

# PROPOSAL FOR A GENERAL ENVIRONMENTAL LICENSING LAW: SIMPLIFICATION OR DISMANTLING OF ADMINISTRATIVE CONTROLS?

## *PROPOSTA DE LEI GERAL DO LICENCIAMENTO AMBIENTAL: SIMPLIFICAÇÃO OU DESADMINISTRATIVIZAÇÃO?*

Article received on: 1/06/2025

Article accepted on: 7/08/2025

**Carla Amado Gomes**

Faculdade de Direito, Universidade de Lisboa (ULISBOA), Lisboa, Portugal

Orcid: <https://orcid.org/0000-0002-6484-0549>

[carla.amado70@gmail.com](mailto:carla.amado70@gmail.com)

**Juliana Rocha Braga**

Faculdade de Direito, Universidade de Lisboa (ULISBOA), Lisboa, Portugal

Lattes: <http://lattes.cnpq.br/4440187376479417>

Orcid: <https://orcid.org/0009-0002-3510-8006>

[julianarochabraga@gmail.com](mailto:julianarochabraga@gmail.com)

The authors declare no conflict of interest.

### Abstract

This research addresses the proposed General Law on Environmental Licensing, critically analyzing Bill No. 2,159/2021 according to Brazilian constitutional environmental principles. The objective is to assess how the new regulatory framework may positively or negatively impact environmental protection in Brazil. To this end, the study adopts a legal-exploratory approach, conducting a qualitative analysis based on the examination of various documents throughout the research. Initially, the study contextualizes the environmental licensing system in Brazil, highlighting its origin, relevance, and normative structure. It then examines key aspects of Bill 2,159/2021, the introduction of the License by Adhesion and Commitment (LAC), and the restrictions on public participation.

### Resumo

*Esta pesquisa aborda a proposta de Lei Geral do Licenciamento Ambiental, analisando criticamente o PL 2.159/2021 sobre os princípios ambientais constitucionais brasileiros. O objetivo é avaliar como o novo marco regulatório pode impactar positivamente ou negativamente a proteção ambiental no Brasil. Para isso, a vertente da pesquisa é jurídico-exploratória, abrangendo uma análise qualitativa fundamentada em análises de diferentes documentos ao longo do estudo. Inicialmente, contextualiza-se o sistema de licenciamento ambiental no Brasil, destacando sua origem, relevância e estrutura normativa. Em seguida, o estudo examina os principais aspectos do PL 2.159/2021, a introdução da Licença por Adesão e Compromisso (LAC) e as restrições à participação popular. A pesquisa conclui que, embora o projeto tenha como premissa central*



The research concludes that, although the bill is primarily based on the premise of simplifying and standardizing the environmental licensing process, it presents significant weaknesses that could constitute a setback in environmental protection. The study emphasizes the importance of strengthening the licensing mechanism, aligning it with constitutional principles and legal certainty, in order to reorient the legislation toward promoting social justice, economic viability, and sustainable development, based on technical criteria and the prudent implementation of eventual changes.

**Keywords:** Bill No. 2,159/2021; constitutional environmental principles; environmental licensing.

*a simplificação e uniformização do processo de licenciamento ambiental, apresenta fragilidades significativas que podem configurar um retrocesso na proteção ambiental. Ressalta-se a importância de fortalecer o mecanismo de licenciamento, alinhando-o aos princípios constitucionais e à segurança jurídica, de modo a reorientar a legislação para promover a justiça social, a viabilidade econômica e o desenvolvimento sustentável, com base em critérios técnicos e na aplicação prudente de eventuais mudanças.*

**Palavras-chave:** licenciamento ambiental; princípios constitucionais ambientais; Projeto de Lei n. 2.159/2021.

## Introduction

In recent years, Brazil has experienced large-scale environmental disasters whose consequences have profoundly impacted the fundamental rights of the affected populations. In 2015, the collapse of a mining dam in Mariana, Minas Gerais, caused extensive environmental degradation and affected numerous communities along the Rio Doce basin. A few years later, in 2019, another tailings dam failure occurred in Brumadinho, also in Minas Gerais, resulting in irreparable human, social, and environmental losses. More recently, in 2024, the state of Rio Grande do Sul was severely affected by widespread flooding that devastated multiple regions, caused substantial losses, and placed several municipalities under a state of emergency.

This paints a brief and somber picture of some disasters and tragedies—or, as the extractive sector would rather characterize them, environmental accidents. Environmental incidents are neither recent phenomena nor isolated occurrences; in most cases, they are foreseeable and preventable. The disasters mentioned above are anthropogenic in nature and stem from a systemic, extractive model of production and consumption that inherently violates human and environmental rights in favor of a profit-oriented, market-driven logic.

The dynamic of unchecked natural resource exploitation, coupled with their growing scarcity, has prompted mobilizations that lead to ecological movements. Such movements, in turn, advocate for environmental protection and underscore

the urgent need to establish regulatory mechanisms in response to the ongoing environmental crisis and the increasing pressures generated by the developmentalist paradigm.

It is within this context that environmental licensing was incorporated into the Brazilian legal framework with the National Environmental Policy Act (Law No. 6,938/1981), becoming one of the most significant instruments for environmental protection. Given its preventive nature, environmental licensing allows for the prior control of activities that are either effectively or potentially polluting and might cause environmental degradation. It is through proper licensing procedures that efforts are made to prevent environmental harm or, at a minimum, to mitigate the damage resulting from the unchecked exploitation of natural resources within the current economic model.

At present, the regulation of environmental licensing is primarily governed by infra-legal instruments, some of which predate the 1988 Constitution. There is a proliferation of state and municipal regulations, many of which are inconsistent or contradictory. Administrative discretion is frequently observed in defining procedures and criteria for environmental assessments, as well as in the lack of uniformity in the environmental conditions imposed. This scenario contributes to excessive judicialization and persistent legal uncertainty.

As a result, federal legislation has long been proposed to establish a comprehensive regulatory framework to guide licensing practices within Brazilian environmental policy. This study therefore turns its focus to Bill No. 2,159/2021, which represents the most advanced and comprehensive legislative proposal on the matter. The following question is posed based on an analysis of the bill: in what ways would the proposed new regulatory framework for environmental licensing enhance—or undermine—the protection of an ecologically balanced environment?

It is important to highlight that, within the current Brazilian context, environmental licensing is approached within a polarized political and institutional climate. A segment of the business sector attributes the current environmental licensing regulations as being responsible for halting major national infrastructure projects. These regulations are often viewed as bureaucratic, slow, and excessively restrictive—an obstacle to the country's development. In contrast, environmental advocates point to the significant human and environmental disasters mentioned to underscore the urgent need for legislative reform and uniform regulation of environmental licensing aimed at implementing more stringent safeguards. Amid the ongoing tension between economic imperatives and environmental protection,

it is crucial to examine whether the proposed new legal framework, such as Bill No. 2,159/2021, constitutes normative progress or a setback in the effectiveness of environmental protection in Brazil. This inquiry is warranted by the pressing need to ensure legal certainty while upholding the constitutional principles that underpin environmental law.

Within this context, the general objective of this article is to assess the impact of Bill No. 2,159/2021 on the protection of an ecologically balanced environment. Its specific objectives are: (i) to contextualize environmental regulation and governance in Brazil, with a focus on the current legal framework for environmental protection; (ii) to examine the origin, purpose, definition, legal nature, and procedural stages of environmental licensing, along with the regulatory instruments that govern it; (iii) to critically analyze the main elements of the legislative proposal, taking into account its history and rationale in the initiating chamber; and (iv) to evaluate the core provisions of Bill No. 2,159/2021 in light of constitutional environmental principles, highlighting its potential contributions and shortcomings in meeting the need for effective environmental regulation.

## 1 Overview of environmental regulations in Brazil

The rise of capitalism and the Industrial Revolution marked the emergence of a dichotomy between economic development and environmental protection, resulting in the intensive exploitation of natural resources and the onset of the environmental crisis. These conflicts spurred ecological movements and sparked debates on the need for legal mechanisms capable of reconciling economic development with environmental preservation.

A foundational milestone in Brazilian Environmental Law was the enactment of the National Environmental Policy Act (PNMA – *Política Nacional do Meio Ambiente*), established by Law No. 6,938/1981, and inspired by the 1972 Stockholm Declaration (UN, 1972). The PNMA systematized environmental protection by recognizing the environment as an autonomous legal interest and introducing key regulatory tools such as environmental licensing and environmental impact assessments. It also established the National Environmental System (SISNAMA – *Sistema Nacional do Meio Ambiente*), encompassing agencies such as CONAMA, IBAMA, and ICMBio, which are tasked with the regulation, oversight, and implementation of environmental policies (Brasil, 1981). The importance of the demands and advocacy for ecological values championed by social movements and environmental organizations since the 1960s must be underscored. These

social and political struggles played a vital role in the consolidation of the legal instruments for environmental protection that remain in force to this day (Sarlet; Fensterseifer, 2019).

The 1988 Federal Constitution (Brasil, 1988) enshrined the right to a healthy environment as a fundamental right, embedding environmental principles into the very foundations of the Democratic Rule of Law. It assigns responsibilities across all levels of government and promotes a model of ecological cooperative federalism, whereby the Union, states, and municipalities share authority over environmental regulation, monitoring, and enforcement.

Together, the PNMA and the 1988 Constitution laid the groundwork for the development of Environmental Law in Brazil, with a focus on environmental justice, damage prevention, and the integration of ecological values into national legislation.

## 2 Environmental licensing

Licensing is a fundamental instrument for environmental management in Brazil, operating as a core mechanism for the control and prevention of environmental impacts. For the purposes of this study, it is essential to examine its key elements, such as its definition, legal nature, jurisdiction, and procedural phases, in order to provide a solid theoretical foundation for the ensuing analysis.

As established by Federal Law No. 6,938/1981, which created the National Environmental Policy Act (PNMA), environmental licensing is an administrative tool for regulating potentially polluting activities (Brasil, 1981). Grounded in the preventive principle and shaped by the principles of sustainability, the polluter-pays principle, and the social and environmental function of property (Wedy & Moreira, 2019), licensing is a procedure through which the competent environmental authority evaluates and authorizes the implementation and operation of projects which could cause environmental harm. It is not an end in itself, but a means to ensure the effectiveness of environmental policy, as set forth in Article 4 of the PNMA.

According to Antunes (2023), environmental licensing has a hybrid legal nature, combining both technical and political dimensions. The technical component involves the use of environmental impact studies, which assess the potential damage associated with a given project, while the political dimension reflects the discretion of public authorities in determining whether to issue the license, based on considerations of public interest and project feasibility.

Moreover, the environmental licensing process, beyond its technical and political aspects, is legally complex, as it involves the application of specific regulations and presupposes public participation as a component of social control and procedural legitimacy.

Despite the centrality of environmental licensing as a governance instrument, not all activities that involve the use of environmental resources are subject to this procedure. Only those that have the potential or actual capacity to cause pollution or environmental degradation require prior authorization, as recognized in both doctrine and regulatory practice. In its Annex I, CONAMA Resolution No. 237/1997, offers a non-exhaustive list of activities subject to environmental licensing, covering sectors such as mining, industry, agriculture, tourism, and transportation, among others. However, activities not explicitly listed may still require licensing if they are shown to have a significant potential for environmental impact, underscoring the legally indeterminate nature of the concept of environmental degradation (CONAMA, 1997).

Regarding the authority responsible for licensing, Complementary Law No. 140/2011 (Brasil, 2011) introduced important developments by regulating Article 23 of the Federal Constitution and establishing guidelines for cooperative efforts between the Union, states, and municipalities. Prior to its enactment, the absence of clear guidelines regarding the responsibilities of federal entities resulted in overlapping duties and delays in the licensing process. The law in question established clear criteria for the distribution of responsibilities, prioritizing administrative decentralization and efficiency in environmental management.

Under the current framework, the federal government is responsible for licensing projects with national or interstate impact or those located in areas under federal jurisdiction. States are granted residual authority to license activities not assigned to federal or municipal jurisdiction, while municipalities are responsible for licensing projects with local impact. Additionally, Complementary Law No. 140/2011 allows for the delegation of responsibilities among federal entities through cooperative mechanisms, enabling large-scale projects to be licensed by federal or state agencies in order to enhance efficiency and address potential technical or structural limitations of local authorities.

From an administrative procedural perspective, environmental licensing is divided into phases involving specific steps, documentation, and legal deadlines. Traditionally, the process includes three types of licenses: the Preliminary License (PL), the Installation License (IL), and the Operating License (OL). Each phase serves a distinct function and is conditional upon compliance with the

requirements of the previous one, although CONAMA Resolution No. 237/1997 allows some flexibility in sequencing, depending on the characteristics of the project (CONAMA, 1997).

The LP, issued during the project's planning stage, evaluates its environmental feasibility and outlines the conditions to be followed during implementation. The IL, in turn, authorizes the beginning of construction or installation, provided that the conditions set by the PL have been met. Finally, the OL is granted after verifying compliance with all previously established requirements, permitting the project to begin regular operations.

In addition to the traditional three-phase model, current legislation allows for simplified procedures for small-scale or low-impact projects, as well as corrective licensing to regularize activities that have already been initiated or are in operation, in accordance with the precautionary and preventive principles. Such flexibilities aim to adapt the licensing process to the specific circumstances of each case without undermining environmental safeguards.

Thus, environmental licensing stands as a legal-administrative mechanism for implementing Brazilian environmental policy, ensuring a balance between economic development and environmental protection. Regardless of the challenges faced, such as bureaucratic complexity and inconsistent regulatory implementation, environmental licensing plays a crucial role in mitigating environmental impacts, promoting the sustainability of economic activities, and fulfilling the constitutional duty to protect the environment.

### **3 Bill No. 2,159/2021**

Having outlined the key elements of the current legal framework governing environmental licensing procedures, this study now turns to an examination of Bill No. 2,159/2021.

#### **3.1 Legislative history and initial justification**

Bill No. 2,159/2021, recently approved by the Federal Senate (May 21, 2025) and returned to the House of Representatives due to substantial amendments introduced by the senators<sup>1</sup>, originated in the House of Representatives

---

<sup>1</sup> The analysis developed throughout this paper is based on the consolidated version of Bill No. 2,159/2021, as approved by the House of Representatives on May 17, 2021. References to its subsequent review by the Senate are included for contextual purposes only and do not involve a detailed assessment of any amendments introduced during later legislative stages.

in 2004 under the designation Bill No. 3,729. The proposal was introduced by then-Congressman Luciano Zica of the Workers' Party of São Paulo, with the support and co-sponsorship of several other members of Congress. In the justification presented to the House of Representatives, the authors emphasized the need to ensure the constitutional right to an ecologically balanced environment, as established in Article 225 of the Federal Constitution, and highlighted the importance of regulating the Environmental Impact Study (EIA – *Estudo de Impacto Ambiental*) and the Environmental Impact Report (RIMA – *Relatório de Impacto Ambiental*) (Brasil, 2021g).

The bill's sponsors assigned environmental licensing a central role as a tool for controlling projects that may result in pollution or environmental degradation. They noted that the absence of a specific legal framework for licensing results in significant legal uncertainty.

The original proposal aimed to regulate the environmental licensing process and its implementation by SISNAMA, as well as to govern the Preliminary Environmental Impact Study (EPIA – *Estudo Prévio de Impacto Ambiental*). According to the initial draft, licensing procedures for projects likely to cause significant environmental degradation would be structured in three phases: a preliminary license, an installation license, and an operating license, consistent with the model established in CONAMA Resolution No. 237/1997 (CONAMA, 1997). The bill also included provisions aimed at strengthening the protection of Indigenous lands and traditional peoples.

While the original draft of the bill presented a markedly protective approach, it also included provisions for simplified licensing of activities deemed to have no significant environmental impact, as established in Article 8, and for single-stage licensing of plans and programs, pursuant to Article 9, Paragraph 1.

Additionally, the legislative proposal emphasized the importance of civil society participation through public hearings for the approval of the EPIA, based on the provisions of Article 18. It also established mandatory environmental control measures through Article 20, providing for sanctions in case of noncompliance, including the possibility of suspension or cancellation of licenses under Article 21. Moreover, Bill No. 3,729/2004 reaffirmed the centrality of the EPIA (Brasil, 2004). One of the measures reflecting this concern was the prohibition of granting public services and undertaking works related to projects with potential for environmental degradation without prior approval of the preliminary study (Article 24).

The bill remained under review in the House of Representatives for 17 years,

during which time several other legislative proposals submitted by other members of Congress were appended to it. Bill No. 3,729/2004 has also been archived and unarchived multiple times, with a significant number of substitute texts and a total of 101 proposed amendments.

It is important to contextualize the historical and political moment in which the bill was originally introduced in order to understand its initial design and to draw a parallel with the political environment surrounding the version submitted to the Senate as Bill No. 2,159/2021. During the early 2000s, deforestation in the Amazon reached critical levels, becoming a major national and international concern (INPE, 2024). At the time, the federal administration under President Luiz Inácio Lula da Silva pursued an environmental policy that sought to reconcile economic development with environmental conservation, most notably reflected in the 2004–2007 Multi-Year Plan (Brasil, 2003) and the launch of the Growth Acceleration Program (Programa de Aceleração do Crescimento, PAC) (Brasil, 2007).

According to data from the National Institute for Space Research (INPE, 2013), deforestation in the Amazon reached approximately 10,722 square miles (27,772 km<sup>2</sup>) in 2004, an increase compared to previous years. These figures prompted the government to step up efforts to combat deforestation through intensified inspections and the creation of conservation units. In this context, it can be concluded that Bill No. 3,729/2004 emerged as a legislative response to mounting demands for environmental protection, aiming to address the challenges posed by environmental degradation in the region.

### 3.2 Current status of the bill

Bill No. 2,159/2021 addresses environmental licensing and proposes regulation of item IV of Paragraph 1 of Article 225 of the Federal Constitution. Additionally, it introduces amendments to Laws No. 9,605/1998 and No. 9,985/2000; repeals provisions of Law No. 7,661/1988; and establishes other measures related to the matter (Brasil, 2021g).

In the Federal Senate, the bill was the subject of several public hearings and received over 200 proposed amendments, having been reviewed by the relevant thematic committees, particularly the Committee on the Environment and the Committee on Agriculture and Agrarian Reform, both of which issued reports incorporating substantial modifications. On May 21, 2025, the text was approved by a Senate Plenary Meeting by a vote of 54 to 13 and became widely referred to

by environmentalists and experts as the “Devastation Bill” (Senado..., 2025), due to criticisms directed at its pattern to weaken environmental protection standards. Following its approval upon amendment, the bill was returned to the House of Representatives for further deliberation.

It is important to note, however, that this research is based on the consolidated version of Bill No. 2,159/2021 as approved by the House of Representatives, and the analysis is therefore focused on this version of the legal framework, which already reflects extensive legislative debate and outlines the core direction of the proposal.

It should be noted that the text of Bill No. 2,159/2021 differs substantially from the original Bill No. 3,729 of 2004. As previously stated, the proposal was subject to hundreds of amendments and substitute versions, which significantly altered its original content. This evolution is illustrative of the broader political context in place in Brazil. As discussed, Bill No. 3,729 was introduced in 2004 and remained under review in the initiating chamber for 17 years, only being approved in 2021 and subsequently forwarded to the Senate. This sequence of events, particularly the approval of the bill in May 2021, is not merely coincidental.

In 2021, Brazilian environmental policy was marked by intense debate and controversy, largely fueled by the actions of then-Minister of the Environment, Ricardo Salles. His tenure was widely criticized for promoting deregulation, weakening enforcement mechanisms, and implementing budget cuts that undermined environmental oversight. The expression “*passar a boiada*” (“let the herd through”) became emblematic of a broader strategy to implement sweeping regulatory changes with minimal public scrutiny during the COVID-19 pandemic, raising widespread concern about environmental rollbacks and diminished protections against illegal deforestation.

The original text of Bill No. 3,729/2004 aimed to consolidate a legal framework grounded in stronger environmental safeguards. Its objective was to strengthen protective mechanisms and emphasize the role of environmental studies and licensing procedures. It was conceived as a normative compilation that, in general terms, sought to provide greater legal certainty to the environmental regulatory system (Brasil, 2004).

Bill No. 2,159/2021, although based on its predecessor, diverges from it in important respects, both in terms of its provisions and its underlying intent.

### 3.3 Main elements and critical analysis of the bill in light of environmental principles

As discussed in previous sections, environmental licensing is one of the most critical instruments established under the PNMA, as it seeks to reconcile the State's constitutional duty to protect the environment with the simultaneous promotion of sustainable development. Nevertheless, it is evident that the current regulatory framework for environmental licensing in Brazil is not codified in a single legal statute; rather, it is composed of a fragmented and dispersed array of rules contained in various legal sources, including constitutional provisions, ordinary and complementary laws, resolutions, decrees, ordinances, and others.

In light of this scenario, Bill No. 2,159/2021 proposes an amendment to current legislation and seeks to establish a more uniform normative framework on the subject (Brasil, 2021g). In this regard, several proposed changes to the environmental licensing framework stand out, aiming to reflect on the question that is the object of investigation in this study. It is important to clarify, however, that this article does not seek to exhaustively address all of the “new” elements introduced by Bill No. 2,159/2021; rather, it aims to provide a general analysis of the most debated and controversial aspects as identified by legal scholars, environmentalists, environmental agencies, affected communities and peoples, as well as the extractive and industrial sectors and other interested parties. Accordingly, this section begins with an examination of the provision that exempts certain activities and enterprises from environmental licensing. It then explores the fragmentation of regulatory authority across different levels of government. Subsequently, it analyzes the characteristics and implications of the self-declaratory license. Finally, it discusses the provisions concerning the participation of Environmental Interest Agencies.

It is recognized that other topics covered in the bill are also highly relevant and merit public debate. Among them are the proposed rules on license validity and renewal periods (Articles 6 and 7). Additionally, the bill has drawn sharp criticism for excluding key environmental issues that should have been addressed, most notably the absence of any reference to climate change, raising concerns about the political intent behind such omissions. Paragraph 1 of Article 12 is especially problematic, as it restricts the scope of environmental conditions to the immediate area affected by the project, failing to consider the complex and indirect impacts of exploratory activities (Brasil, 2021g). Finally, another point of contention concerns the appropriateness—or lack thereof—of excluding mining

activity from a bill that purports to serve as a general regulatory framework (Article 1, Paragraph 3). Nonetheless, given space constraints, this study focuses on the themes discussed below, which are deemed most pertinent due to their direct relevance and impact on environmental governance.

*3.3.1 Activities and projects exempt from environmental licensing (articles 8 and 9): streamlining or sheer arbitrariness?*

Article 8 of Bill No. 2,159/2021 addresses one of the proposal's most sensitive and widely criticized elements: the exemption of certain activities and projects from the environmental licensing requirement. Specifically, it eliminates the licensing obligation for military-related undertakings (item I), as well as for other activities such as water and wastewater treatment systems and facilities (item VII); maintenance and improvement works for infrastructure, including maintenance dredging (item VIII); solid waste sorting operations (item X); and yards, structures, and equipment for composting organic waste (item XI).

As previously discussed, environmental licensing is an administrative procedure designed to authorize the siting, installation, expansion, and operation of projects and activities that may result in environmental impacts, such as pollution or environmental degradation (CONAMA, 1997). However, given numerous factors such as lack of uniformity, procedural delays, and limited flexibility throughout its stages, heated debates have emerged regarding licensing exemptions, which are presented in the bill as one of the proposed solutions.

Currently, various federal, state, and municipal regulations in Brazil provide for exemptions from environmental licensing for specific activities. Such regulatory provisions reflect the practice of cooperative federalism among federative entities and exhibit varying degrees of flexibility with respect to exempted activities.

For instance, Resolution No. 107/2020 of the State Environmental Council of Paraná (Paraná, 2020)<sup>2</sup>, which addresses environmental licensing, outlines the criteria and procedures to be applied to polluting, harmful, and/or environmentally altering activities, and includes provisions on exemptions (Articles 63 and 64) and non-requirement (Articles 65 and 66) of environmental licensing, including the issuance of a declaration of non-requirement in such cases.

---

<sup>2</sup> Likewise, Resolution No. 02, dated April 11, 2019, of the State Environmental Council of Ceará, Coema/CE (Ceará, 2019), also provides for licensing exemptions in its Article 8. Regarding the latter, the Federal Supreme Court adjudicated Direct Action for the Declaration of Unconstitutionality No. 6,288 (Brasil, 2020), partially upholding the claim and declaring the material unconstitutionality of Article 8 of Coema/CE Resolution No. 02/2019.

A justification for such exemptions could lie in the perception that the licensing procedure is often perceived as costly, overly bureaucratic, and even unfeasible for the development of certain activities<sup>3</sup>. From this perspective, licensing exemptions are framed as a measure intended to simplify administrative procedures. Proponents argue that the approach may modernize and improve the efficiency<sup>4</sup> of public administration, enabling the full exercise of specific activities.

Against this backdrop, it becomes evident that the legislator's intent, based on the wording of Article 8, aimed to regulate the matter through a general federal provision, seeking to establish more uniform guidelines and to implement the technique of environmental licensing exemption nationwide by law. The central issue, therefore, lies in the proposal to create a federal provision framed as a general rule that allows for licensing exemptions based on predefined activity typologies. To facilitate a clearer analysis, two key aspects are addressed: first, the meaning and implications of the exemption; and second, how such exemptions are structured within the bill.

On the first point, it is clear that the text of Article 8 implies the exemption of certain activities from the scope of environmental licensing. Consequently, by exempting these activities from the licensing requirement, the Public Administration relinquishes its regulatory oversight under environmental law and foregoes the application of mitigation measures designed to prevent environmental harm. The second point concerns the specific types of activities that would fall under the exemption. In this regard, it is essential to examine which categories of activities are contemplated under this regime and whether the proposed measure aligns with the current legal framework.

---

<sup>3</sup> Davi Bomtempo, Executive Manager of Environment and Sustainability at the National Confederation of Industry (CNI – *Confederação Nacional da Indústria*), emphasizes that environmental licensing in Brazil faces numerous challenges that undermine its effective implementation. He identifies key barriers, including excessive bureaucracy, overlapping authorities, complex regulations, legal uncertainty, and a lack of procedural clarity. Bomtempo advocates for streamlining the process, suggesting that for low-impact projects, a more agile, modern, and rational system is not only possible but feasible. These statements were made during a joint session of the Committee on the Environment (13th) and the Committee on Agriculture and Agrarian Reform (9th), held on May 31, 2023 (TV Senado, 2023).

<sup>4</sup> During the same joint meeting of the Committees on the Environment and on Agriculture and Agrarian Reform, Senator Tereza Cristina underscored the urgent need for legislation to modernize the environmental licensing process, arguing that ideals should not become the enemy of the good and that the bill could be further refined by the Senate. Mauren Lazzaretti, president of ABEMA, echoed the urgency of approving Bill No. 2,159/2021 as a significant step forward, emphasizing the role of technology in streamlining and improving the efficiency of the process. Senator Confúcio Moura reiterated that, since the enactment of the 1988 Constitution, Brazil has lacked a general law on environmental licensing, which has led to fragmented regulation and created difficulties for the productive sector (TV Senado, 2023).

A preliminary analysis suggests that such a provision could benefit small-scale entrepreneurs by allowing them to initiate operations without navigating a time-consuming and complex licensing process. Examples include activities such as family farming, aquaculture, and social housing initiatives. Additionally, it is worth considering that licensing exemptions for certain public works or projects serving the public interest could help expedite implementation and reduce associated costs. Such a measure could prevent frequent legal challenges and delays in the licensing of projects, particularly those related to basic sanitary infrastructure. Lastly, the exemption from licensing for military projects, which are often carried out under urgent conditions, is also addressed and may, under certain circumstances, be justified.

That said, what is the primary concern raised by this provision? The controversy surrounding Article 8 of the bill lies in its establishment of a blanket exemption from environmental licensing for certain categories of projects through a general law, based solely on the nature of the activity. The measure in question fails to account for factors such as local particularities, biome characteristics, watershed location, and potential socio-environmental vulnerabilities<sup>5</sup>.

The bill merely provides a list of activities potentially eligible for exemption from licensing, disregarding the fact that some of them may, under specific conditions, pose significant environmental risks. For example, Article 8 would grant exemptions for several situations, such as water and wastewater treatment systems and stations, solid waste sorting facilities, and services related to infrastructure maintenance and improvement works, including dredging. While these activities may, in some instances, be urgent or present low environmental risk, they may also have significant impacts and thus warrant environmental licensing. The general exemption based solely on the type of project should therefore be reconsidered.

Items IV and V of the article are particularly relevant to illustrate and reinforce this critique; they address exemptions for emergency works and interventions in response to infrastructure failures, accidents, or disasters, as well as urgent actions aimed at preventing imminent environmental damage—situations in which the urgency allegedly precludes the regular licensing process (Brasil, 2021g). However, the provision does not require the submission or preparation of technical reports by qualified professionals, which would be essential for enabling effective

---

<sup>5</sup> In a public hearing, André Lima, Secretary Extraordinary for Deforestation Control and Environmental Zoning at the Ministry of the Environment (MMA – *Ministério do Meio Ambiente*), explained that the bill's approach prioritizes project size and procedural streamlining of environmental licensing while sidelining the critical relevance of territorial suitability, ecological vocation, and vulnerability (TV Senado, 2023).

oversight of the intervention. Such a requirement would not only help justify the urgency of the measure but also allow for a comprehensive understanding of the intervention's scope, particularly in terms of its structure, potential harm, and effects on nearby communities.

It is important to emphasize that the urgency of a project does not imply the dispensability of thorough technical assessments aimed at fully and accurately evaluating the project's (in)security. Otherwise, a system would be legitimized that runs counter to the very purpose of emergency works, particularly with respect to the precautionary principle and the protection of social, environmental, and legal interests in their implementation<sup>6</sup>.

Thus, the core criticism is directed at the legislator's decision to adopt project typology as the sole criterion for exemption. This standard does not simplify or enable the activities in question but rather undermines the environmental licensing process and, by extension, the State's oversight capacity. A bill intended to establish a legal framework for environmental licensing should reinforce its role as a mechanism for balanced social, economic, and environmental development, in alignment with the principles of environmental law. However, the approach taken in Article 8 ultimately reduces licensing to a mere bureaucratic formality<sup>7</sup>.

In this regard, it is critical to highlight the axiological foundation that underpins the analysis proposed in this study, insofar as the principles governing environmental law must also guide the environmental licensing process. Following this logic, the Principle of Mandatory Public Authority Intervention mandates that the State is responsible for managing shared environmental assets and for exercising control to promote improved environmental quality. Accordingly, the licensing exemptions established in the bill amount to an abdication of the State's

---

<sup>6</sup> While a detailed discussion of this issue is beyond the scope of this study, a potential alternative can be found in Article 36, Paragraph 2 of Decree No. 47,749/2019 of the State of Minas Gerais (Minas Gerais, 2019). This provision establishes that in emergency situations, environmental interventions may be carried out without prior authorization from the competent authority, provided that formal prior notice is submitted to the authority in question. Its opening paragraph defines what constitutes an emergency, including imminent risks of environmental degradation, particularly concerning flora and fauna, as well as threats to individuals' physical integrity and situations that may jeopardize essential public services such as water supply, sanitation, transportation, and energy. It also stipulates that the party responsible for the emergency intervention must initiate the environmental regularization process within 90 days of the prior communication to the environmental agency. Lastly, Paragraph 3 establishes that if the emergency nature of the intervention is not confirmed or if the regularization process is not initiated within the prescribed timeframe, the responsible party will be subject to appropriate administrative sanctions, and the Public Prosecutor's Office shall be notified of the incident.

<sup>7</sup> Characterization used by André Lima, Secretary Extraordinary for Deforestation Control and Environmental Zoning (MMA) (TV Senado, 2023).

duty to oversee activities that could lead to environmental degradation.

Furthermore, in light of the absence of any requirement for environmental studies or procedures preceding the commencement of the activities listed in Article 8, as well as the lack of prior oversight or intervention by public authorities in the exploitation of natural resources, it is clear that the legislative proposal directly contravenes the precautionary principle. Originating in German environmental law (*Vorsorgeprinzip*) and formally expressed in the items of Paragraph 1 of Article 225 of the 1988 Federal Constitution, this principle underscores the need for prior evaluation of the environmental impacts of projects and undertakings during their process of implementation (Antunes, 2005).

Thus, the precautionary principle is operationalized through technical and scientific analyses grounded in internationally recognized protocols. In other words, it is reflected in the various standards that govern the assessment of environmental impacts of projects, even those that only potentially pose a threat to the environment (Antunes, 2005).

Similarly, without organized information or research, there can be no prevention—and without prevention, there is no environmental protection<sup>8</sup>. Environmental licensing represents a practical expression of compliance with the prevention principle, as it is not merely a precautionary mechanism, but one that leads to the concrete development of plans aligned with public environmental policy. The prevention principle is grounded in the premise that prior knowledge of environmental impacts is essential to safely establishing a set of measures designed to prevent or mitigate harm during the implementation of a project.

One of the main challenges in applying the prevention principle lies in its effective implementation, which often fails to yield full legal effects, such that persistent violations of this obligation remain one of the primary challenges faced by contemporary environmental law. It is worth emphasizing that while economic and developmental concerns are relevant to assessing prevention compliance, they must not be used as a pretext to disregard this principle, as is seemingly the case with the bill under analysis.

Moreover, as a consequence of the points raised above, Article 8 lists activities and projects that, in most instances, would require deliberation by state and municipal environmental councils or other SISNAMA bodies, with the participation of civil society and other stakeholders. Such a requirement would be feasible within the framework of the licensing process. However, as established in the

---

<sup>8</sup> In connecting the prevention principle to the concept of tacit approval under Portuguese legislation, Machado (2013) and Gomes and Leong (2023) offer valuable insights.

proposal, there is no provision allowing for public participation or the issuance of opinions by SISNAMA agencies when necessary, which constitutes a clear violation of the principle of participation.

Additionally, the Federal Constitution enshrines the principle of the prohibition of regression—or the prohibition of insufficient protection—under Article 225, Paragraph 1, item III, which legally precludes legislative amendments from diminishing the level of environmental protection afforded to specially protected areas due to their ecological significance. The Federal Supreme Court (STF), in its most recent jurisprudence, has reiterated this principle, prohibiting the creation of legal norms that, in practice, result in an environmental protection standard that falls below the constitutionally required minimum.

In her opinion in Direct Action for the Declaration of Unconstitutionality (ADI) No. 4,717, Justice Cármen Lúcia, acting as rapporteur, underscored key interpretations of the principle of the prohibition of socio-environmental regression. The Justice emphasized that this principle derives directly from the broader principle of the prohibition of social regression, which bars the State from dismantling the essential core of social rights that have already been achieved and implemented through legislative measures (Brasil, 2018).

Sarlet and Fensterseifer (2013) caution that the application of the prohibition of socio-environmental regression must not impede legislative or administrative action. They argue that public authorities must be granted a certain margin of discretion in environmental matters, so as not to constrain the necessary adjustments and restrictions. Although socio-environmental rights require protection, this protection must not be so absolute as to prevent the adaptation and evolution of legal norms needed to ensure the effective safeguarding of other fundamental rights.

In this case, the issue is not merely the prohibition of more permissive or simplified laws. The core issue lies in the development of legal norms that compromise the overall framework of environmental protection. This is the situation presented by the bill under discussion, which seeks primarily to eliminate environmental licensing for certain categories of activities. This instrument is essential for the management, oversight, and mitigation of damage resulting from the exploitation of natural resources. In light of this, the unconstitutionality of the measure is evident.

Accordingly, it is understood that, under specific and well-defined circumstances and subject to the particularities of each case, licensing may be waived through an administrative decision issued by the competent authority. Such a

measure is justified when it is determined that the activity in question does not generate pollution or pose potential harm to social well-being. However, it is essential that such a decision be supported by solid scientific criteria and objective technical parameters.

Thus, Article 8, in its current form, by presenting itself as a general rule that encompasses broad typologies of activities, projects, or works, is likely to result in increased legal uncertainty, particularly given the growing trend of judicial disputes in future specific cases.

As it stands, the proposal reveals a discrepancy between the principles set forth in the 1988 Federal Constitution and the foundational tenets of Environmental Law. This inconsistency becomes even more evident when considered alongside the established jurisprudence of the Federal Supreme Court (Supremo Tribunal Federal, STF), which has repeatedly affirmed the importance of constitutional principles related to environmental protection, such as the right to an ecologically balanced environment, the principle of non-regression, and the principles of prevention and precaution (Brasil, 2020). Indeed, the approach currently adopted by the proposal, by failing to adequately observe these principles, raises serious concerns regarding its compatibility with Brazil's domestic legal-environmental framework and its international environmental commitments. Moreover, it disregards well-established jurisprudence that reinforces the importance of preserving environmental balance and preventing normative setbacks that could undermine environmental safeguards.

Meanwhile, in light of the amendment proposals already submitted<sup>9</sup> concerning the content of Article 8, particular attention should be given to Modifying Amendment No. 20, presented by Senator Jaques Wagner (Brasil, 2021b), which was fully accepted by the Committee on the Environment (CMA, 2023). This amendment proposes to specify within the scope of Article 8 of the bill military works (which are already exempt from licensing), activities that do not involve the use of environmental resources, emergency works and interventions in cases of state of emergency, and urgent interventions intended to prevent environmental damage—provided that, in the latter two cases, a technical report on the actions taken is submitted.

The latter amendment is considered more consistent with constitutional principles and the foundational tenets of Environmental Law, as it acknowledges

---

<sup>9</sup> Four amendments propose modifications to the text of Article 8. These include: Amendments No. 33 and No. 20 (Brasil, 2021e; Brasil, 2021b) seek to remove certain projects from the list of exemptions; Amendment No. 29 (Brasil, 2021d) adds new activities to the list; and Amendment No. 49 (Brasil, 2021f) proposes the complete elimination of the article, thereby abolishing all exemptions.

environmental licensing as a regulatory instrument intended to balance the use and conservation of natural resources, with exemptions permissible only under exceptional circumstances. In cases involving projects with no significant environmental impact, it may be appropriate to consider procedural alternatives aimed at enhancing the licensing process, making it more efficient and better suited to such activities, as will be discussed below; however, total exemption cannot be regarded as a form of modernization—rather, it constitutes a devaluation of the licensing instrument.

Therefore, it can be asserted that the exemption from licensing<sup>10</sup>, when not based on clear technical criteria and justified solely by the type of activity involved, represents an unwarranted legislative regression. Such an approach may heighten legal uncertainty and contribute to increased judicial intervention in specific cases. Therefore, it is recommended that the current proposal be revised to align with constitutional principles and established jurisprudence, thereby ensuring that environmental legislation remains consistent with domestic law and the international commitments undertaken by the country in the field of environmental protection.

### *3.3.2 Delegation of complementary regulatory authority to states and municipalities (article 4, paragraph 1; article 8, II and III): specialization criterion or federal competence conflict?*

Article 4, Paragraph 1 of Bill No. 2,159/2021 establishes the competence of federative entities to define the typologies of activities and projects subject to environmental licensing, taking into account their nature, location, scale, and polluting potential<sup>11</sup>. In other words, it confers upon states and municipalities the

<sup>10</sup> Article 9 of Bill No. 2,159/2021 also provides for the exemption from environmental licensing; however, it specifically addresses agricultural and livestock activities and presents three main issues: (i) it fails to clarify whether related activities, such as effluent treatment and the use of agricultural pesticides, are also exempt, potentially leading to future interpretive challenges; (ii) it conditions the exemption to regularization through the Rural Environmental Registry (CAR – *Cadastro Ambiental Rural*), the validation of which remains incomplete, with only 3% of the analyses finalized to date; and (iii) it permits exemption for properties classified as “under regularization”, despite the fact that the vast majority of such properties have not yet undergone validation. Additionally, the provision of a simplified licensing procedure for intensive livestock farming and the classification of small dams as projects of public utility without adequate justification further aggravates potential environmental impacts. In summary, this legislation favors agribusiness by reducing prior control over its social and environmental impacts, resulting in a weakening of environmental oversight by federal governance (Brasil, 2021g).

<sup>11</sup> Article 4: The construction, installation, expansion, and operation of any activity or project that utilizes environmental resources and is either effectively or potentially polluting—or otherwise capable

prerogative to set parameters concerning the environmental licensing of certain projects that pose environmental risks.

Currently, Article 8, I of the National Environmental Policy Act (PNMA) assigns to CONAMA the responsibility of establishing rules and criteria for licensing activities that are effectively or potentially polluting (Brasil, 1981). Thus, CONAMA determines the categories of projects subject to environmental licensing processes and, despite shortcomings in the system, does so by considering the nature, location, scale, and polluting potential of the projects, while ensuring broad public participation in the decision-making process.

Accordingly, the first concern associated with the proposal set forth in Paragraph 1 of Article 4 of the bill, when compared to the current legal framework, lies in the internal contradiction of the proposal, which purports to constitute a General Environmental Licensing Law. If the stated purpose of Bill No. 2,159/2021 is to establish a comprehensive and uniform federal regulatory framework for environmental licensing, it must provide foundational guidelines for the other federative entities to follow, ensuring coherence at the national level. In this sense, Paragraph 1 of Article 4, by delegating such responsibilities, contradicts the very justification of the bill, as it fails to adopt pre-defined environmental criteria regarding the nature and procedure of the licensing process (whether three-phase or simplified), leaving that responsibility to states and municipalities. Even Ibama (2017)<sup>12</sup> expressed its position on this matter, stating that a project with certain characteristics may be subject to a three-phase process with EIA/RIMA in one jurisdiction, while a similar activity in another jurisdiction may only require a declaration of adherence and commitment, contradicting the purpose of a general law.

Thus, there is a clear conflict between this provision and the broader objectives of the bill. The following section explores the implications of this delegation of authority.

The rationale—although not explicitly stated—underlying the arguments in favor of the delegation seemingly lies in the pursuit of improved technical accuracy and regulatory specificity in the environmental licensing procedure, tailored

---

of causing environmental degradation—shall be subject to prior environmental licensing by a licensing authority that is part of SISNAMA, without prejudice to any other applicable licenses, permits, or authorizations. Paragraph 1: Federative entities shall define the typologies of activities or projects subject to environmental licensing, in accordance with the responsibilities set forth in Complementary Law No. 140, of December 8, 2011, and must update such definitions as necessary, observing the provisions of Articles 8 and 9 of this Law (Brasil, 2021g).

<sup>12</sup> Although the referenced document pertains to an earlier version of the bill from the House of Representatives, the critique remains valid, as the current proposal retains the provision with identical wording.

to the region of interest and its particular needs. In theory, the entities benefiting from this delegation would be granted greater capacity to define the typologies of activities and projects subject to environmental licensing, taking into account local incidence and the possibility of establishing more specific criteria tailored to the context of each locality.

However, delegating to state and municipal authorities the power to determine which types of projects will be exempt from environmental licensing may lead to federal imbalances and exacerbate inequalities in environmental governance. This is because, in the absence of a legitimizing parameter, there arises the possibility of creating incentive or attraction-based policies for certain projects in specific states of the Federation, disregarding environmental protection due to the differing criteria adopted for this purpose (Brasil, 2024). According to a joint statement signed by environmental organizations including Greenpeace, the World Wide Fund for Nature (WWF), and others, this provision is problematic, as it may lead to a “race to the bottom in environmental standards”<sup>13</sup> among federative entities competing to attract investment, in disregard of existing legislation (Greenpeace Brasil *et al.*, 2021, p. 1, free translation).

Thus, the core issue stems from the lack of clear standards, which allows different states to adopt varying criteria, leading to inconsistent levels of environmental protection. Establishing more secure benchmarks and stricter, more uniform guidelines may, therefore, help ensure consistent and effective environmental protection. An example of the effects of decentralizing policy on environmental legislation can be seen in the cases of the states of Minas Gerais and Rio Grande do Sul. In recent years, these states have implemented measures that relaxed their environmental regulations, rendering their territories more vulnerable to environmental disasters. At present, they face alarming and tragic scenarios, serving as the stage for natural events triggered by anthropogenic actions.

In 2019, Eduardo Leite, the governor of Rio Grande do Sul affiliated with the Brazilian Social Democracy Party (PSDB)—a center-right party with a liberal economic orientation—removed nearly 500 articles from the State Environmental Code (Neves, 2024). According to him, this was a strategy to promote entrepreneurship. In May and June of 2024, the state of Rio Grande do Sul experienced one of the most significant natural disasters in the last hundred years in Brazil. Over 100 deaths were recorded, while approximately 1.9 million people were affected by the intense rains that struck the region (Scaff, 2024). Meanwhile, in Minas Gerais, Governor Romeu Zema, affiliated with the Partido

<sup>13</sup> In the original: “corrida pela flexibilização ambiental”.

Novo—a party known for its pro-privatization and market-driven policies—has, since the beginning of his administration, implemented a deregulatory approach to environmental control. This process specifically focuses on revising the rules for granting licenses to large corporations, with an emphasis on the mining sector. It is relevant to clarify that Minas Gerais has the highest concentration of dam structures for mining activities in the country, totaling 121 such constructions—29 of which are currently under alert status, according to the National Mining Agency (ANM – *Agência Nacional de Mineração*)<sup>14</sup>.

The case of these two states show that the provision set forth in Paragraph 1 of Article 4 of the bill constitutes an extremely risky measure, justified by the influence of political interests in the management of environmental policy, which are closely influenced by economic agendas. In other words, it is not unusual for the environmental agenda to be used as a political instrument specifically aimed at favoring projects pursued by federative entities. Following this reasoning, with regard to the delegation of authority established in Article 4, Paragraph 1, rather than adopting more precise criteria aligned with the principles of the PNMA and attentive to the specificities of each Brazilian state and municipality, the provision opens the door to what could become a veritable Trojan Horse serving the interests of those in power. This could lead to the disintegration and weakening of the entire environmental licensing process.

It is clear that the mere delegation of authority to federative entities does not constitute a violation of the principles of Environmental Law or constitutional norms in itself, as the Federal Constitution expressly establishes a model of ecological cooperative federalism. However, considering the potential effects of the proposal to delegate the responsibilities of SISNAMA agencies to federative entities, one can identify, notwithstanding violations of other principles not explicitly cited, a direct breach of the principles of precaution and prevention.

Accordingly, the establishment of a national framework is mandatory, under penalty of a gradual decline in environmental protection standards. The agency responsible for environmental policy (Ministry of the Environment – MMA) must conduct the necessary studies to develop such regulation at the national level. CONAMA, in turn, should be responsible for establishing nationwide guidelines for the typologies of projects eligible for licensing exemptions, in order to prevent states from adopting significantly divergent criteria and, additionally,

---

<sup>14</sup> Minas Gerais is also the state where two of the country's greatest environmental and human disasters occurred: the collapse of the Mariana tailings dam, in the Rio Doce basin, in November 2015, and the failure of the B1 dam at the Córrego do Feijão mine in Brumadinho, in January 2019.

from implementing regional incentive policies at the expense of environmental protection. Otherwise, the more lenient a federative entity's environmental policy, the greater its capacity to attract projects—potentially triggering a wave of relaxed licensing standards and resulting in severe setbacks to environmental safeguards.

### 3.3.3 License by Commitment and Adhesion (LAC)<sup>15</sup>: simplification or dismantling of administrative control?

Bill No. 2,159/2021 introduces new forms of environmental licenses in addition to those already recognized by CONAMA Resolution No. 237/97—namely, the Preliminary License (PL), the Installation License (IL), and the Operating License (OL) (CONAMA, 1997). The Single Environmental License (LAU – *Licença Ambiental Única*) (Article 5, IV)<sup>16</sup>, the Corrective Operating License (LOC – *Licença de Operação Corretiva*) (Article 5, VI)<sup>17</sup>, and the License by Adhesion and Commitment (LAC – *Licença Ambiental por Adesão e Compromisso*) (Article 5, V) are licensing modalities intended for simplified procedures, as provided in the bill<sup>18</sup>. The latter will be the focus of discussion in this investigation, due to its characteristics, practical impacts, and the fact that, under the current text of the bill, it is the standard procedure in the environmental licensing process.

The LAC<sup>19</sup> is a self-declaratory license issued based on the project developer's

<sup>15</sup> The provisions of the bill addressing the LAC are set forth in: Article 3, item XXIV; Article 5, item V; Article 9, Paragraph 5; Article 17, items IIc and III; Article 21, Paragraphs 1 and 4; and Article 22, Paragraphs 1 and 2.

<sup>16</sup> The LAU consists of a single-stage license. In this case, the installation, expansion, and operation of the activity or project will be analyzed, along with the environmental conditions, including those related to its deactivation. According to Ana Maria de Oliveira Nusdeo, Professor of Environmental Law at the University of São Paulo Law School, the LAU merges the stages of the traditional three-phase licensing model. Although this is permitted under certain state laws, its use is generally limited to low-impact activities. Notably, changes to environmental legislation in the state of Minas Gerais allowed for the expansion of the Brumadinho dam's capacity through this simplified procedure just a few years before the disaster occurred (Nusdeo, 2021).

<sup>17</sup> The LOC regularizes activities or projects operating without an environmental license by establishing conditions that enable their continued operation in compliance with environmental regulations. In brief, the main criticism of this type of license lies in its potential to encourage irregularities, as it allows projects to begin in noncompliance with the law and subsequently seek regularization. According to Nusdeo (2021), the LOC is granted to activities operating without the proper license—in other words, illegally. While corrective licenses are permitted under existing legislation, they are intended to be exceptional. By elevating the LOC to the same status as standard license types, the bill effectively normalizes its use, undermining the preventive essence of environmental licensing (Nusdeo, 2021).

<sup>18</sup> Articles 5, IV, V, and VI, and Article 21 of Bill No. 2,159/2021.

<sup>19</sup> Article 3, XXVI, of Bill No. 2,159/2021 – License by Adhesion and Commitment (LAC): a license that certifies the feasibility of installing, expanding, and operating an activity or project in accordance with the conditions established by this Law, based on a declaration of adherence and commitment by

simple declaration of adherence to and compliance with the requirements pre-established by the licensing authority. It is an automatic licensing model that does not require the submission of environmental studies by the developer or prior review by the environmental agency. Article 21 of Bill No. 2,159/2021 sets forth the conditions for applying the LAC: (i) the project or activity must not be likely to cause significant environmental degradation; (ii) the following must be known in advance: (a) the general characteristics of the region where the activity or project will be implemented; (b) the conditions for installation and operation of the activity or project; (c) the environmental impacts associated with the type of activity or project; and (d) the required environmental control measures; (iii) the suppression of native vegetation is not permitted, as it requires specific authorization (Brasil, 2021g). Additionally, Article 17, V requires submission of a Project Characterization Report (RCE – *Relatório de Caracterização do Empreendimento*), including technical details about the project's installation and operation (Brasil, 2021g).

As such, it becomes clear that, aside from those activities legally classified as environmentally harmful—for which the Constitution requires an Environmental Impact Study<sup>20</sup>—the LAC could be applied broadly. This implies that the currently standard three-phase licensing process would become an exception, required only for projects with significant environmental impacts. In its place, under the bill's current terms, the LAC would apply to all other projects, potentially encompassing large, medium, and small-scale operations. Thus, if the bill passes, the LAC will become the standard procedure for environmental licensing in Brazil.

The configuration of the LAC in Bill No. 2,159/2021 seemingly reflects a legislative attempt to ease the burden on the state apparatus caused by the extensive three-phase environmental licensing process, which requires the separate and successive review of the project, its installation, and subsequently, its operation. However, it is important to consider that under the LAC modality, there is no analysis or approval process concerning the projects or their mechanisms for controlling the impacts of the activity or development. As stated in the bill, the three-phase model would become less common, thereby subverting the principle that environmental licensing serves as an expression of the State's regulatory authority. Although projects would still be subject to inspections, such oversight is sporadic and allows many violations to go undetected (Nusdeo, 2021).

---

the developer to the requirements pre-established by the licensing authority (Brasil, 2021g).

<sup>20</sup> Article 225, Paragraph 1, IV of the 1988 Federal Constitution.

It is also important to underscore that the concept of the LAC is not entirely new. Several Brazilian states already provide for this licensing modality and apply it within their jurisdictions through state legislation<sup>21</sup>. However, these provisions have been challenged in court, primarily on two grounds. First, the alleged lack of authority of states to create new types of environmental licenses not provided for in federal legislation, especially in light of CONAMA Resolution No. 237/1997, which holds the status of general law by derivation, pursuant to Article 8, I, of Law No. 6,938/1981. Second, the violation of constitutional principles that govern environmental law, particularly the principles of precaution, prevention, public participation, non-regression, and the right to an ecologically balanced environment (CONAMA, 1997).

Regarding this second issue—its grounding in legal principles—it is important to highlight that the bill fails to require an environmental assessment of the implementation area as part of the environmental study and does not take into account the impacts on affected human populations. The declaration is submitted by the developer under a self-declaratory system, electronically, without prior verification or oversight by the licensing authorities.

Another significant concern lies in the absence of any provision for validating the data submitted by the developer. Under the self-declaration model, the license is automatically granted after the developer agrees to and commits to the pre-established criteria and submits the required documents and declaration. This process takes place without any prior review of the submitted materials, without technical inspection by the competent environmental authority, and without consideration of the specific environmental conditions involved in each case.

In these circumstances, this model is understood to undermine the purpose and objectives of the environmental licensing framework, constituting a violation of the principles of precaution, prevention, and the constitutional duty to ensure effective environmental protection (Brasil, 2024). Moreover, the implementation of the LAC, combined with paragraph 1 of Article 4 of Bill No. 2,159/2021, further exacerbates the issue by granting state and municipal governments the authority to define the types of projects subject to the LAC. This may lead to federal imbalances and inconsistent environmental protections across the country.

Notwithstanding the arguments presented above, it is reasonable to acknowledge the LAC as a potential mechanism for reducing bureaucratic

---

<sup>21</sup> The ongoing debate concerning jurisdiction, which has been addressed in Direct Actions for the Declaration of Unconstitutionality filed against state laws, would not apply to Bill No. 2,159/2021 if approved, due to its *status* as federal statutory law. Accordingly, this study focuses on the second point of controversy.

inefficiencies in environmental licensing. However, the environmental license, as a protective instrument within the framework of the PNMA, must not compromise the effective oversight of polluting activities. Therefore, the LAC, as currently set forth in Bill No. 2,159/2021 proposed by the House of Representatives, is considered unconstitutional due to its direct infringement of core constitutional principles.

This does not preclude, however, the consideration of its exceptional admissibility as a licensing mechanism based on adherence and commitment. For such use to be constitutionally acceptable, it is essential that a national normative act first establish clear guidelines and general criteria governing the procedure. Its application should be strictly limited to small-scale activities with low pollution potential and minimal environmental relevance of the area or location, in accordance with typologies and thresholds defined by CONAMA, along with investments in subsequent monitoring. Within this context, there is a general tendency to support Amending Proposals Nos. 19, 28, and 33, submitted by Senators Jacques Wagner, Randolfe Rodrigues, and Eliziane Gama, respectively (Brasil, 2021a; Brasil, 2021c; Brasil, 2021e).

These proposals do not rule out the possibility of applying the LAC, but they impose restrictions on its use, limiting it to projects that meet the previously outlined criteria. Nevertheless, it is necessary to reinforce the importance of public investment in post-licensing monitoring and verification of the documentation submitted by developers, even for small-scale, low-impact projects, lest the State abdicate its duty of effective environmental protection and directly violate the principle of public authority participation, among other principles of Environmental Law.

Furthermore, it is understood that although the LAC may indeed simplify the licensing procedure, it is urgent that a federal regulation be issued on the matter—either to eliminate it or to provide for its proper regulation. This urgency arises from the numerous legal disputes, particularly the Direct Actions for the Declaration of Unconstitutionality challenging state laws that provide for the LAC, which contribute to significant legal uncertainty across the country and disparities among federative entities.

In current legislation that sets criteria for very low environmental protection, it is possible to observe provisions that allow the application of the LAC to small- and medium-scale projects and activities with low or moderate pollution potential. Examples include the LAC established under the Environmental and Biodiversity Protection Policy of the State of Bahia (Law No. 10,431/2006) and

the Simplified Environmental License (Licença Ambiental Simplificada, LAS) of the State of Minas Gerais (Article 13, IV, of Decree No. 47,383/2018), among others.

In this context, the inclusion of the LAC in federal law, if approved, will be necessary to standardize procedures and provide greater legal certainty within the framework of the Environmental Policy. Meanwhile, the procedural fatigue evident in the Brazilian licensing context cannot serve as a justification for excessive debureaucratization that compromises environmental protection.

### *3.3.4 Decline in participation of environmental stakeholder agencies: institutional dismantling or administrative efficiency?*

Item VII, beginning with Article 38, of Bill No. 2,159/2021 addresses the participation of relevant authorities, that is, agencies or entities which, in cases provided for by law, may issue opinions on environmental licensing with regard to the impacts of an activity on Indigenous or quilombola lands, on protected cultural heritage, or on nature conservation units. In this sense, Article 3, III of the bill implicitly references—but does not limit itself to—the National Indigenous People Foundation (FUNAI – *Fundação Nacional dos Povos Indígenas*), the Chico Mendes Institute for Biodiversity Conservation (ICMBio – *Instituto Chico Mendes de Conservação da Biodiversidade*), the National Institute of Historical and Artistic Heritage (IPHAN – *Instituto do Patrimônio Histórico e Artístico Nacional*), and the Palmares Foundation<sup>22</sup>.

A contrasting approach will be adopted in this specific section, starting with the arguments presented by the business sector, followed by the concerns raised by environmental advocates. In defense of the industrial sector, Werner Grau Neto, during the first public hearing on the aforementioned bill, argued for the need for efficient coordination between the licensing authority and the intervening agencies, aiming for a more harmonious and less bureaucratic process (TV Senado, 2023). Werner Grau (TV Senado, 2023) contended that environmental licensing should concentrate on project-specific matters and their interactions with the receiving environment, rather than attempting to resolve broader social issues in Brazil, which, he argued, may fall outside the appropriate scope of licensing. He also criticized what he described as the excessive rigidity of environmental licensing procedures in Brazil—characterizing them as bordering on irrational—and advocated for a more flexible and adaptable approach.

<sup>22</sup> Palmares is a federal foundation tasked with promoting Afro-Brazilian culture.

In his remarks at the public hearing, Grau expressed support for maintaining Section VII of Bill No. 2,159/2021, which, in summary, does not require the licensing authority to base its decisions on the opinions of the involved agencies; establishes firm deadlines<sup>23</sup>; and stipulates that a lack of response within the set timeframe does not suspend the licensing process or prevent the issuance of a license. Moreover, the bill approved by the Chamber of Deputies restricts the scope of opinions issued by stakeholder agencies to matters within their institutional competencies, defines minimum distances as the area of direct impact, and excludes areas of indirect influence. It also limits consideration to Indigenous lands that have been officially demarcated<sup>24</sup> or are under restriction due to the presence of isolated Indigenous peoples, as well as lands titled to quilombola communities.

To fully understand the implications of this proposal, it is essential to reflect on who is truly allowed to participate in the decision-making process, and who has historically been relegated to a position of marginalization. To grasp this idea, one may turn to Krenak's (2022)<sup>25</sup> perspective and his concept of a humanity that is (self-)declared as superior and external to its Other/nature. He argues that, within dominant cultural paradigms, human life is regarded as the only legitimate form of existence on Earth, while all other forms are rendered disposable—unless they yield some form of economic profit. Krenak (2022) explains that humankind has become so utterly detached from the Earth as a living organism that the only groups who still see themselves as intrinsically bound to it are those left on the margins of the world—in riverside settlements, along the ocean shores, in Africa, Asia, or Latin America. “They are *caíçaras*, Indigenous peoples, quilombolas, *Aborígenes*—the sub-humanity”<sup>26</sup> (Krenak, 2022, pp. 21–22, free translation).

This perspective encompasses the notion that certain groups are excluded from cultural, social, and environmental spheres, and that those who resist the developmentalist agenda are subjected to mechanisms of silencing, erasure, and subjugation, which serve to portray them as inferior beings and thereby legitimize

<sup>23</sup> A 30-day deadline, extendable by 10 days – Article 39, Paragraph 1 of Bill No. 2,159/2021.

<sup>24</sup> The analysis of Indigenous and quilombola lands, moreover, is restricted to those that are officially demarcated and titled for the purposes of licensing. This would leave 32% of Indigenous lands and 92% of quilombola territories in Brazil unprotected (MAB, 2023).

<sup>25</sup> Krenak is an Indigenous activist and author from Itabira, Minas Gerais, located in the Rio Doce valley, a region severely affected by the Mariana dam collapse in 2015. He played a leading role in the Indigenous rights movements of the 1970s and 1980s, which culminated in the inclusion of the “Indigenous chapter” in the 1988 Brazilian Constitution, formally recognizing Indigenous peoples’ rights to their traditional cultures and lands (Krenak, 2022).

<sup>26</sup> In the original: “São *caíçaras*, índios, quilombolas, *aborígenes* – a sub-humanidade”.

their intensified exploitation<sup>27</sup>. Taking this view into account and applying it to the present study, an analysis of Article 38 and subsequent provisions of the bill reveals that the text primarily serves the interests of the business sector. It imposes constraints of time, space, and procedure on the right of consultation and participation of Indigenous and traditional communities. In doing so, these communities—already rendered invisible by the State, subjected to oppression, and victims of systemic violence—are now confronted with an even more regressive legal instrument.

The right to an ecologically balanced environment is recognized by the Federal Constitution (Art. 225, *caput*) as a public good of common use and essential to a healthy quality of life. In this regard, the principle of participation requires the government to ensure broad societal involvement in decision-making processes concerning environmental quality, which is a public good for common use<sup>28</sup>. This involves shifting the responsibility for managing environmental resources away from a select few and placing it directly upon society as a whole.

The restrictions proposed in the bill reinforce the marginalization of Indigenous and traditional peoples, reflecting a broader context of “tensions and contestations by those seeking to preserve the dominant economic and development model”<sup>29</sup> and, conversely, “of the exploitation of both human beings

<sup>27</sup> Losurdo (2020) presents an approach grounded in the classical ideology of the colonial tradition, which has consistently regarded conquered or desired territories as *res nullius*—nobody’s land—and has tended to reduce Indigenous populations to an insignificant magnitude.

<sup>28</sup> Gomes and Leong (2023) explain that the balancing of multifaceted interests involved in this type of decision, the collective nature of environmental goods, and the strategic role of public participation in the impartial definition of preventive objectives for the authorizing act are factors that contribute to the understanding that the right to participation is essential to a substantively balanced configuration of administrative environmental authorization. Gomes (2022) further identifies three primary rights associated with environmental citizenship: (i) access to environmental information; (ii) participation in environmental decision-making; and (iii) access to environmental justice. These rights reflect both privileges and responsibilities of citizens. Citizens have the right to be informed about environmental issues, enabling them to understand the impact of human activities on the environment. They also have both the right and the duty to participate in decision-making processes affecting the environment, thus contributing to more transparent and effective environmental governance. In addition, citizens may turn to the courts if they disagree with environmental decisions, ensuring compliance with the law and the protection of their rights. Environmental citizenship, then, involves a shared set of rights and duties in which the responsibility for environmental protection is collectively held, as established in Article 66, No.2 of the Portuguese Constitution (Portugal, 1976). Within this framework of participatory democracy, citizens must remain informed and engaged, even when delegating the responsibility for approving laws that regulate environmental activities to representatives. In doing so, they can contribute to the formulation of executive environmental decisions and, in case of disagreement, seek judicial review of such decisions.

<sup>29</sup> In the original: “tensões e contestações por aqueles que buscam manter o modelo econômico e de desenvolvimento hegemônico”.

and nature, marked by deep social inequality and the exclusion of a large portion of the world's population from access to basic rights"<sup>30</sup> (Pinto; Gonzáles Botija; Rios, 2023, p. 13, free translation), thereby imposing upon these communities a condition of social, technical, and financial vulnerability.

The Samoré Case (Rodríguez, 2016), involving the U'wa Indigenous people, stands as a paradigmatic example of an environmental conflict grounded in conflicting conceptions of territory and development. The U'wa, who regard their territory as sacred and inviolable, opposed oil exploration authorized by the Colombian government through an Environmental License. Perceived by the U'wa as a violation of their fundamental rights, this government decision prompted peaceful yet determined resistance, including legal challenges and public demonstrations. The conflict drew international attention and exemplifies the tension between the Indigenous cosmovision of environmental protection and the commodified view of natural resources. The U'wa's struggle to preserve their culture and land led to intervention by Colombia's Constitutional Court, which acknowledged irregularities in the prior consultation process and upheld the rights of the U'wa people.

The Samoré Case underscores the importance of adopting legal strategies that better ensure the right to consultation and effective participation, in addition to guaranteeing a fair and accessible environmental licensing process, particularly for the most vulnerable and affected populations. Within this framework, the Escazú Agreement (ECLAC, 2018) emerged in response to the need to promote the rights of access to information, participation, and justice in environmental matters. As the first environmental treaty in Latin America and the Caribbean, it is also a pioneer in establishing specific protection mechanisms for environmental defenders—a crucial point given that the region remains the deadliest in the world for this people. However, despite its significance and Brazil's signature of the treaty in 2018, the Escazú Agreement has yet to be ratified by the Brazilian State.

It follows that Bill No. 2,159/2021 runs counter to the direction established by the Escazú Agreement and violates multiple provisions of both the constitution and international treaties<sup>31</sup>. The bill's provisions reflect a rollback in public participation and a direct assault on the core principles of environmental protection.

<sup>30</sup> In the original: "da exploração do ser humano e da natureza, com forte desigualdade social e exclusão de boa parte da população mundial ao acesso a direitos mínimos".

<sup>31</sup> The content introduced through Section VII of Bill No. 2,159 constitutes a clear violation of multiple provisions of the 1988 Federal Constitution, most notably Article 231. Reference is also made to Article 6 of the International Labour Organization Convention No. 169 (ILO, 1989), as upheld in decisions of the Inter-American Court of Human Rights (*Saramaka v. Suriname*) (IACtHR, 2007).

This legislative proposal reflects a governmental position marked by ongoing disputes over protected areas (Lemos, 2020) and insufficient support for public policies, contributing to a context in which Indigenous peoples represent one-third of all murder victims worldwide (França, 2023).

Policies promoting land suppression are a direct and explicit attack against the constitutional rights of traditional peoples and communities, who continue to struggle for legal recognition of their traditionally occupied territories (ABA, 2020). This reality has led to violence and the systematic annihilation of Indigenous and quilombola peoples, further exacerbated by the Supreme Federal Court's deliberations regarding the *marco temporal* (Time marker) thesis. By rendering the opinions of specialized institutions non-binding, shortening deadlines, and restricting the right to participation to areas within officially demarcated lands, the bill violates the principles of sustainable development, integration, efficiency, participation, among others. This framework establishes a hierarchy of competing legal interests while disregarding the institutional expertise of bodies such as Funai, the Palmares Foundation, and other cultural heritage protection agencies legally mandated to develop the technical capacity necessary to fulfill their institutional missions (ANPR, 2021).

In light of this scenario, the urgent need to revise Articles 38 to 42 of Bill No. 2,159/2021 becomes evident. Yet, it is important to clarify that even the current provision is hesitant in ensuring the participation of Indigenous and quilombola peoples, as the effectiveness of such participation is hindered by ongoing territorial disputes, which are inherently unequal due to extremely asymmetrical power dynamics, regardless of the legal text.

### Final considerations

The capitalist model of production and consumption presupposes the progressive degradation of the environment, resulting in a growing series of environmental and human disasters with irreversible repercussions. As a result, amid the worsening scenario of environmental degradation and the urgent need for preservation in the face of resource scarcity, the efforts of ecological movements have prompted a redefinition of environmental protection strategies aimed at creating mechanisms to mitigate the damage caused by the unrestrained and predatory exploitation of nature under the current economic system.

The 1972 Stockholm Conference marked a turning point in the development of legal frameworks for environmental protection, influencing Brazil's

enactment of Law No. 6,938 in 1981, which established the National Environmental Policy (PNMA) and SISNAMA (Brasil, 1981). The 1988 Constitution elevated environmental protection to the status of a fundamental right, thereby requiring effective preventive action. The PNMA instituted environmental licensing as the official procedure for authorizing activities with pollution potential and is regulated by Complementary Law No. 140/2011, which outlined the shared responsibilities among the federal, state, and municipal levels of government. Environmental licensing is structured in three phases: the preliminary license, the installation license, and the operating license, which may be adapted according to the environmental impact of the activity, becoming the cornerstone to ensuring environmental preservation and the right to a balanced environment.

Currently, however, the management and implementation of environmental licensing in Brazil is marked by a clear divergence of views. On the one hand, segments of the business sector criticize the current regulatory framework for being overly bureaucratic and slow, claiming that it causes delays and disruptions in major infrastructure projects, leading, from their perspective, to the obstruction of the national development. On the other hand, environmental advocates argue that major environmental and human disasters underscore the urgent need to reform environmental legislation to ensure stricter and more effective regulation.

Bill No. 2,159/2021, currently under review by the Federal Senate, emerges as an attempt to unify the fragmented body of environmental licensing laws in the country. The absence of a consolidated regulatory framework has resulted in a patchwork of regulations and significant variation in licensing procedures across states and municipalities. The bill seeks to enhance legal certainty and streamline the licensing process; however, a closer examination reveals inconsistencies between the proposal and the existing legal system, as well as deviations from the original legislative intent. Approved by the House of Representatives, it introduces provisions to exempt certain activities from licensing, delegates regulatory authority among different levels of government, introduces self-declaratory licensing mechanisms, and limits the participation of environmental agencies. While such changes may expedite the licensing process, they also raise serious concerns regarding the effectiveness of environmental protection.

Accordingly, the initial focus of this study was an examination of Article 8 of Bill No. 2,159/2021, which proposes licensing exemptions for a range of activities, including military projects, water and sewage treatment, infrastructure maintenance, solid waste sorting, and organic waste composting (Brasil, 2021g). The analysis of the provision led to the conclusion that, although the measure is

aimed at simplifying the procedures, such an exemption may compromise the State's ability to exercise environmental oversight by disregarding local specificities and environmental vulnerabilities. The proposal has also been criticized for failing to uphold constitutional principles such as prevention, precaution, and public participation, and for violating the principle of non-regression in environmental protection.

Furthermore, Bill No. 2,159/2021 includes the delegation of regulatory authority to states and municipalities, as provided in Paragraph 1 of Article 4 (Brasil, 2021g). This provision enables these entities to define which categories of activities are subject to environmental licensing, diverging from the current structure under the PNMA, which centralizes such guidelines within the National Environmental Council (CONAMA). The wording of the provision suggests that states and municipalities will be allowed to establish regulatory standards independently, without a uniform minimum standard. Such discretion may trigger a race to the bottom in environmental standards as states compete to attract local investment by relaxing legal requirements. This scenario could ultimately jeopardize the protection of socio-environmental rights and the principle of sustainable development, leading to a weakening of environmental safeguards.

Therefore, it is understood that only through democratic and transparent debate ensuring the effective operation of environmental councils and the strengthening of the National Environmental System can the scope of environmental licensing be adequately defined. The measure proposed in the bill runs counter to this approach, as it dismantles the uniformity of jurisdiction and environmental definitions at the national level, fostering fragmentation in standards and criteria. This, in turn, contributes to the erosion of the National Environmental System.

The License by Adhesion and Commitment (LAC) was also addressed in Bill No. 2,159/2021. The text of the bill introduces a self-declaratory modality of environmental licensing that waives the requirement for prior environmental studies and eliminates pre-approval by the licensing authority for activities that are not potentially harmful to the environment (Brasil, 2021g). The LAC is intended to simplify the licensing process by replacing the traditional three-phase procedure. This study identified two major shortcomings in the LAC as currently outlined in the bill. First, the broad scope of its application must be highlighted, given that it may be requested for projects of large, medium, and small scale and impact. Second, the LAC's potential fragility in terms of enforcement and the absence of minimum environmental protection standards pose a serious risk and contradict the constitutional framework.

It is therefore asserted that incorporating the LAC at the federal level is important to standardize the instrument among federative entities, potentially consolidating it as a tool for increasing efficiency and speed in the licensing process. However, as currently stipulated in the bill, the LAC violates fundamental principles of Environmental Law. The simplified procedure should be understood as an exception, applicable only to small-scale projects with low pollution potential, in accordance with criteria previously established by CONAMA and accompanied by substantial investments in post-issuance regulatory enforcement.

The final controversial point addressed in this article concerned Articles 38 through 42 of Bill No. 2,159/2021, which propose restrictions on public participation and consultation. While much of the business sector supports procedural simplification to foster a less bureaucratic business environment, environmentalists, and advocates of Indigenous and quilombola community rights criticize the limitations imposed on the participation and consultation of representative institutions.

In this respect, it is understood that, by rendering the opinions of specialized institutions non-binding, reducing deadlines, and limiting the right to participation to demarcated territories, the approach taken in Bill No. 2,159/2021 constitutes a direct violation of the principles of sustainable development, of the right to an ecologically balanced environment, and, fundamentally, of the principle of participation.

Thus, it is argued that the procedural fatigue observed in the Brazilian context cannot serve as justification for a means of simplification sheltering deregulation and precarization, which undermines environmental protection and the entire legal and axiological framework built over the years. Although there is criticism of the current legislation, what prevails in the structure of the bill under review is the defense of a more flexible regulatory framework and the dismantling of the previously established procedural system for environmental licensing.

It is undeniable that this constitutes a clear example of the erosion of hard-won social and environmental rights and thus represents a socio-environmental setback. This research recommends the establishment of solid technical criteria and an approach that does not compromise the integrity of the licensing process. The integrity of this mechanism must be preserved and strengthened, bringing it closer to a regulatory system that values legal certainty and aligns with environmental and constitutional principles.

The position affirmed here is that the legal system must establish mechanisms to address environmental challenges from an emancipatory perspective. The

bill, as approved by the House of Representatives and now at risk of being passed in the Federal Senate, represents yet another maneuver by the extractive sector to perpetuate the exploitative logic of natural resource use, serving specific interest groups while externalizing the resulting harm to society at large. There is a pressing need to reorient the legal approach toward environmental preservation, social justice, and economic viability. Any proposed changes must be carefully evaluated and guided by comprehensive public policies that promote the integration of sustainable development with environmental conservation, grounded in prudent implementation and sound technical analysis.

## References

- ANTUNES, P. B. *Política Nacional do Meio Ambiente – PNMA: comentários à Lei 6.938, de 31 de agosto de 1981*. Rio de Janeiro: Lumen Juris, 2005.
- ANTUNES, P. B. *Direito Ambiental*. 23. ed. São Paulo: Atlas, 2023.
- ASSOCIAÇÃO BRASILEIRA DE ANTROPOLOGIA. *Parecer técnico-científico sobre a proposta de votação da nova Lei Geral do Licenciamento Ambiental (Projeto de Lei 3.729/2004)*. Comitê Povos Tradicionais, Meio Ambiente e Grandes Projetos. Brasília: ABA, 10 maio 2020. Available from: [https://conflitosambientaismg.lcc.ufmg.br/wp-content/uploads/2021/05/Parecer\\_Te%CC%81cnico-Cienti%CC%81fico\\_Comite%CC%82\\_da\\_ABA\\_PL-3.729-2004.pdf](https://conflitosambientaismg.lcc.ufmg.br/wp-content/uploads/2021/05/Parecer_Te%CC%81cnico-Cienti%CC%81fico_Comite%CC%82_da_ABA_PL-3.729-2004.pdf). Access on: July 6, 2025.
- ASSOCIAÇÃO NACIONAL DOS PROCURADORES DA REPÚBLICA. *Nota Técnica ANPR n. 002/2021 – UC*. Brasília: ANPR, 11 ago. 2021. Available from: <https://legis.senado.leg.br/sdleg-getter/documento?dm=9051044&ts=1715784184840&disposition=inline>. Access on: July 6, 2025.
- BAHIA. Lei n. 10.431, de 20 de dezembro de 2006. Dispõe sobre a Política de Meio Ambiente e de Proteção à Biodiversidade do Estado da Bahia e dá outras providências. *Diário Oficial do Estado*, Salvador, BA, 21 dez. 2006. Available from: <https://www.legisweb.com.br/legislacao/?id=121083>. Access on: July 6, 2025.
- BRASIL. Lei n. 6.938, de 31 de agosto de 1981. Dispõe sobre a Política Nacional do Meio Ambiente, seus fins e mecanismos de formulação e aplicação, e dá outras providências. *Diário Oficial da União*: seção 1, Brasília, DF, p. 16509, 2 set. 1981. Available from: [https://www.planalto.gov.br/ccivil\\_03/leis/l6938.htm](https://www.planalto.gov.br/ccivil_03/leis/l6938.htm). Access on: July 25, 2024.
- BRASIL. Constituição da República Federativa do Brasil de 1988. Promulgada em 5 de outubro de 1988. *Diário Oficial da União*: seção 1, Brasília, DF, ano 125, n. 192, p. 1-2, 5 out. 1988. Available from: [https://www.planalto.gov.br/ccivil\\_03/constituicao/constituicao.htm](https://www.planalto.gov.br/ccivil_03/constituicao/constituicao.htm). Access on: July 11, 2025.
- BRASIL. Ministério do Planejamento, Orçamento e Gestão. Secretaria de Planejamento e Investimentos Estratégicos. *Plano plurianual 2004-2007*: Projeto de Lei. Brasília, DF: Ministério do Planejamento, Orçamento e Gestão, 2003. Available from: <https://www2.camara.leg.br/orcamento-da-uniao/leis-orcamentarias/ppa/2004-2007/ppa-2004-2007/proposta/anexo1.PDF>. Access on: April 29, 2024.
- BRASIL. *Projeto de Lei n. 3.729*, de 08 junho de 2004. Dispõe sobre o licenciamento ambiental, regulamenta o inc. IV do § 1º do art. 225 da Constituição Federal, e dá outras providências. Brasília, DF: Câmara dos Deputados, [2004]. Available from: [https://www.camara.leg.br/proposicoesWeb/prop\\_mostrarintegra?codteor=225810&filename=PL%203729/2004](https://www.camara.leg.br/proposicoesWeb/prop_mostrarintegra?codteor=225810&filename=PL%203729/2004). Access on: July 25, 2024.

BRASIL. *Programa de Aceleração do Crescimento (PAC) 2007-2010*. Romper barreiras e superar limites. Brasília, DF: Senado Federal, 2007. Available from: [https://www.senado.leg.br/comissoes/CAE/AP/APRP2007/APRP\\_20070315\\_PAC.pdf](https://www.senado.leg.br/comissoes/CAE/AP/APRP2007/APRP_20070315_PAC.pdf). Access on: July 6, 2025.

BRASIL. Lei Complementar n. 140, de 8 de dezembro de 2011. Fixa normas, nos termos dos incs. III, VI e VII do *caput* e do parágrafo único do art. 23 da Constituição Federal, para a cooperação entre a União, os Estados, o Distrito Federal e os Municípios nas ações administrativas decorrentes do exercício da competência comum relativas à proteção das paisagens naturais notáveis, à proteção do meio ambiente, ao combate à poluição em qualquer de suas formas e à preservação das florestas, da fauna e da flora; e altera a Lei n. 6.938, de 31 de agosto de 1981. *Diário Oficial da União*: seção 1, Brasília, DF, p. 1, 09 dez. 2011. Available from: [https://www.planalto.gov.br/ccivil\\_03/leis/lcp/lcp140.htm](https://www.planalto.gov.br/ccivil_03/leis/lcp/lcp140.htm). Access on: July 6, 2025.

BRASIL. Supremo Tribunal Federal. *Ação Direta de Inconstitucionalidade 4.717 DF*. Ação Direta de Inconstitucionalidade. Medida Provisória n. 558/2012. Conversão na Lei n. 12.678/2012. Inépcia da inicial e prejuízo da ação quanto aos arts. 6º e 11 da medida provisória n. 558/2012 e ao art. 20 da lei n. 12.678/2012. Possibilidade de exame dos requisitos constitucionais para o exercício da competência extraordinária normativa do chefe do executivo. Ausência dos pressupostos de relevância e urgência. Alteração da área de unidades de conservação por Medida Provisória. Impossibilidade. Configurada ofensa ao princípio da proibição de retrocesso socioambiental. Ação parcialmente conhecida e, nessa parte, julgada procedente, sem pronúncia de nulidade. Requerente: Procurador-Geral da República. Interessado: Presidente da República. Relatora: Min. Cármen Lúcia, 05 abr. 2018. Available from: <https://redir.stf.jus.br/paginadorpub/paginador.jsp?docTP=TP&docID=749158743>. Access on: May 29, 2024.

BRASIL. Supremo Tribunal Federal. *Ação Direta de Inconstitucionalidade 6.288 CE*. Ação Direta de Inconstitucionalidade. Direito Ambiental e Constitucional. Federalismo, Repartição de competências legislativas. Resolução do Conselho Estadual do Meio Ambiente do Ceará Coema/CE n. 2, de 11 de abril de 2019. Disposições sobre os procedimentos, critérios e parâmetros aplicados aos processos de licenciamento e autorização ambiental no âmbito da Superintendência Estadual do Meio Ambiente – SEMACE. Cabimento. Ato Normativo Estadual com natureza primária, autônoma, geral, abstrata e técnica. Princípio da Predominância do Interesse para normatizar procedimentos específicos e simplificados. Jurisprudência consolidada. Precedentes. Criação de hipóteses de dispensa de licenciamento ambiental de atividades e empreendimentos potencialmente poluidores. Flexibilização indevida. Violação do Direito Fundamental ao Meio Ambiente ecologicamente equilibrado (art. 225 da Constituição da República), do Princípio da Proibição do Retrocesso Ambiental no território do Ceará. Interpretação conforme para resguardar a competência dos Municípios para o licenciamento de atividades e empreendimentos de impacto local. Procedência parcial do pedido. Requerente: Partido Socialismo e Liberdade (PSOL). Interessado: Conselho Estadual do Meio Ambiente do Ceará. Relatora: Min. Rosa Weber, 03 dez. 2020. Available from: <https://jurisprudencia.stf.jus.br/pages/search/sjur437503/false>. Access on: May 8, 2024.

BRASIL. *Emenda Modificativa n. 19 ao Projeto de Lei n. 2.159/2021, de 2021*. Brasília, DF: Senado Federal, [2021a]. Available from: <https://legis.senado.leg.br/sdleg-getter/documento?d-m=9009357&ts=1715784186850&disposition=inline&ts=1715784186850>. Access on: May 7, 2024.

BRASIL. *Emenda Modificativa n. 20 ao Projeto de Lei n. 2.159/2021, de 2021*. Brasília, DF: Senado Federal, [2021b]. Available from: <https://legis.senado.leg.br/sdleg-getter/documento?d-m=9009360&ts=1748279405971&disposition=inline&ts=1748279405971>. Access on: May 7, 2024.

BRASIL. *Emenda Modificativa n. 28 ao Projeto de Lei n. 2.159/2021, de 2021*. Brasília, DF: Senado Federal, [2021c]. Available from: <https://legis.senado.leg.br/sdleg-getter/documento?d-m=9014273&ts=1748279406090&disposition=inline&ts=1748279406090>. Access on: May 7, 2024.

BRASIL. *Emenda Modificativa n. 29 ao Projeto de Lei n. 2.159/2021, de 2021*. Brasília, DF: Senado Federal, [2021d]. Available from: <https://legis.senado.leg.br/sdleg-getter/documento?dm=9017408&ts=1748224878041&disposition=inline>. Access on: July 6, 2025.

BRASIL. *Emenda Modificativa n. 33 ao Projeto de Lei n. 2.159/2021, de 2021*. Brasília, DF: Senado Federal, [2021e]. Available from: <https://legis.senado.leg.br/sdleg-getter/documento?dm=9017426&ts=1748279406145&disposition=inline&ts=1748279406145>. Access on: May 7, 2024.

BRASIL. *Emenda Modificativa n. 49 ao Projeto de Lei n. 2.159/2021, de 2021*. Brasília, DF: Senado Federal, [2021f]. Available from: <https://legis.senado.leg.br/sdleg-getter/documento?dm=9029084&ts=1747856283318&disposition=inline>. Access on: July 6, 2025.

BRASIL. *Projeto de Lei n. 2.159*, de 18 de maio de 2021. Dispõe sobre o licenciamento ambiental; regulamenta o inc. IV do § 1º do art. 225 da Constituição Federal; altera as Leis n.s 9.605, de 12 de fevereiro de 1998, e 9.985, de 18 de julho de 2000; revoga dispositivo da Lei n. 7.661, de 16 de maio de 1988; e dá outras providências. Brasília, DF: Senado Federal, [2021g]. Available from: <https://legis.senado.leg.br/sdleg-getter/documento?dm=8979282&ts=1715784180951&disposition=inline>. Access on: July 25, 2024.

BRASIL. Ministério Público Federal. *Ofício n. 82/2024 – 4ª CCR*. Brasília, MPF, 2024. Available from: <https://legis.senado.leg.br/sdleg-getter/documento?dm=9600149&ts=1715784186711&disposition=inline>. Access on: July 6, 2024.

CEARÁ. Resolução Coema n. 2 de 11/04/2019. Dispõe sobre os procedimentos, critérios, parâmetros e custos aplicados aos processos de licenciamento e autorização ambiental no âmbito da Superintendência Estadual do Meio Ambiente – SEMACE. *Diário Oficial do Estado*. Fortaleza, CE, 17 maio 2019. Available from: <https://www.legisweb.com.br/legislacao/?id=377738>. Access on: July 4, 2025.

COMISSÃO DE MEIO AMBIENTE. *Parecer n. de 2023*. Relatório Legislativo. Relator: Senador Confúcio Moura (MDB/RO). Brasília: Senado Federal, 14 nov. 2023. Available from: <https://legis.senado.leg.br/sdleg-getter/documento?dm=9504944&ts=1702472637615&disposition=inline>. Access on: April 11, 2024.

COMISSÃO ECONÔMICA PARA A AMÉRICA LATINA E O CARIBE. *Acordo Regional Sobre Acesso à Informação, Participação Pública e Acesso à Justiça em Assuntos Ambientais na América Latina e no Caribe*. Santiago: Cepal, 2018. Available from: <https://repositorio.cepal.org/server/api/core/bitstreams/29b2d738-4090-45c5-a289-428b465ab60c/content>. Access on: July 6, 2025.

CONSELHO NACIONAL DO MEIO AMBIENTE. Resolução n. 237, de 19 de dezembro de 1997. Dispõe sobre a revisão e complementação dos procedimentos e critérios utilizados para o licenciamento ambiental. *Diário Oficial da União*: seção 1, Brasília, DF, n. 247, p. 30841-30843, 22 dez. 1997. Available from: [https://conama.mma.gov.br/?option=com\\_sisconama&task=arquivo.download&id=237](https://conama.mma.gov.br/?option=com_sisconama&task=arquivo.download&id=237). Access on: July 25, 2024.

CORTE INTERAMERICANA DE DIREITOS HUMANOS. *Caso do Povo Saramaka vs. Suriname*: exceções preliminares, mérito, reparações e custas. Sentença de 28 de novembro de 2007 (Exceções Preliminares, Mérito, Reparções e Custas). San José, Costa Rica: Corte IDH, 2007. (Série C, n. 172). Available from: [https://www.corteidh.or.cr/docs/casos/articulos/seriec\\_172\\_por.pdf](https://www.corteidh.or.cr/docs/casos/articulos/seriec_172_por.pdf). Access on: July 5, 2025.

FRANÇA, V. Brasil é um dos países mais perigosos para ambientalistas: relatório da World Witness mapeia assassinatos de líderes e aponta os índios como maiores vítimas. *Veja*, 13 set. 2023. Available from: <https://veja.abril.com.br/comportamento/brasil-e-um-dos-paises-mais-perigosos-para-ambientalistas>. Access on: July 6, 2025.

GOMES, C. A. A cidadania ambiental: informação, participação e acesso à justiça em defesa do

ambiente. In: GOMES, C. A.; OLIVEIRA, H. (org.). *Tratado de Direito do Ambiente 1*. 2 ed. Lisboa: CIDP: ICJP, 2022. p. 127-177.

GOMES, C. A.; LEONG, H. C. *Introdução ao Direito do Ambiente*. 6. ed. Lisboa: AAFDL, 2023.

GREENPEACE BRASIL *et al.* Principais problemas do Substitutivo ao Projeto de Lei n. 3.729/2004, de 06. 05.2021: Lei Geral do Licenciamento Ambiental (Lei da Não Licença e do Autolicensingamento). *INESC.org*, 2021. Available from: <https://www.inesc.org.br/wp-content/uploads/2021/05/Principais-pontos-criticos-PL-3729-Subs.-Neri-Geller.pdf>. Access on: July 6, 2025.

INSTITUTO BRASILEIRO DO MEIO AMBIENTE E DOS RECURSOS NATURAIS RENOVÁVEIS. *Parecer n. 001/2017*. Análise do parecer do Relator da CFT da Câmara dos Deputados para a Lei Geral do Licenciamento Ambiental. Brasília, DF: Ibama, 2017. Available from: <https://www.gov.br/ibama/pt-br/centrais-de-conteudo/arquivos/arquivos-pdf/parecer-001-2017-e-anexos-pdf>. Access on: March 13, 2024.

INSTITUTO NACIONAL DE PESQUISAS ESPACIAIS. *Mapeamento da degradação florestal na Amazônia Brasileira-DEGRAD*. São José dos Campos: INPE, 2013. Available from: <http://www.obt.inpe.br/degrad/>. Access on: April 29, 2024.

INSTITUTO NACIONAL DE PESQUISAS ESPACIAIS. *Incrementos de desmatamento – Amazônia – Estados-PRODES*. São José dos Campos: INPE, 2024. Available from: <https://terrabrasilis.dpi.inpe.br/app/dashboard/deforestation/biomes/amazon/increments>. Access on: July 7, 2025.

KRENAK, A. *Ideias para adiar o fim do mundo*. 2. ed. São Paulo: Companhia das Letras, 2022.

LEMOS, V. 'Isso não é gente': os áudios com ataques a indígenas na pandemia que se tornaram alvos do MPF. *BBC News*, 27 jul. 2020. Available from: <https://www.bbc.com/portuguese/brasil-53541373>. Access on: May 29, 2024.

LOSURDO, D. *Colonialismo e luta anticolonial: desafios da revolução no século XXI*. São Paulo: Boitempo, 2020.

MACHADO, P. A. L. *Direito Ambiental brasileiro*. 21. ed. São Paulo: Malheiros Editores, 2013.

MINAS GERAIS. Decreto n. 47.383, de 02 de março de 2018. Estabelece normas para licenciamento ambiental, tipifica e classifica infrações às normas de proteção ao meio ambiente e aos recursos hídricos e estabelece procedimentos administrativos de fiscalização e aplicação das penalidades. *Diário do (Poder) Executivo*, Belo Horizonte, MG, ano 126, n. 41, p. 1-52, 03 mar. 2018. Available from: <https://www.siam.mg.gov.br/sla/download.pdf?idNorma=45918>. Access on: July 5, 2025.

MINAS GERAIS. Decreto n. 47.749, de 11/11/2019. Dispõe sobre os processos de autorização para intervenção ambiental e sobre a produção florestal no âmbito do Estado de Minas Gerais e dá outras providências. *Diário do (Poder) Executivo*, Belo Horizonte, MG, p. 1, col. 2, 12 nov. 2019. Available from: <https://www.almg.gov.br/legislacao-mineira/DEC/47749/2019/>. Access on: July 4, 2025.

MOVIMENTO ATINGIDOS POR BARRAGENS. Dez Barbaridades do PL 2.159/2021 do Licenciamento Ambiental: texto com risco de aprovação pelo senado beneficia grupos de interesse e socializa prejuízos. *Instituto Socioambiental – ISA*, 04 set. 2023. Available from: <https://mab.org.br/2023/09/04/dez-barbaridades-do-pl-2-159-2021-do-licenciamento-ambiental/>. Access on: July 5, 2025.

NEVES, E. Eduardo Leite mudou quase 500 normas do Código Ambiental do RS. *Veja*, 10 maio 2024. Available from: <https://veja.abril.com.br/agenda-verde/eduardo-leite-alterou-mais-de-500-pontos-do-codigo-ambiental-do-rs-em-2019>. Access on: May 15, 2024.

NUSDEO, A. M. O. Direito Ambiental à deriva. *Instituto Socioambiental – ISA*, 4 ago. 2021. Available from: <https://acervo.socioambiental.org/acervo/noticias/direito-ambiental-deriva>. Access on: May 10, 2024.

ORGANIZAÇÃO DAS NAÇÕES UNIDAS. *Declaração de Estocolmo sobre o ambiente humano – 1972*. [S. l.]: ONU, 1972. Available from: <http://www.direitoshumanos.usp.br/index.php/Meio-Ambiente/declaracao-de-estocolmo-sobre-o-ambiente-humano.html>. Access on: April 11, 2024.

ORGANIZAÇÃO INTERNACIONAL DO TRABALHO. *Convenção n. 169 sobre Povos Indígenas e Tribais*. Genebra: OIT, 1989. Available from: <https://www.oas.org/dil/port/1989%20Conven%C3%A7%C3%A3o%20sobre%20Povos%20Ind%C3%ADgenas%20e%20Tribais%20Conven%C3%A7%C3%A3o%20OIT%20n%20%C2%BA%20169.pdf>. Access on: July 5, 2025.

PARANÁ. Resolução n. 107, de 9 de setembro de 2020. Dispõe sobre o licenciamento ambiental, estabelece critérios e procedimentos a serem adotados para as atividades poluidoras, degradadoras e/ou modificadoras do meio ambiente e adota outras providências. *Diário Oficial [do] Paraná*, Curitiba, PR, n. 10772, 17 set. 2020. Available from: <https://www.legislacao.pr.gov.br/legislacao/listarAtosA-no.do?action=exibir&codAto=239356&indice=1&totalRegistros=2&anoSpan=2020&anoSelecionado=2020&mesSelecionado=0&isPaginado=true>. Access on: July 5, 2025.

PINTO, J. B. M.; GONZÁLES BOTIJA, F.; RIOS, M. Potencialidades do projeto de sociedade dos direitos humanos e da natureza. *Veredas do Direito*, Belo Horizonte, v. 20, e202447, 2023. Available from: <https://www.scielo.br/j/vd/a/BzYGR4xDbMRDKYy7vcRVCGj/>. Access on: Aug. 11, 2023.

PORTUGAL. Constituição da República Portuguesa. *Diário da República*, Lisboa, n. 86, série I, 04 out. 1976. Available from: <https://diariodarepublica.pt/dr/legislacao-consolidada/decreto-aprovacao-constituicao/1976-34520775-43894075>. Access on: July 5, 2025.

RODRÍGUEZ, G. A. *Los conflictos ambientales en Colombia y su incidencia en los territorios indígenas*. Bogotá: Editorial Universidad del Rosario, 2016. Available from: [https://editorial.urosario.edu.co/pageflip/acceso-abierto/oa\\_los-conflictos-ambientales-en-colombia.pdf](https://editorial.urosario.edu.co/pageflip/acceso-abierto/oa_los-conflictos-ambientales-en-colombia.pdf). Access on: May 28, 2024.

SARLET, I. W.; FENSTERSEIFER, T. *Direito Constitucional Ambiental*: constituição, direitos fundamentais e proteção do ambiente. 3. ed. rev. atual. e ampl. São Paulo: Revista dos Tribunais, 2013.

SARLET, I. W.; FENSTERSEIFER, T. O Direito Constitucional-Ambiental brasileiro e a governança judicial ecológica: estudo à luz da jurisprudência do Superior Tribunal de Justiça e do Supremo Tribunal Federal. *Constituição, Economia e Desenvolvimento: Revista da Academia Brasileira de Direito Constitucional*, Curitiba, v. 11, n. 20, p. 42-69, jan./jul. 2019. Available from: <https://abdconstojs.com.br/index.php/revista/article/view/209/206>. Access on: April 11, 2024.

SCAFF, A. Maiores desastres naturais do Brasil no século 21. *Valor*, 10 mar. 2024. Available from: <https://valor.globo.com/brasil/noticia/2024/05/10/maiores-desastres-naturais-do-brasil-no-seculo-21.ghtml>. Access on: May 19, 2024.

SENADO Federal aprova PL da Devastação, que altera normas para licenciamento ambiental. *ANDES – Sindicato Nacional*, 28 maio 2025. Available from: <https://www.andes.org.br/conteudos/noticia/senado-federal-aprova-pL-da-devastacao-que-altera-normas-para-licenciamento-ambiental1>. Access on: July 6, 2025.

TV SENADO. Ao vivo: CMA e CRA discutem regras sobre licenciamento ambiental – Reunião conjunta da Comissão de Meio Ambiente (13ª) e da Comissão de Agricultura e Reforma Agrária (9ª) [vídeo]. *YouTube*, 31 maio 2023. Available from: <https://www.youtube.com/watch?v=FQxGuhnuIU4>. Access on: July 6, 2025.

WEDY, G.; MOREIRA, R. M. C. *Manual de Direito Ambiental*: de acordo com a jurisprudência dos tribunais superiores. Belo Horizonte: Fórum, 2019.

## ABOUT THE AUTHORS

### **Carla Amado Gomes**

Ph.D. in Legal and Political Sciences from Universidade de Lisboa (ULISBOA), Lisbon, Portugal. Master's degree in Law from Faculdade de Direito of ULISBOA. Bachelor's degree in Law from Faculdade de Direito of ULISBOA. Adjunct Professor at Faculdade de Direito of ULISBOA. Visiting Professor at Faculdade de Direito of Universidade Católica Portuguesa, Porto, Portugal. Principal Researcher at the Centro de Investigação de Direito Público (CDP) of Faculdade de Direito of ULISBOA.

### **Juliana Rocha Braga**

Master's student in Legal Sciences, with a specialization in Civil Law, at Faculdade de Direito of Universidade de Lisboa (ULISBOA), Lisbon, Portugal. Specialist in Applied Civil Law from Pontifícia Universidade Católica de Minas Gerais (PUC-Minas), Belo Horizonte/MG, Brazil. Bachelor's degree in Law, full-time program, from Escola Superior Dom Helder Câmara (ESDHC), Belo Horizonte/MG, Brazil. Member of the Dam Committee of the Order of Attorneys of Brazil, Minas Gerais Section (OAB/MG), Belo Horizonte/MG, Brazil. Attorney-at-law.

### **Authors' participation**

Carla Amado Gomes handled the review and final approval of the work. Juliana Rocha Braga actively contributed to the discussion of the results.

### **How to cite this article (ABNT):**

GOMES, C. A.; BRAGA, J. R. Proposal for a General Environmental Licensing Law: simplification or dismantling of administrative controls? *Veredas do Direito*, Belo Horizonte, v. 22, e222875, 2025. Available from: <http://www.domhelder.edu.br/revista/index.php/veredas/article/view/2875>. Access on: Month, day, year.