

## Economy and Ecosystems: Environmental Approaches According to Michele Carducci\*

*Economia e Ecossistemas: Abordagens Ambientais Segundo Michele Carducci*

*Economía y Ecosistemas Enfoques Ambientales Según Michele Carducci*

Gina Vidal Marcílio Pompeu\*\*

Natália Maria Silva Luz\*\*\*

### Abstract

The research aims to discuss the different approaches to combating climate change as presented by Michele Carducci, taking the terms of the Glasgow Climate Pact as a starting point. It questions how these approaches relate to the international legal system. It is justified by the importance of discussing the strategies used in the debate on international environmental protection, whether dominant or alternative, given the urgency of the climate situation and the prevalence of terms of economic interest in the discussions, with the hypothesis that the study of strategies alternatives can offer better responses to different environmental challenges. This is a qualitative, exploratory, bibliographic, and documentary research, in which the Glasgow Climate Pact was selected as a parameter because it is the most recent. The first topic presents the historical process of formation of the concept of sustainable development and the main international initiatives that led to the Pact, while the second discusses the prevalence of the economic factor in this type of document according to the classification of the approach pointed out by Carducci, and the third comments alternative initiatives to the international axis, especially the theory of degrowth and the new Latin American constitutions. The study concludes that in the optional approach, common in treaties, economic interests still predominate, however different approaches emerge outside the main axes, highlighting demodiversity as a viable alternative for building environmental responsibility.



**Keywords:** sustainable development; climate changes; degrowth; demodiversity.



### Resumo

*Trata-se de uma pesquisa qualitativa, exploratória, bibliográfica e documental, na qual o Pacto Climático de Glasgow foi selecionado como parâmetro por ser o mais recente. O primeiro tópico apresenta o processo histórico de formação do conceito de desenvolvimento sustentável e as principais iniciativas internacionais que levaram ao Pacto, enquanto o segundo discute a prevalência do fator econômico nesse tipo de documento conforme classificação da abordagem apontada por Carducci, e o terceiro comenta iniciativas alternativas ao eixo internacional, em especial a teoria do decrescimento e as novas constituições latino-americanas. O estudo conclui que na abordagem opcional, comum em tratados, ainda predominam interesses econômicos, entretanto abordagens diferentes surgem fora dos eixos principais, destacando-se a demodiversidade como uma alternativa viável para construção da responsabilidade ambiental.*

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\*\*   Post-Doctoral Internship in Economic Law from the Faculty of Law of the University of Lisbon, (2017), Post-Doctoral Internship in Human and Economic Rights and Corporate Social Responsibility from the Faculty of Law of the University of Havre (2012), PhD in Law from the Federal University of Pernambuco (2004), Master's Degree in Law and Development from the Federal University of Ceará (1994), Bachelor's Degree in Law from the Federal University of Ceará (1987). Lawyer registered with the OAB-CE under No. 6101.

\*\*\*   Master's degree in Constitutional Law from the University of Fortaleza (UNIFOR). Specialization in Criminal Law and Criminal Procedure from the Raimundo Sá Institute of Higher Education (2016). She holds a degree in LAW from the Raimundo Sá Institute of Higher Education (2015).

**Palavras-chave:** desenvolvimento sustentável; mudanças climáticas; decrescimento; demodiversidade.

### **Resumen**

*La investigación tiene como objetivo discutir los diferentes enfoques de combate a los cambios según presentado por Michele Carducci, tomando como punto de partida los términos del Pacto Climático de Glasgow. Se justifica por la importancia de discutir las estrategias utilizadas en el debate sobre la protección ambiental internacional, sean aquellas dominantes o alternativas, ante la urgencia de la situación climática y la prevalencia de términos de interés económico en las discusiones, lo que requiere el estudio de alternativas adecuadas a los diferentes retos. Se trata de una investigación bibliográfica y documental, en la cual el Pacto Climático de Glasgow fue seleccionado como parámetro por ser lo más reciente. El primer tópico presenta el proceso histórico de formación del concepto de desarrollo sostenible y las principales iniciativas internacionales que llevaron al Pacto, mientras el segundo discute la prevalencia del factor económico en este tipo de documento según la clasificación del enfoque indicada por Carducci, y el tercero comenta iniciativas alternativas al eje internacional, en especial la teoría del decrecimiento y las nuevas constituciones latinoamericanas. El estudio concluye que, en el enfoque opcional, común en tratados, aún predominan los intereses económicos. Sin embargo, enfoques diferentes surgen fuera de los ejes principales, enfocando la demodiversidad como una alternativa viable para construcción de la responsabilidad ambiental.*

**Palabras clave:** desarrollo sostenible; cambios climáticos; decrecimiento; demodiversidad.

## **1 Introduction**

The effects of climate change resulting from the use of carbon-based energy matrices have ceased to be projections for the future to become a current problem. Responsible for leveraging industrial development since the nineteenth century, fossil fuels are also the main cause of global warming, and the reduction or abandonment of their use has become the main agenda in international dialogues on sustainable development and combating climate change. Its role as the main driver of the industry has made concerns about economic agendas predominant in the midst of environmental discourses since its emergence, and it is still a reality today.

The 2021 United Nations Climate Change Conference (COP26), held in Glasgow, Scotland, in November 2021, and the subsequent Glasgow Climate Pact produced from the event's negotiations, are examples of the current international treatment given to climate policy. Discussions about cuts in carbon emissions were hampered by the resistance of several countries to compromise their economic growth rates, prevailing forecasts of mitigation of effects. Even the provisions that sought to guarantee financial aid to developing and underdeveloped countries, which are hardest hit by climate change, come up against the lack of action mechanisms, and, without mechanisms that force the assumption of commitments made, they run the risk of becoming just words on paper.

The document is an example of one of the two main approaches to combating climate change pointed out by Michele Carducci, marked precisely by the lack of enforceability, which prevails in the international and European environment. This approach, however, is not the only one that exists: other attempts, including constitutional ones, arise in countries outside the Europe-USA axis, seeking to ensure the supremacy of the nature-man relationship over economic interests.

This article seeks, therefore, to discuss the different approaches to combating climate change as presented by Michele Carducci, taking as a starting point the terms of the Glasgow Climate Pact and questioning how these approaches relate to the international legal system. As a justification, it is important to discuss the strategies used in the debate on environmental protection, whether dominant or alternative.

The interests that govern the discussion and the growing urgency in the climate scenario create the need to debate the positive and negative points of each approach, in addition to seeking options outside the main decision-making axes, in order to better adapt to the specific demands of each ecosystem and society. Thus, it is hypothesized that a variety of approaches tend to offer benefits to environmental discussions, due to the diversity of challenges faced not only at the global level, but also at the regional level.

As a structure, the article is divided into three parts. The first topic presents the historical process of formation of the concept of sustainable development and some of the main international environmental initiatives that led to the Glasgow Climate Pact. The second topic discusses the prevalence of the economic factor in this type according to the classification of the approach pointed out by Carducci, while the third topic comments on alternative initiatives to the international axis, especially the theory of degrowth and the new Latin American constitutions.

As for the method, the research is qualitative, in addition to using an exploratory and bibliographic methodology through doctrinal and documentary consultation, in order to provide theoretical and data support to the discussion of the theme in relation to its application in the real world. The Glasgow Climate Pact was chosen as the main document to be analyzed because it is the most recent, serving as an example for the rest of the discussion.

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## **2 The Evolution of Sustainable Development until COP26**

The discovery of the use of fossil fuels was a watershed in the timescale of the development of human industry. While in previous centuries, or even millennia, the rhythm of nature was depended on for work in all its forms, and work was especially focused on meeting the needs of human life, these fuels allowed nature to be exploited for "unnatural" purposes (Carducci, 2020b, p. 90). The industry fostered by this discovery goes beyond biological cycles, initiating

processes of social and natural transformation in equal measure.

The limits of economic growth driven by fossil fuels, and the environmental impacts of their use, began to be more strongly questioned from the 1970s onwards. The technological progress achieved on the international scene in the period after the Second World War follows the economic recovery of countries affected by the conflict, and the possibility of growth in countries that are still underdeveloped. According to Najam (2005, p. 307-308), in the moments leading up to the Stockholm Conference in 1972, the main feeling among developing countries was a threat to their interests, as if the negotiations represented the intention to prevent their access to the industrialization obtained by the North. The social problem faced by these countries, considered as something truly urgent, had as its only visible solution economic growth, creating an apparent conflict with the new environmental issues.

Despite the reluctance of developing countries, the Stockholm Conference inaugurated the notion of a third way, initially called eco-development (Vargas; Aranda; Radomsky, 2016, p. 101). This premise becomes the current concept of sustainable development with the Brundtland Report, of 1987, the result of the work of the World Commission on Environment and Development (CMED) of the United Nations (UN). The concept works on two fronts: in order to protect the needs of the present, and to safeguard resources for future generations (De Marco, Mezzaroba, 2017, p. 329).

Until then, the basis of a country's growth was measured especially by its Gross Domestic Product (GDP), which disregarded both the human development aspect and the environmental issue. As stated by Vizeu, Meneghetti and Seifert (2012, p. 574), the fundamental premises of sustainable development tried to combine "economic prosperity, environmental quality and social justice". This concept, despite raising concerns about the situation of the planet and human beings, is then a concession to market pressures and developing countries, influencing the direction of the international ecological approach from then on. The 1992 Rio de Janeiro Conference was once called the United Nations Conference on Environment and *Development*, which is representative of its key role in increasing the participation of the still reluctant developing countries.

The case of the Commission for Sustainable Development (CDS) that emerged from the Rio process is interesting because developing countries became proponents of this organization precisely because it had a development mandate and was seen as a means of addressing the legitimacy deficit in the global system of environmental governance by creating a body that was specifically designed to highlight and monitor the implementation of the sustainable development agenda (Najam, 2005, p. 310).

Despite the establishment of Agenda 21, with an action plan and mechanisms that sought to involve the collective participation of governments, companies and social organizations in environmental action, the real application of the concept of sustainability has

already been weakened. Vargas, Aranda and Radomsky (2016, p. 103) use as an example the Brazilian Agenda 21, which points to sustainable development as "experimental" and "a concept under construction", conditioning its implementation to social processes to be discussed in the future.

The conventions that followed, namely Rio+10 in Johannesburg, and Rio+20, placed more emphasis on the relational character between economic growth, social inclusion and environmental protection than on the conservation of resources and systems for the future of the next generations (De Marco, Mezzaroba, 2017, p. 331). The data obtained by studies and reports published in the decades between the conventions point to immediate effects of climate change, serving to create a sense of urgency for change less present in previous discussions. Still, the economic character remains predominant in the objectives of many countries.

Other objectives are added to each new revision, such as greater expression and popular participation in the decision-making processes present in the idea of development presented by the 2013 Report of the United Nations Development Program (UNDP). Carducci (2014, p. 179) points to this inclusion as a constitutional dimension to the traditional tripod environment, economy and society of the concept of sustainable development, while commenting on pernicious postulates that emerge in the discussions. The apparent neutrality of the economy and the perception of the existence of a single constitutionalism are particularly pertinent, in a scenario in which economic objectives are included ahead of environmental issues in international discussions.

The 2030 Agenda, published in 2015, represents a clear example of this phenomenon by listing as the areas of greatest interest for the construction of the human future, in this order: people, planet, prosperity, peace and partnership. Among its seventeen goals, however, are "Promote inclusive and sustainable economic growth, full and productive employment and decent work for all" in eighth position, and "Ensure sustainable consumption and production patterns" in twelfth (UN, 2015, p. 18). Goals aimed at actions against climate change and the protection of terrestrial and aquatic life, in turn, appear only later.

The human factor, however, receives great attention among the goals established by the document, the first four of which are aimed at eradicating poverty and hunger, and ensuring health care and access to education. The document states that these goals are aimed at all countries, developed and developing, but, at the same time, emphasizes the need for greater attention to those in situations of greater vulnerability (UN, 2015, p. 7). Socioeconomic imbalance is a concern as urgent as the environmental crisis, mainly due to the fact that less developed countries are more strongly affected by the effects of climate change, even though they are not the main responsible for the largest share of degradation.

The acceleration of the effects of climate change and environmental imbalance

has called into question the strategies used until then. The Human Development Report 2020 is emphatic in its observations on the different conceptions discussed in recent decades. The very concepts of human development and sustainable development emerged in opposition to the so-called "myopic" visions that privileged only economic growth, even though this is crucial to improving the quality of life of people in poverty (UNDP, 2020, p. 6). The 2020 Report, in turn, questions the view that opposes people and trees.

Considering the complex and interdependent relationship between people and planet, between socioeconomic and natural systems, the connection between dangerous planetary and social imbalances is pointed out, which interact and often reinforce each other. As long as planetary imbalances persist, they create risks that can materialize in shocks to human development, just as the Covid-19 pandemic has done (UNDP, 2020, p. 24).

Such is the transformative force of human activity on planetary biological processes that the Report bears the name of Anthropocene, a suggestion for the nomenclature of the current geological era marked by the changes brought about by millennia of human intervention (UNDP, 2020, p. 4). The use of fossil fuels as a catalyst for these changes and the main causative agent of global warming is often the subject of international discussions, such as the 2021 United Nations Climate Change Conference, called COP26.

The Glasgow Pact, resulting from the work of the conference, establishes 1.5°C as the limit for the increase in global temperature, in order to mitigate the effects and keep them at less critical levels (UN, 2021, p. 3). The document urges States to take quick action to ensure such goals, diversifying their clean energy matrices in search of zero emissions, and emphasizes the need for collective action, with the redistribution of financial resources. The Pact, however, depends on individual action by each of the committed countries, and has no binding force.

The predominant interests behind the concept of development vary according to the historical period analyzed. Despite the continuous efforts made since the Stockholm Conference to centralise the human or nature as development objectives, the economic factor is still the main responsible for dictating the pace of mitigation and adaptation measures to the effects caused by its own activity. The economy is treated as its own certainty, rather than as another product of human activity.

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### **3 The Predominance of Economic Development in Environmental Negotiations**

Carducci (2014, p. 179) presents what he calls "pernicious postulates" as ideas that predominate in relation to the development of constitutionalism. Its premises, however, are also verified in the approach to sustainable development. The idea of globalization as an

independent phenomenon rather than the product of historical processes of influence, which is reflected in the reservations of developing countries during environmental negotiations due to the perception that they are being limited by developed countries, is an example. The guarantee of consumption patterns as one of the goals of the 2030 Agenda, on the other hand, is close to its critique of the culture of rights.

However, the most relevant point among these postulates is that of the supposed "neutrality of the economy". In discussions about development, economics is presented as a natural fact, an uncontested existence, not subject to value judgments but to "neutral" knowledge. This view allows, therefore, what are essentially political choices to be considered as incontestable scientific decisions (Carducci, 2014, p. 187). One of the elements of the formation of the tripod of sustainable development would then be perceived as a constant.

The equivocal character of this idea of the scientificity of economics is put to the test by the impossibility of its exact mathematical replication, and the real precision of the formulas used in economic models when compared with reality (Carducci, 2014, p. . 189). Economics as a series of political and market choices, on the other hand, opens space for decisions involving this area to be criticized and modified to serve the interests of the people and the State.

The discussions on environmental issues were, from their beginning, adjusted and adapted to the economic interests of the subjects involved, culminating in the current concept of sustainable development. As a response to the challenges of environmental degradation caused by the use of fossil fuels, this concept does not break with "the perspective of functionalization of nature in the market", in addition to maintaining the illusion that it is possible "a development of material goods and services that are in fact sustained by nature" (Carducci, 2020b, p. 94). Pompeu and Fernandes (2021, p. 200) point out that the idea of development based on economic rationality is incompatible with the search for balance between man and nature. The accumulation of goods and capital, a marker of progress in this view, requires constant use of natural resources, accentuating situations of imbalance. The 2020 Report points to the existence of planetary imbalances, causing dangerous changes for people and all forms of life, exacerbated by social imbalances (UNDP, 2020, p. 3-4). Achieve a

Sustainable development in such a system sounds contradictory.

Financial incentives for investment in sustainable production and energy models stem mainly from popular pressure, either from the investor group or from consumers themselves, or from the more recent realization that climate change is, in itself, an obstacle to profit. Studies show that more than half of the world's Gross Domestic Product is moderately or strongly dependent on nature or ecological systems (UNDP, 2020, p. 163). The economy, like all other human activities, depends on nature and, without adapting the forms of production adopted in recent centuries, it is as affected by climate change as other sectors, with the added

bonus of being directly responsible for these changes.

Despite the tone of greater urgency adopted by international documents published in the last decade, economic decisions are still the main point of discussion, and what in fact has dictated the pace of the international response to climate change. As a representation of Carducci's proposed postulate of economics as a series of political decisions, the COP26 deliberations were directly affected by the pressure exerted by developing countries, especially China and India. Although the final text of the Covenant is the first UN document to expressly mention the use of coal, it also mentions the phasing out of the use of "inefficient" fossil fuels (UN, 2021, p. 5), a term included after deliberation by member countries.

This involvement of countries in the defense of private economic interests in the international scenario postpones the confrontation of environmental issues in an effective way, mitigating effects and making the agreements assume a position of response to market trends, instead of directing action.

On the one hand, the world economy is currently governed by global financial markets that produce or burn wealth (in an amount far greater than the financial reserves of individual states) independently of the material decisions of states, and, above all, much faster than the time of political decisions. The market, in short, is now "faster" than states, and this temporal dysfunction inexorably not only conditions and "captures" public decision-makers, but also instantly frightens public opinion and private decision-makers (Carducci, 2020b, p. 96-97).

Blühdorn (2016, p. 268) points out that the trend of the current phase of sustainable development policies is less about changing social values, prevailing lifestyles and socioeconomic structures to achieve a socio-ecological objective than about managing inevitable consequences. What he calls "unsustainable" policies seeks to promote social adaptation and resilience to the effects of human action on nature. In this sense, the sixth topic of the Glasgow Pact is aptly called "Loss and Damage", where members recognize that climate change has already caused and will cause more and more loss and damage (UN, 2021, p. 6). The constant prioritization of the economic factor in the concept of sustainable development generates criticism of the very definition of the concept. Latouche (2003, p. 1) states that there is no room for the care for nature of ecologists or for respect for man by humanists in the paradigm of economists. Development, in itself, is firmly planted in the logic of economists, and is therefore incompatible with the sustainable side. Integrating ecology and economy does not change the nature of the market, of permanent accumulation and consumption of resources.

Sustainable development would then be an oxymoron, a contradiction.

The neutrality of the economy pointed out by Carducci as a factor of discussion allows countries to continue to raise such demands to justify the non-fulfillment of commitments and the mitigation of concrete actions. The Glasgow Pact is once again an example, by highlighting, urging, emphasizing and *reemphasizing* points already discussed and agreed upon previously, but not

yet implemented due to lack of action by countries. In an emblematic speech, Alok Sharma, president of COP26 states that "unless we honor the promises made, that we turn the commitments in the Glasgow Climate Pact into action, they [the goals] will wither on the branch"<sup>1</sup>.

The Pact has no coercive instruments, and the financing of actions depends on collaboration and the assumption of commitments established by countries. Carducci (2020b, p. 97-98) defines this type of ecological policy approach as "optional", based on the establishment of secondary principles that demarcate goals to be achieved without the provision of measures that limit freedoms or the global market. This approach, predominant in the scenario of international organizations, is therefore focused on the interests of the market in the first place.

Without the interest of transforming the foreseen terms into action, and without instruments to enforce their compliance, the activity of international ecological protection assumes almost symbolic functions, often verified in the legal protection of domestic Environmental Law. These symbols create expectations and calm public opinion, representing a false awareness (Freitas; Pompeu, 2019, p. 250), without there being any real change in reality and the *status quo*.

The prioritization of the economy in socio-ecological debates, however, opens space for the emergence of discussions and searches for alternatives. From theories critical of the concept of sustainable development to internal initiatives of countries outside the Euro-American axis, there are several attempts to centralize nature, of which man is an inseparable part, in the response to climate change.

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#### 4 Ecosystem Centrality as a Viable Alternative

One of the initial points of criticism of sustainable development lies in the assertion that at no time is this concept detached from the developmentalist thinking that underlies modern life, whether in the economic or social sphere (Pereira; Wincler; Franco, 2008, p. 140). The need to impose limits on the use of resources, while maintaining the expected growth rates, invariably becomes a contradiction weakening the points of defense of ecosystems in favor of the preservation of development.

Thus, the discussion of alternatives to the models of response to the environmental deficit prioritized in the international scenario goes through different areas. In addition to the optional approach already presented, Carducci (2020b, p. 95) points to the existence of other more radical ones, not oriented towards a market ethic, but rather towards an ecosystem view of the relationship between man and nature. One of the examples of these

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<sup>1</sup> More information at: McGrath, Matt. Climate change: 'Fragile win' at COP26 summit under threat. BBC News. London, 24 Jan 2022. Available at: <https://www.bbc.com/news/science-environment-60115969>. Accessed on: 18 Feb. 2022.

theories is that of degrowth, as presented by Serge Latouche, although it has already been mentioned and defended by environmental defense groups at other times.

Latouche (2018, p. 279) defines degrowth as a social project, rather than an economic project. The goal is not to replace economic growth, which currently governs the international scenario and decision-making in all areas, with another type of growth or development, but to break with the imperialist imaginary of economic supremacy and the creation of a new society. The constant need for economic growth that underlies the current consumer society is based on the lack of limits: unlimited production with the use of renewable and non-renewable resources, creation of unlimited needs, and unlimited generation of waste and pollution. This growth, however, does not serve the interests of humanity either.

One of the main concerns of the theory of degrowth occurs precisely in trying to create strategies as responses to unlimited growth and the consumer society. Economic growth, by itself, does not bring happiness or equalization of inequalities, but what is observed is an infinite cycle of production – consumption – disposal, being, therefore, one of the dilemmas for sustainability (Holanda, 2021, p. 229).

As Carducci (2020b) states, such a perspective is radical, and, in many discussions, it is difficult to predict how such a transition would occur and what is the real level of degrowth necessary to achieve a balance between quality of life and ecosystem preservation. Trainer (2021) points out that the magnitude of this change surpasses even the most optimistic projections, if the goal is to enable a sustainable and just world for all, with drastic reform of political, social, cultural, and economic systems. The development of local production and supply systems, governed by regional councils and outside the influence of the market, is presented as an alternative.

Also relevant in the theory of degrowth presented by Latouche (2018, p. 280) is the idea of the decolonialization of the imaginary as a necessary step towards an ecological transition. By pointing to social reality as a product of imaginary meanings, he transforms the economy and its growth, as well as development and all its facets, into beliefs that must be modified before they can be overcome. The reality of the current economic and international market dynamics, which represents a product of North/South influence and its imperialist heritage, requires, then, the search for solutions beyond the reach of this imaginary.

In addition to the optional approach, common to international provisions, Carducci (2020b, p. 100) presents a second approach in the fight against the ecological deficit that he calls "prescriptive". Derived from the efforts of developing countries, especially in Latin America and Africa, this approach is based on environmental humanitarian law, mainly through the provision of terms such as *in dubio pro natura*, the focus on policies to restore degradation rather than compensation aimed at market convenience, the imposition of prior limits on the use of natural resources, and the implementation of popular participation

initiatives at various levels, the so-called demodiversity.

The historical process of the formation of Latin American states was based on the colonialism of exploitation, by the extraction and export of natural resources with economic value, at the same time that political and legal concepts were imported that did little to coincide with the local reality (Pompeu; Fernandes, 2021, p. 193). European economic and constitutional models, and later North American, did not take into account local diversity, whether human or natural. These models still prevail in countries with similar heritages, and are presented as one of the obstacles to the search for alternatives.

This new constitutionalism rejects such transplants in favor of new systems, where participation and diversity assume a central role in the preservation of nature as an objective and as a means of achieving social well-being (Carducci; Amaya, 2016, p. 259-260). Respect for biodiversity, of which human beings are a part, becomes a parameter of constitutional control and a judicially questionable obligation, while nature it assumes a role as a subject of rights, and not just as a human right. The constitutionalization of this traditional thought, common to several indigenous communities, represents a break with the legal paradigm as a colonial heritage.

This philosophy brings about a change in the modern perspective, by accepting the logic of cultural, ethnic and social diversity, and by combating the hegemonic colonialist damages. The recognition of nature as a subject of collective law implies the partial loss of ownership of individual rights. Hence the difficulty of recognizing *buen vivir* within the capitalist individualist system, in which the State and monist law are institutionalized (Calaça *et al.*, 2017, p. 159-160)

This approach, despite representing an important attempt to highlight the relationship between ecosystem and human beings as the basis of the legal system, faces particular limitations in its form of application. Legal decisions, such as the new Latin American constitutions, are limited in space to the borders of the states that promote them, while the problems arising from the ecosystem imbalance take on a global character. The solution to these problems through local conservation measures is then insufficient, although necessary (Carducci, 2020b, p. 87). Krenak (2019, p. 13) calls this practice creating "some places as a free sample of the Earth".

The concept of demodiversity that emerges from this approach represents, however, an alternative to current environmental decision-making processes that are not very representative or participatory. By integrating the population in decision-making related to the protection of the ecosystem and biodiversity, at all levels and dimensions, a relationship that was broken by the distance between the common citizen and the care for nature is reestablished (Carducci, 2018, p. 421). Democratic participation is based, then, on responsibility for one's environment and on learning and maintaining the living conditions of

the ecosystem as a whole.

This separation between man and nature, created by the modern Western way of life, is an obstacle not only to the solution of the problems of environmental degradation, but to the very search for alternatives, so that promoting the reform of this connection with the land, at any level, is already a challenge to the dichotomous positioning of man against trees (Bicas, 2018, p. 481). The search for alternatives must be as diverse as the biodiversity of ecosystems and the plurality of human societies, rather than following a single dominant movement or interest. Carducci (2020b, p. 101-102) emphasizes this point when he speaks of a constitutional ecology, about a change not only in the legal system, but in the type of rule, whether main as the new Latin American constitutions or secondary as international treaties. About the limits and responsibilities within an ecosystem approach, which sees man and nature as parts of a whole and which, perhaps, is a better option than other so-called revolutionaries. The breadth of options and, more importantly, their feasibility of application In the real world, however, they are the main reason to look beyond the most common protection models.

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## 5 Final Thoughts

The decision-making process regarding the current environmental crisis is the product of decades of mitigating the real protection of the ecosystem and the relationship between man and nature in favor of maintaining the economy. Economic growth was already a concern in the genesis of the concept of sustainable development, as it was seen as the only path to human development in poor countries. This concern still remains central on the international scene, where debates such as those at COP26 are dominated by discourses against the end of the use of fossil fuels, influencing the final text of the document resulting from the event.

The Glasgow Climate Pact represents, therefore, a clear vision of the optional approach as presented by Carducci, with the predominance of non-mandatory provisions and still strongly oriented towards a market ethic. This type of document prevails in the international scenario because it does not compromise the autonomy of states or antagonize economic interests, but, at the same time, it offers timid responses both in improving the quality of human life and in reducing the effects of climate change. The long adaptation periods and the lack of action mechanisms contradict the urgency of the most recent projections, but favor the economy. On the other hand, this type of response is not the only one, as demonstrated by the existence of constitutional initiatives such as the new Latin American constitutions, and by theories such as degrowth. These prescriptive approaches are focused on the holistic human-nature system, establishing limits to the performance of the market and the supremacy of ecosystems over other interests. Man assumes a central role, with the creation of participation

mechanisms that value not only the biodiversity that makes up nature, but human diversities.

In this way, the approaches presented by Carducci find materialization not only in the international scenario, as evidenced by the Glasgow Pact, but also in regional initiatives, evidencing the existence of different angles of reaction to climate change. These angles, however, do not respond only to the different needs, as the initial hypothesis, but also to the various conflicting interests, especially the economic ones.

In this scenario, demodiversity stands out as a mechanism that allows society, at various levels, to reassume responsibility for caring for nature, in addition to reinforcing participation in the construction of reality and the future. This approach also allows greater decision-making power to traditional and indigenous groups, routinely removed from official deliberative processes. The centrality of nature and man in this mechanism removes the domination of economic interests, submitting them, first, to the well-being of the ecosystem as a whole.

Climate change is the product of continuous human action on nature, which creates a complex situation of imbalance and difficult to solve unless the basis of the causative system is contested. In the same way, seeking a single form of resolution, especially through the same mechanisms that cause degradation, disrespects the role of man as agent and victim, and natural diversities. The economy is a human creation, driven by human choices, and, as such, it must serve human interests. Prioritizing it in environmental dynamics is also a choice. Thus, other choices can be made, as demonstrated by the applications of the prescriptive approach.

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#### Mailing address:

Gina Vidal Marcílio Pompeu Email: [ginapompeu@unifor.br](mailto:ginapompeu@unifor.br)

Natália Maria Silva Luz  
E-mail: [natmsluz@gmail.com](mailto:natmsluz@gmail.com)

#### Editores-Chefes

Joyceane Bezerra de Menezes, Universidade de Fortaleza, Fortaleza, Ceará, Brasil  
<https://orcid.org/0000-0002-5710-9977>, [joyceane@unifor.br](mailto:joyceane@unifor.br)

Gustavo Raposo Pereira Feitosa, Universidade de Fortaleza, Fortaleza, Ceará, Brasil  
<https://orcid.org/0000-0002-3766-0112>, [gfeitosa@unifor.br](mailto:gfeitosa@unifor.br)



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