# CLIMATE CHANGE, ENERGY TRANSITION AND INTERNATIONAL TRADE: CHALLENGES FOR LATIN AMERICA AND THE CARIBBEAN

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#### Overview

The presentation will analyze the challenges posed by energy transition to Latin America and the Caribbean countries from the perspective of international trade. The main global trends observed regarding the imposition of market access requirements based on environmental and climate criteria and their implications for the region will be examined. While there are heterogeneities among Latin American countries in terms of export specialization and GHG emission profiles, all countries share the challenge of, among other things, developing and implementing methodologies for estimating the carbon footprint of regional exports (ie., the embedded GHG emissions in exported goods) through life cycle analysis and demonstrating that exported agricultural products are deforestation-free. Within this context, differences in terms of energy matrix composition and freight transport will result in differentiated "climate competitiveness" levels within an international context that is increasingly demanding environmentally sustainable and carbon neutral goods. Energy transition is not only an ecological, technical and moral imperative but also an urgent economic and commercial necessity for developing countries.

## Methods

First, main observed global trends regarding the implementation of market access requirements based on climate criteria at the global level will be analyzed, with a focus on the European Union (the most emblematic case), the United States, and China. Second, the implications for the region will be assessed, as countries will increasingly be evaluated as global providers using the same "climate yardstick" globally. The regional export structure -primarily based on hydrocarbons, minerals, agro-industrial products, and certain manufacturing goods- will be examined together with the existing country heterogeneities. Then, available studies estimating the GHG emissions intensity of Latin American export products will be assessed. Based on this, priority discussion points to advance an action agenda that could ensure continued market access will be posed.

#### **Results**

Estimates from organizations such as ECLAC indicate that there are differences among the exporting sectors in different Latin American countries in terms of GHG emissions intensity (GHG emissions per exported dollar), with this intensity being higher in mining exports than in primary agricultural production or processed agricultural products. Furthermore, in international comparisons, the emissions intensity of Latin America's major mining exports and technologically advanced manufacturing exports is higher than the average for other countries with available information. This means that more fossil fuels are used in Latin America to produce the same quantity of exportable products than in other parts of the world, placing the region at a relative disadvantageous position in terms of climate impact in international trade.

# Conclusions

The organization of international trade is being redefined due to multiple and diverse factors. In addition to increasing geopolitical tensions and rising logistics costs, there is a growing consideration in the Global North of the environmental and carbon footprint impact of transnational production and trade chains.

The European Union is leading a global movement towards the inclusion of market access requirements based on environmental and climate criteria (Carbon Border Adjustment Mechanism, Deforestation-Free Products, Circular Economy Action Plan). The United States is considering similar initiatives at the legislative level, and China is likely to advance in similar external measures as mandatory measurement and reporting of corporate GHG emissions expands at the national level.

In this context, environmental and/or "climate competitiveness" is becoming a highly significant criterion that is being increasingly evaluated in terms of the accreditation of environmental labels, carbon-neutral seals, and similar certifications.

The challenges for the regional productive sector is enormous. However, it will not be enough for individual exporting companies to make efforts to comply with the new requirements because part of their environmental performance will be assessed through indicators that do not depend directly on them. This is the case with GHG emissions associated with each country's energy infrastructure, primarily in the areas of power generation and domestic freight transport. These country-determined GHG emissions will need to be included in various life cycle analyses of export products.

This means that the evolving international trade landscape presents additional pressures on regional governments to accelerate the energy transition processes, especially in those countries with higher dependence on hydrocarbons. The imperative is no longer solely ecological, moral, and diplomatic. The urgency is increasingly economic and commercial.

Advancing in the energy transition in Latin America and the Caribbean is thus an urgent priority, as international markets will gradually close to goods and services with negative climate impacts. However, to drive this energy transition it is necessary to simultaneously consider the "economic transition" required to reduce production and fiscal dependence on fossil fuels.

This dilemma compels us as a region to accelerate the discussion regarding how to reduce not only technological and sunk cost dependence on fossil energy infrastructure but also, and primarily, how to decrease the economic dependence (in terms of production, employment, and fiscal revenue) on hydrocarbons. The central question is through what new means can value be generated to compensate for the income, jobs, and local production chains that would disappear in a world without oil and gas.

It is essential to bring to the discussion table the need to carefully analyze possible alternatives to diversify the regional production and export matrix as well as sources of income and associated foreign exchange generation, so that the survival needs of productive actors and national and subnational states no longer delay the change.

### References

CEPAL (2021): Perspectivas del Comercio Internacional de América Latina y el Caribe, 2021. Comisión Económica para América Latina y el Caribe (CEPAL), LC/PUB.2021/14-P/Rev.1, Santiago.

CEPAL (2019): Perspectivas del Comercio Internacional de América Latina y el Caribe, 2019. Comisión Económica para América Latina y el Caribe (CEPAL), LC/PUB.2019/20-P, Santiago.

Galindo, L.M.; Samaniego, J.; Alatorre, J.; Ferrer, J.; Reyes, O.; Sánchez, L. (2015): Ocho tesis sobre el cambio climático y el desarrollo sostenible en América Latina. Comisión Económica para América Latina y el Caribe (CEPAL), LC/W.690. Naciones Unidas, Santiago

European Commision (2020): Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: A new Circular Economy Action Plan For a cleaner and more competitive Europe. Brussels, 11.3.2020. COM(2020) 98 final.

IEA (2021): Net Zero by 2050: A Roadmap for the Global Energy Sector. International Energy Agency (IEA)

IPCC (2018): Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above preindustrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty

McManus, M. y Taylor, C. (2018): Chapter 3 - Greenhouse Gas Balances of Bioenergy Systems: The Role of Life Cycle Assessment. Editor(s): Patricia Thornley, Paul Adams, Greenhouse Gas Balances of Bioenergy Systems, Academic Press

OLADE (2021): Generación eléctrica mundial y para América Latina y el Caribe (ALC) y su impacto en el sector energético por la pandemia producida por el COVID – 19. Organización Latinoamericana de Energía (OLADE)

Roldao, R. (2022): Carbon trading the Chinese way. Energy Monitor, 5 de enero de 2022

UNEP (2021): Emissions Gap Report 2021: The Heat Is On – A World of Climate Promises Not Yet Delivered. Nairobi. United Nations Environment Programme (UNEP)