

Transnational Climate Justice and the Carbon Credit Market

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Abstract

This article addresses the intersection between transnational climate justice and the carbon credit market, considering the contemporary environmental changes and the dependency of economic systems on ecosystem resources. By establishing a carbon credit market in 1997, The Kyoto Protocol created a mechanism for countries to trade emission permits, promoting environmental balance. However, this approach raises questions of transnational climate justice, as the uneven distribution of burdens and benefits among countries may lead to disparities. The study seeks to elucidate how economic instruments, such as the carbon credit market, can contribute to transnational climate justice, exploring challenges of regulation and governance in this context. The goal is to emphasize the importance of transnational climate justice in the contemporary world and to examine the role of the carbon credit market in this scenario.

Keywords

Transnational Climate Justice, Carbon Credit, Environmental Law

1. Introduction

The observation of rapid changes in environmental conditions in contemporary times highlights a crucial point of tension for economic systems, as indicated by several authors. This interconnection between economic progress and environmental degradation reveals a deep dependence of economic systems on resources coming from terrestrial ecosystems.

The quickness with which drastic environmental shifts, such as climate change, loss of biodiversity and degradation of ecosystems that are occurring,

represents a significant threat to the stability and sustainability of global economic systems. The contemporary economic structure, largely based on the intensive exploitation of natural resources, is intrinsically linked to ecosystems that provide raw materials, essential environmental services and support for diverse human activities.

The dependence of economic systems on these resources generates a notable vulnerability, as rapid environmental changes can affect the availability and quality of these resources. This could result in disruptions to production, increased costs, instability in markets and, ultimately, significant challenges to the viability and resilience of economic activities.

Therefore, understanding this interconnection between rapid environmental changes and economic systems highlights the critical need for sustainable and resilient approaches in economic management. Careful consideration of environmental impacts and the transition to more sustainable economic models become imperative to face these challenges and promote harmony between economic development and environmental preservation.

Inside this context, the policy outlined by the advent of the Kyoto Protocol, signed in 1997, introduced the concept of tradable carbon emission licenses, enabling countries that exceed their reduction targets to purchase carbon credits from nations that are below their limits. This approach led to the consolidation of a market centered on these carbon credits, which also operates on the stock exchanges markets.

At the same time, the establishment of such a market aims to promote environmental balance through a structure supported by economic dynamics, encouraging the global reduction of greenhouse gas emissions through a perspective of interconnection and interdependence between countries. This culminates in strengthening the global importance of nations with less economic power.

Within the extent of global concerns about climate change, the carbon credits market plays a central role, especially in the context of the consolidation of the Kyoto Protocol. Such an international mechanism was conceived as an innovative approach to tackling greenhouse gas emissions, allowing countries to meet their targets through the acquisition and trading of carbon credits. However, when examining this scenario more deeply, the crucial question of transnational climate justice emerges.

Transnational climate justice goes beyond national borders, being intrinsically linked to the ethical and equitable dimensions of climate actions. When exploring this perspective, it becomes evident that complex socioeconomic and environmental dynamics are at play. The unequal distribution of burdens and benefits between countries is a fundamental aspect to be considered. While some countries may benefit economically from the sale of carbon credits, others may disproportionately bear the costs of mitigating emissions.

This article aims to deepen into the intersection between transnational climate justice and the carbon credit market, analyzing the challenges and opportunities arising from this convergence. By addressing the asymmetric distribution of re-

sponsibilities and advantages between countries, we seek to offer critical insights that contribute to the search for global climate solutions that consider, in a more equitable way, the diversity of contexts and the pressing need for climate justice.

Therefore, through bibliographical research, we intend to seek clarification on the following questions: 1) Can economic instruments such as the carbon credit market contribute to transnational climate justice? 2) Furthermore, what are the main challenges of regulation and governance from a transnational perspective?

Thus, the objective is to clarify the importance of transnational climate justice for the contemporary world, as well as to highlight the carbon credits market in this context.

2. The Economic Dependence on the Exploitation of Natural Resources

Since catastrophic predictions about the future are widely accepted regarding the carrying capacity of the environment as opposed to the exploitation of resources by human action, Kruse (2023) analyzes that the limit of the availability of non-renewable natural resources has already been outdated decades outdated.¹ The author also understands that the ecological footprints have shown significant increases since the 1970s, so the Planet's biocapacity is currently at a level of eminent environment irreversibility. This proves the unsustainability of the way of life² of contemporary societies with regard to the long-term maintenance of the resources on which this and future generations depend on.

Rifkin (1992) asserts that variations in the disposition of environmental resources, as well as in the conditions of the environment itself, are challenges aggravated by the extreme dependence of the global economy on such resources. Therefore, it is urgent that the progress of nations has planning based on climate data as a guide to the limits of the environment for the future.

When faced with this specific issue between the excessive use of natural resources and economic development, Leff (2015) questions the form in which sustainable development has been applied, seeking to reconcile environmental preservation with economic growth. He argues that the initial proposal to establish a balance between natural resources and consumption has been diverted, favoring economic development over environmental preservation. "In this way, nature's potentials are reduced to its valuation in the market as natural capital; [...] Every single thing can be reduced just to market value, representable in the codes of capital" (Leff, 2015: p. 25).

According to Sirvinskas (2018), the preservation of the environment is fundamental to ensuring the sustainability of the planet, while socioeconomic development is necessary to promote progress and social justice. However, this re-

¹Biocapacity represents the Earth's environmental capacity to provide renewable resources, assimilate waste, and sustain human activities. Essentially, it is the ability of the terrestrial ecosystem to generate services and resources over time without exceeding its limits or harming its future capacity.

²Environmental irreversibility refers to harmful changes in the environment that are significant and permanent and cannot be reversed to their original state

conciliation will only be achieved through the rational use of natural resources. This means that it is necessary to adopt sustainable practices, such as the use of renewable energy, the appropriate management of water resources and the reduction of excessive consumption. In this way, it will be possible to reconcile environmental protection with economic growth, guaranteeing benefits for society as a whole.

Furthermore, it is important to highlight that harmful actions against the environment generate global and timeless catastrophic effects, which Ulrich Beck (2010) calls the universalism of threats. Therefore, given this reality of globalization, reflection on possible solutions must be with global reflections, in the same way that each harmful action generates its effects on a global scale.

In the analyzed context, carbon credit trading emerged as a tool that prioritizes an economic approach in the search for balancing greenhouse gas emissions, allowing industrialized countries to offset their carbon footprints through financing emission reduction projects in developing nations.

The interdependence revealed by this dynamic reflects the fact that it is now understood that the search for climate solutions necessarily involves alternatives that consider the complexity of systems in a primarily capitalist world in which relations between people, communities and countries are largely guided by economic aspects. . Therefore, it is emphasized that the path to responsible exploitation of natural resources, as well as the mitigation of climate change, is limited by already established ideological, social and, mainly, economic relationships.

The importance of taking into account the economic factor in combating climate change is evident in several aspects. Firstly, the incorporation of economic incentives can boost technological innovation, motivating companies to invest in cleaner and more efficient technologies. These incentives can come in the form of subsidies for renewable energy and penalties for excessive emissions.

Furthermore, private sector engagement is essential for the success of strategies to combat climate change. Economic considerations, such as market opportunities and operational efficiency, encourage companies to adopt sustainable practices, striking a balance between economic progress and environmental sustainability.

The long-term viability of strategies is also intrinsically linked to economic considerations. Sustainable and economically efficient plans are more likely to be maintained and implemented consistently over time.

Another important point addressed by the introduction of the dynamics of trading carbon credits refers to the fact that, by integrating economic considerations, it is possible to address socioeconomic disparities, ensuring that the measures adopted and the burden arising from the problem do not have a disproportionate impact economically vulnerable communities.

International cooperation has already proven to be a dimension where the economic factor plays a crucial role. Effective action to combat climate change often requires global partnerships, and economic considerations, such as financing projects in developing countries, are essential to achieving efficient

global agreements.

In short, adapting to economic changes is an important aspect of combating climate change, as the transition to a greener economy can involve significant adjustments, and considering the economic impact helps to minimize challenges and facilitate the transition of greener sectors. pollutants. The integration of economic considerations into strategies to combat climate change is crucial to ensure effectiveness, sustainability and widespread acceptance of these measures, promoting a convergence between economic and environmental objectives.

3. Carbon Credits

The entry in force of the Kyoto Protocol³ in 2005 marked a crucial point in global understanding of the urgency of establishing parameters that allow for more sustainable progress in economies around the world. In the Brazilian context, the agreement was responsible for converting the country into a more active participant in environmental discussions. This accession was the natural evolution of what had already been established by the United Nations Framework Convention on Climate Change (UNFCCC) in 1992, when signatory countries officially recognized the imperative of controlling greenhouse gas (GHG) concentrations in the atmosphere. In this sense, the Clean Development Mechanism (CDM), part of the Kyoto Protocol since 1997, represented an innovative response to confront climate change, directly connecting environmental concerns with global efforts to reduce GHG emissions. This flexibility instrument aimed to balance the responsibility for reducing emissions between developing and industrialized countries, thus making them, in many aspects, interdependent.

The CDM played a crucial role in establishing the dynamics of generating tradable devices called Carbon Credits. These credits, negotiated internationally, boost the offer of an economic alternative for industrialized countries to meet their emission reduction targets, beyond what can be achieved within the limits of their territorial borders, in order to establish mutual dependence between countries in contexts, mainly economic and environmental (Pinto et al., 2008).

Therefore, carbon credits are standardized units that represent the reduction, removal or offset of one metric ton of carbon dioxide equivalent (CO₂e) or other greenhouse gas (GHG) in the atmosphere. These credits are used as financial instruments to encourage the mitigation of gas emissions that contribute to climate change. Its concept is intrinsically linked to market mechanisms and instruments that seek to reduce carbon emissions in an economically efficient way.

The general process involves awarding carbon credits to projects or activities that manage to reduce greenhouse gas emissions compared to a predefined baseline. These projects may include renewable energy initiatives, energy efficiency,

³The Kyoto Protocol is an international treaty entered into during the Third Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC) with the aim of addressing climate change, in particular the reduction of greenhouse gas emissions that contribute to global warming. The treaty establishes emission reduction targets for industrialized countries and economies in transition.

reforestation, among others, which contribute to the net reduction of emissions.

Once generated, carbon credits can be traded on the carbon market. Countries, companies or organizations that exceed their reduction targets can purchase these credits as a way to offset their own emissions. This approach creates an economic incentive to implement more sustainable practices and contributes to the broader goal of reducing global greenhouse gas emissions.

The term carbon market is used to describe two distinct types of trading in assets related to GHG emissions: the voluntary market and the regulated market. These markets differ in terms of scope, participants involved and regulation applied, but both play an important role in mitigating climate change and transitioning to a low-carbon economy.

The first type of carbon market is known as a “voluntary market.” In this case, the participation of companies and organizations is optional, and government regulation may be limited. Carbon transactions occur voluntarily between interested parties, who can buy and sell carbon credits or offsets for avoided emissions. These offsets may include emission reduction projects, such as reforestation or the production of renewable energy. The voluntary market allows companies to offset their GHG emissions and demonstrate a commitment to sustainability (ICC, 2021).

On the other hand, the second type of carbon market is known as the “regulated market” or “compliance market”. In this case, the participation of companies and organizations is mandatory, and there is stricter government regulation to guarantee the reduction of GHG emissions. This market is commonly found in emissions trading systems (SCE), in which companies have a maximum limit on permitted emissions and can buy or sell carbon credits to meet their targets. The regulated market is often used as a strategy to address climate change and reduce emissions in specific sectors of the economy (ICC, 2021).

From a purely marketing point of view, Oliveira considers that the carbon market, regardless of whether it is implemented voluntarily, is strongly dependent on political-economic decisions that are valid across the global territory. Therefore, the stability of this market fluctuates according to the interests of the political actors who stipulate environmental agreements and according to the context of each era.

However, the challenges and criticisms associated with the CDM, such as the equitable distribution of benefits and the environmental integrity of projects, highlight the complexity of this interconnection. Therefore, a critical and in-depth analysis of the functioning of the CDM is essential to assess its effective role in promoting equitable and sustainable global climate actions, recognizing the intricate relationship between economic and environmental dynamics (Pinto et al., 2008).

4. Transnational Climate Justice: Challenges and Perspectives

The concept of environmental justice is related to the objective of promoting a

rearrangement of the distribution of social and environmental goods, so that fundamental socio-environmental rights are guaranteed in a more equitable manner, bringing together ethical principles in order to influence a style of social and environmental thinking consistent with to the model of globalizing capitalism and the demands of the contemporary world (Carvalho, 2013).

The notion of environmental justice transcends the mere distribution of resources, seeking to restructure the way these social and environmental goods are shared. The objective is to ensure, in a more equitable way, fundamental socio-environmental rights. This perspective implies a redesign of the relationships between society, environment and economy, going beyond conventional approaches.

The implementation of environmental justice requires the same degree of protection against all environmental and health risks, as well as equal access to decision-making related to environmental policies (Freiria, 2022).

By seeking equity in distribution, environmental justice incorporates ethical principles that challenge the current model of globalized capitalism. It is not only concerned with the fair allocation of benefits, but also questions the very logic that permeates social and economic interactions. This concept meets the urgent demands of the contemporary world, where growing concerns about climate change, loss of biodiversity and environmental degradation demand a profound review of the foundations of the way in which human beings understand and relate themselves to the environment.

In this context, the concept of climate justice emerges from a central point demonstrated by the perception that the impacts of global warming and changing climatic conditions do not affect different social groups in a uniform manner and intensity in terms of geographical occupation or social class. Thus, the opposite of climate justice could be exemplified by catastrophic phenomena intensified by human action, such as “desertification processes, extreme climatic events, such as intense rains, heat waves, rising sea levels, among others” (Milanez & Fonseca, 2011: p. 84).

In this way, environmental justice proposes not only material redistribution, but a transformation in social and environmental thinking, influencing the way development, production and consumption are viewed. This approach not only seeks to correct visible inequalities, but also seeks to challenge the underlying structures that perpetuate these disparities, promoting a transition to more sustainable and ethical models, aligned with the needs of the planet and its diverse communities. Environmental justice demands, for its implementation, ruptures in the governmental structure, through innovative public policies (Veríssimo Ferreira, 2021: p. 63).

Both the latent climate issues and several other issues of global interest reveal a governance crisis at a global level, demonstrated by the notorious obsolescence of the still predominant nationalist state model, strongly limited by territorial borders. Therefore, especially with regard to the environmental aspect, it is understood that the logic of Classical International Law proves to be ineffective in

managing duly efficient protection at a global environmental level, especially with the understanding of the fundamental right to the environment. ecologically balanced, which must a priori be guaranteed to this and future generations (Cruz & Bodnar, 2010).

Even though important advances have been made in recent decades towards incorporating better defined parameters in environmental competence into the Constitutions, Constitutional States continue to demonstrate significant difficulty in guaranteeing an effective implementation of the legal parameters required for such issues.

State entities need to protect citizens against new forms of violation of their dignity and fundamental rights due to the environmental and climate impact produced by contemporary society, the escalation of which operates at a planetary level, “given the overflow of national borders of degradation ecological” (Sarlet & Fensterseifer, 2022: p. 84).

This gap, as Cruz and Bodnar (2010) conclude, is due to the lack of solidity in an approach that transcends territorial limits in a more robust way. Therefore, there is an urgent need to implement strategic regulations that are capable of establishing legal duties that are effective in reversing the accentuated ecological degradation, as well as reestablishing climate balance. It is crucial for the process of making the progress of global economies truly sustainable to be successful, the development of an approach to transnational environmental governance that prioritizes a supportive and cooperative position between individuals, institutions and States, seeking to ensure a dignified, sustainable and sustainable existence prosperous, for current and future generations (Cruz & Bodnar, 2010).

Thus, in practice, Cruz, Staffen and Bodnar (2011) understand that the concept of Transnational State is intrinsically related to the promotion of “plural, supportive and cooperatively democratic public spaces free from the ideological constraints of modernity, resulting from the intensification of the complexity of global relations, endowed with legal capacity for governance, regulation, intervention and coercion” (Cruz, Staffen, & Bodnar, 2011: p. 58).

This understanding is based primarily on the conception of a State that truly transcends national physical and ideological borders, seeking to establish public spheres characterized by plurality, solidarity and cooperation. Thus, the approach of multiple authors, such as those mentioned above, suggests the need for a reformulation of the concept of State based on the demand to face challenges that are urgent and equally important indiscriminately, aiming at the construction of more flexible and adaptable political structures to the needs of a world that is increasingly interconnected and complex.

The understanding underlying this reasoning implies that, by taking these aspects into account, a Transnational State would be able to recognize and broadly face challenges of global scope, embracing a model of collaboration and solidarity that transcends state borders. Consolidating the understanding of transnational governance would enable the adoption of shared responsibilities in guaranteeing diffuse rights, notably the fundamental right to an ecologically ba-

lanced and healthy environment. According to this approach, a State with these characteristics would provide an environment for facing crises collectively, and would fulfill its purpose of recognizing the interconnection of global issues and the need to coordinate efforts at a global level. This involves breaking multiple paradigms with regard to the traditional nationalist approach through which crises are usually faced, which would give way to an approach from an internationally collaborative perspective.

The guarantee of diffuse rights, especially the right to an ecologically balanced environment, would then be seen in this scenario as a shared responsibility among all States, without regard to geographic borders. This implies effective cooperation in the implementation of environmental policies, sharing of resources, knowledge and technologies, as well as the promotion of global initiatives aimed at addressing challenges that affect humanity as a whole. Ultimately, the consolidation of a Transnational State presents itself as a promising approach to confront environmental issues in a globalized context, promoting solidarity and cooperation to guarantee a sustainable future for all (Cruz & Bodnar, 2010).

That said, Freitas (2016) contributes with the essential understanding that the concept of sustainability goes far beyond the mere preservation of life and finite natural resources and, therefore, requires a holistic understanding of the meaning of “life”. In addition to caring for the environment, sustainability implies ensuring quality of life in a broad sense as development occurs. This multidimensional approach reflects the interconnectedness between all beings and elements, as well as the uniqueness and subjectivity of understanding health and well-being.

Such teaching reveals the need to make global efforts evolve in order to consider more broadly a deep understanding of what is intended to be preserved and, therefore, also the extent of the damage that is intended to be repaired.

Another relevant challenge for promoting transnational climate justice refers to the fact that global warming and the resulting climate changes represent the first major challenge to environmental governance at a global level. Thus, in a structure of strongly nationalist and capitalist States, it is understood that a portion of developed countries still do not demonstrate the necessary engagement in tackling the problem precisely as a result of the economic consequences of strengthening environmental regulations and, among many other measures, encourage consumption and industry to be truly sustainable (Andrade & Costa, 2008).

Kruse (2023) assesses that, in practice, the absence of an effective charge for the disposal of resources from the natural environment means that the burden resulting from the climate crisis falls indiscriminately on the entire community, making it imperative that capable taxation mechanisms be implemented. to make up for this deficiency.

The author understands that the lack of effective restrictions in the legal sphere is largely responsible for allowing the unrestrained and irrational exploi-

tation of environmental resources without due associated accountability. This failure to charge for the indiscriminate use of environmental resources has favored and continues to favor the free, unrestricted and inconsequential appropriation of these assets, resulting in an imbalance in the legal balance. This lack of balance not only penalizes and burdens the entire community, but also exclusively benefits the reproduction of capital and the search for profit, highlighting the critical need for a more equitable and regulatory approach to the management of environmental resources (Kruse, 2023).

In addition, Ferreira et al. (2023) declare the paradox revealed by the planetary climate crisis that requires urgent changes to be made in the way man relates to the resources available on the planet, under penalty of, in the long term, risking the viability of life on Earth, in the face of governments and institutions, mainly linked to industry, that continue to expand the use of fossil fuels, for example. This reality reveals that, therefore, the environmental crisis is definitely much more of an ethical dilemma than a legal one.

The excerpt highlights a paradox highlighted by the planetary climate crisis, pointing to the urgent need for changes in the way humanity relates to the resources available on Earth. This paradox becomes evident when we contrast the urgency of the actions necessary to face the climate crisis with the persistence of governments and institutions, especially those linked to industry, which continue to expand the use of fossil fuels, one of the main sources of greenhouse gas emissions (greenhouse effect).

The reference to the environmental crisis as an ethical dilemma, rather than a purely legal problem, highlights the moral and values complexity involved in addressing the climate crisis. While there are legal frameworks and international agreements designed to address environmental issues, the persistence of environmentally harmful practices by certain sectors indicates an ethical gap. This suggests that, in addition to legal and regulatory measures, a deep reflection on the ethical values that guide human actions in relation to the environment is essential.

The climate crisis, in this context, is not just a technical or legal challenge, but an ethical problem that requires a transformation in the way society and institutions view their responsibility towards the planet. The decision to prioritize short-term profits over long-term sustainability raises ethical questions about the choices made by individuals and organizations in the face of environmental consequences.

5. How Can the Carbon Credit Market Effectively Contribute to Transnational Climate Justice?

In view of the understanding of Environmental Law, which establishes that it is the responsibility of environmental civil liability not only to repair the damage already caused, but also to prevent it, it becomes a fair strategy to hold the countries that correspond to the most significant part of the emission responsible of greenhouse gases, given the clear disparity between those that emit the most

GHGs and those that suffer most from the consequences of the problem (Brasil & Soares, 2017).

In this context, the need to focus on measures to prevent an exacerbated emission of pollutants, as well as activities with great environmental impact in themselves, is emphasized, since, as already mentioned, irreparable damage to the terrestrial ecosystem is already a risk to be seen as a reality.

Therefore, in the face of global warming, which affects the entire planet, although it is caused primarily by some countries, the responsibility for the impact caused by each State is not necessarily proportional and, in a general context, does not match properly national responsibilities.

According to the perspective presented by Ferreira et al. (2023), it is assumed that global warming is indisputably associated with the increase in greenhouse gas emissions, so that there is a way to hold nationally responsible for those who contribute to the phenomenon through the control of CO₂ emissions, since this is the main issue of GHGs in the context of the problem in question in the long term.

In this context, the carbon credits market appears to play a crucial role in addressing global environmental responsibility, especially given the difficulties presented by traditional accountability. The impossibility of individualizing the damage caused by global warming to a specific country, due to its global nature, highlights the complexity in applying traditional legal measures.

Faced with the dilemma, Ferreira et al. (2023: p. 768) explain about traditional accountability in the context of exacerbated GHG emissions that “the difficulty seems to lie in demonstrating the causal link, required in the theory of traditional accountability, between the emissions of one country and the damages in another”.

In this context, the requirement to reduce emissions, promoted by the carbon credits market, emerges as a more effective approach. While the planetary climate crisis demands urgent changes to avoid dangerous consequences, trading carbon credits enables a collective response, promoting the global reduction of emissions and encouraging the transition to more sustainable practices. In this way, the carbon credits market, despite due challenges, has the potential to represent a pragmatic solution to the ethical and legal challenges associated with climate change.

Therefore, the carbon credits market could constitute a valuable instrument to be used in mitigating the impacts resulting from global warming. Due to its high potential for broad support from productive sectors and investors, as it operates according to market logic, it tends to be highly effective and will also serve as a strategy for implementing climate justice through a more equitable distribution of the costs generated by polluting activities.

Ferreira et al. (2023) observe that, although there is a consensus at the international level on the fundamental nature of the right to an ecologically balanced environment, the regulations that internationally govern environmental preservation parameters appear to be quite generic. The declaration format, much

more than a norm itself, encourages the conclusion that International Law is based on political constructions, and not exactly a sanctioning system.

The authors, when approaching Kelsen's understanding, highlight that compliance with environmental obligations at the international level is primarily based on moral conscience, in contrast to the strict application of objective law. However, they emphasize that environmental protection, intrinsically linked to the right to life, should not be treated in a discretionary manner, as if it were a merely ideological issue. They argue that, given its relevance for the preservation of life and ecosystem balance, environmental protection must be ensured by solid legal principles and not just by moral conscience, guaranteeing a more objective and binding approach in the search for global sustainability (Ferreira et al., 2023).

Kruse (2023) evaluates the positive impact of the implementation of the carbon credit market when evaluating the situation in the United States of America, which to date has been extremely resistant to internationally adopted environmental impact mitigation projects. The author understands that:

[...] if it were completely ineffective and the simple payment for the unmet target already solved the problem, it would not cause the USA to unilaterally withdraw from the Protocol, twice in a row (2001 and 2018), under the allegation of vetoing the economic growth (Kruse, 2023: p. 34).

Thus, the allegation of the ineffectiveness of the compensation stipulated for non-compliance with international protocols is supported by the optional nature of adopting the parameters established by the Kyoto Protocol, since there is no way to force a nation to ratify an international treaty. Kruse (2023) criticizes the neglect with which the urgency of the environmental crisis is still treated, which, in the author's view, attempts to maintain the hegemony of an anthropocentric and fragmented view of the relations between man and nature, which is no longer supported by the current context.

It is concluded, therefore, that the institution of the carbon credits market was an important advance with regard to the seriousness with which the imminent global environmental crisis is handled, as well as in the accountability of nations that emit large quantities of greenhouse gases, and which are largely responsible for the crisis itself. However, the difficulty in promoting a robust confrontation with the problem, an immediate result of the fragmentation of measures taken at each national border, proves to be one of the main obstacles to the effectiveness of combating the problem.

With the gradual transition to a global economic model where countries are increasingly interconnected, it is expected that International Law, especially in the environmental sphere, will find more and more space to bring together the interests of different nations in search of a common ground, in order to adjust the plan for dealing with the current climate crisis, as well as preventing others, to make it possible to raise awareness and full engagement among all societies, culminating in a truly serious confrontation with the problem.

6. Conclusion

This article was developed with the aim of answering the following inquiries: 1) Can economic instruments such as the carbon credit market contribute to transnational climate justice? 2) Furthermore, what are the main challenges of regulation and governance from a transnational perspective?

When analyzing the current challenges related to the climate crisis and the effectiveness of the measures adopted, it is clear that the carbon credits market represents a significant advance in making nations responsible for the emission of greenhouse gases.

The Kyoto Protocol, established in 1997 and pioneering in breaking the paradigms that until then did not recognize the environmental issue as a sufficiently urgent and relevant problem, introduced an innovative mechanism, the Clean Development Mechanism (CDM), which allows the generation of credits carbon in developing countries. These credits, negotiated internationally, provide an economic alternative for industrialized countries to meet their emissions reduction targets.

In this context, the fragmentation in the implementation of measures to tackle climate change, imposed by the limits of the hegemony of States that are still quite nationalist in character, represents a fundamental challenge that highlights the need for a more integrated and transnational approach to tackling environmental issues.

The interconnection between the effectiveness of environmental policies adopted by different nations and global dependence on natural resources is evident. This interdependence highlights the importance of strategies that transcend national borders, recognizing the global nature of environmental challenges. Transnational approaches, based on international cooperation and coordination of efforts, become crucial to effectively deal with environmental issues, promoting sustainability and mitigating the impacts of human activities on the environment on a global scale.

The resistance of some countries to taking due responsibility for tackling the problem remains another major obstacle to more successful results in this context. This reality, added to the legal imbalance in relation to firm and clear regulations in this sense, evidenced, for example, by the lack of effective taxation on the unrestrained and irrational use of environmental resources in different parts of the world, is one of the main reasons for the burden significant attributes attributed to the entire community, which primarily includes the portion of it that has little or no relationship with the source of the problem. Global economic dependence on the exploitation of natural resources intensifies this vulnerability, demanding coordinated actions at the international level.

In short, the importance of International Law is reiterated, especially in the environmental sphere, as a catalyst to unify the interests of nations in favor of robustly confronting the climate crisis.

The challenge is to overcome ideological barriers, promote global awareness

and fully engage all societies, culminating in joint and effective efforts to ensure a sustainable future for the planet.

Summarizing, the establishment of the carbon credits market represents a significant advance in addressing the imminent global environmental crisis, promoting the accountability of nations that are the main emitters of greenhouse gases. However, the effectiveness of this mechanism is compromised by the fragmentation of measures adopted at national levels, highlighting the need for a more integrated and coordinated approach.

The transition to an interconnected global economic model suggests that international law, especially in the environmental sphere, must play a central role in promoting common interests among nations. This evolution is fundamental to adjust strategies to combat the climate crisis and prevent future ones, aiming to raise awareness and full engagement of all societies. Therefore, effectively overcoming the problem requires a more comprehensive and collaborative approach, culminating in joint efforts to seriously address the environmental challenges that affect the planet.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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