those costs were borne by U.S. and western countries(6)

3. Changes in supply chain dynamics: Climate change may also impact supply chain dynamics as companies seek to reduce their carbon footprint. This could lead to a shift towards local sourcing and manufacturing, which may impact international trade. Companies may also look towards reducing their exposure to climate-related risks by diversifying their supply chains and investing in climate-resilient infrastructure.

The COVID-19 pandemic has caused significant changes in supply chain dynamics in international trade. The product structure of merchandise trade changed significantly: trade in several products nosedived (e.g. fuels, aircrafts, cars, mechanical machinery, steel), while trade in some other products increased (e.g. protective equipment and pharmaceutical products, food, and ‘home nesting’ products such as domestic appliances and electronics) (7)

4. Increased focus on sustainable finance:Sustainable finance is the process of taking due account of environmental, social and governance (ESG) considerations when making investment decisions in the financial sector, leading to increased longer-term investments into sustainable economic activities and projects(8).

There is an increased focus on sustainable finance in international investment. The EU Sustainable Finance Disclosure Regulation (SFDR) is one part of a wider package of ESG rules impacting asset managers and asset owners (including investment funds). The SFDR requires companies to disclose whether and how ESG factors are integrated into investment(9).

Climate change may also impact international investment as investors become increasingly focused on sustainable finance. This could lead to a shift towards investments in companies that are aligned with environmental, social, and governance (ESG) criteria. Countries that are seen as leading the way in addressing climate change may also attract more investment from these types of investors

5. Impacts on developing countries: Developing countries are likely to be particularly affected by the impacts of climate change on international trade and investment. Many of these countries rely solely on exports of natural resources such as oil and gas,and as the world is shifting towards more sustainable and renewable energy these countries are put at a big disadvantage. They may also face challenges in meeting the regulatory and compliance requirements of developed countries, which could impact their ability to trade internationally. Just like any other thing in this world, international trade and investments have both advantages and disadvantages. On the more positive side,international trade can help developing countries to grow their economies by providing access to new markets and sources of capital. On the down side, it can lead to increased competition from foreign firms, which can hurt domestic industries and lead to job losses.

FDIs are an important source of capital for many developing countries, however it can also have negative impacts on developing countries if it is not managed properly. The most prominent side effect to FDIs is the exploitation of natural resources and the displacement of local communities.

It is important for developing countries to carefully manage their trade and investment policies in order to maximize the benefits and minimize the risks. This can involve measures such as promoting exports of high-value-added products, attracting high-quality FDI, and implementing policies that support domestic industries.

The impact of climate change on international trade and investment in the post-pandemic period is most likely going to be of great influence and significance . As climate change continues to be a challenge that we face every day and in all aspects of both our economies and day-to-day life, businesses and governments have to adapt their implementations to alleviate and adapt to these changes.There is an immediate need for policymakers to consider the impacts of climate change on international trade and investment and develop strategies to build resilience and promote sustainable economic growth. Only through joint action and cooperation will we be able to address the challenges posed by climate change and safeguard the future of our planet and its economies.

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RENEWABLE ENERGY IN ECUADOR

Ecuador is a country located in the northwestern part of South America, with a population of approximately 17 million people. The country is known for its rich biodiversity, including the Galapagos Islands, which are home to unique species found nowhere else on Earth. In recent years, Ecuador has been making efforts to transition to a more sustainable economy, with a focus on developing its renewable energy sector.

Renewable energy has the potential to play a key role in Ecuador's energy mix. The country has significant natural resources that can be used to generate electricity, including hydropower, wind power, solar power, biomass, and geothermal energy. Hydropower is currently the largest source of renewable energy in Ecuador,

92% of the energy generation in the province comes from hydraulic power plants, 7% from thermal and 1% from non-conventional sources (photovoltaic, wind, biomass, biogas, geothermal, among others). This production, marked by environmentally friendly energies, satisfies the national demand for electrical energy, as well as the export of electrons to neighboring countries (Colombia and Peru). However, the dependence on hydropower also makes Ecuador's electricity generation vulnerable to changes in weather patterns and climate change.

In recent years, Ecuador has been making efforts to diversify its renewable energy mix. The government has implemented policies to promote the use of other