
THE POLLUTER PAYS PRINCIPLE IN THE BRAZILIAN SUPERIOR COURTS: A CRITICAL ANALYSIS¹

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ABSTRACT

The acknowledgment of the – importance and potential – of the polluter pays principle has the power to strengthen the various legal and environmental instruments dedicated to promoting the equitable distribution of socio-environmental burdens and bonuses and the realization of the fundamental right to a balanced environment. This text is the result of a research carried out in 2014 and updated in 2017 and 2018 on the application of the polluter pays principle by the Federal Supreme Court (STF) and Superior Court of Justice (STJ) in Brazil. The main objective was to critically analyze how this principle – considering its historical origin, relevance and scope – has had an impact on the case law regarding the legal protection of the environment, considering the efforts to make the fundamental right to a balanced environment effective. The study comprised a bibliographical and documentary survey, together with cataloging and critical analysis of the selected material; the methodology included a survey, systematization and qualitative analysis of rulings issued by the Courts in the period from 1993 to 2018 within the scope of STF and STJ. In relation to its remedial aspect, the polluter pays principle has played an important role in boosting environmental civil liability; it has worked as a theoretical guideline for the solution of several of the challenges to the relief for environmental damages. As for the preventive aspect of this principle, which is equally relevant for

¹ The research was funded by CNPq (research mentorship scholarship).

a better application of tools to enforce distributive justice in environmental matters, it was possible to verify its significant underutilization.

Keywords: Polluter pays principle; negative environmental externality; internalization of environmental costs; prevention and remedying of environmental damage; civil environmental liability.

O PRINCÍPIO DO POLUIDOR-PAGADOR NA JURISPRUDÊNCIA DO STF E DO STJ: UMA ANÁLISE CRÍTICA

RESUMO

O reconhecimento da importância e do potencial – muitas vezes subestimado – do princípio do poluidor-pagador tem o condão de fortalecer os diversos instrumentos jurídico-ambientais dedicados a promover a distribuição equitativa dos ônus e bônus socioambientais e a concretização do direito fundamental ao meio ambiente equilibrado. Este texto reflete a respeito de pesquisa, desenvolvida em 2014 e atualizada em 2017 e 2018, sobre a aplicação do princípio do poluidor-pagador pelo Supremo Tribunal Federal (STF) e Superior Tribunal de Justiça (STJ). O principal objetivo foi o de analisar criticamente como o referido princípio – consideradas sua origem histórica, relevância e amplitude – tem incidido na jurisprudência relativa à tutela jurídica do meio ambiente, tendo em vista a busca pela efetividade do direito fundamental ao meio ambiente equilibrado. O estudo compreendeu levantamento bibliográfico e documental, acompanhado de catalogação e análise crítica do material selecionado; a metodologia adotada incluiu levantamento, sistematização e análise qualitativa de acórdãos julgados no período de 1993 a 2018 no âmbito do STF e STJ. Foi possível observar que, no que concerne à sua dimensão reparatória, o princípio do poluidor-pagador tem cumprido importante papel no aperfeiçoamento da responsabilidade civil ambiental, servindo de fio condutor teórico para a solução de vários dos desafios à reparação integral dos danos ambientais. Quanto à dimensão preventiva do referido princípio, igualmente relevante para a melhor aplicação de ferramentas que promovam a justiça distributiva em matéria ambiental, pôde-se verificar sua significativa subutilização.

Palavras-chave: *Princípio do poluidor-pagador; externalidade ambiental negativa; internalização de custos ambientais; prevenção e reparação de danos ambientais; responsabilidade civil ambiental.*

FOREWORD

The process of collectivization and sale of assets legal systems have been subject to throughout the twentieth century has resulted in significant changes in the objectives and roles of Law, which beyond settling disputes, adopted spreading of social justice as one of its basic functions. The constitutional protection of the environment is one of the stages of this process. The right to the environment is acknowledged as a fundamental human right, with broad and intergenerational ownership. The scope of third-generation human rights or third dimension fundamental rights include, as expected, the guarantee of the right to a decent life for the maintenance of a balanced environment. Therefore, the existential and collective aspect of this right is clear, a right that is constructed from society's reaction to the environmental crisis.

The maturation of the legal-environmental system, which is driven by the inclusion of legal protection to the environment in the constitution, results in the acknowledgment that Environmental Law as an autonomous branch of Law has as one of its basic roles the promotion of distributive justice in environmental matters, with a view at ensuring quality of life for current and future generations.

In this context, the polluter pays principle (PPP) becomes important. This principle is geared at making potentially polluting sources to pay for the environmental costs their activities include. In light of this principle, negative environmental externalities – or, in other words, external environmental costs – are intended to be computed as production costs. The promotion of environmental distributive justice depends on the acknowledgment that it is primarily the responsibility of the polluter – or potential polluter – to bear the preventive and remedial costs arising from the environmental degradation they cause or are capable of causing.

Once the importance and potential – often underestimated – of the polluter pays principle as one of the foundations of Environmental Law is acknowledged, the various legal and environmental instruments dedicated to promoting the equitable distribution of social and environmental burdens are strengthened with the objective of to realize the right of everyone to an ecologically balanced environment, pursuant Article 225 of the 1988 Federal Constitution.

This text presents the results of a research carried out in 2014 and updated in 2017 and 2018, whose main objective was to critically analyze

how the polluter pays principle – considering its historical origin and the acknowledgement of its relevance and scope – has been applied in Brazilian case law, in particular in trials of cases that deal with matters related to the legal protection of the environment within the Federal Supreme Court (STF) and Superior Court of Justice (STJ), considering the efforts to make the fundamental right to an ecologically balanced environment effective.

The study comprised a bibliographical and documentary survey, together with cataloging and critical analysis of the selected material; the methodology included a survey, systematization and qualitative analysis of rulings issued by the Courts in the period from 1993 to 2018 within the scope of STF and STJ. We started from a theoretical framework that supports and guides the demonstration of the relevance and identification of the scope of PPP in order to find out how the selected cases reflect the guidelines of the principle in question in its preventive and remedial aspects. We hoped that this study will contribute to the improvement of the Brazilian legal and environmental legal protection and, more specifically, help the guidelines of this principle to be better understood by the courts.

1 THE POLLUTER PAYS PRINCIPLE: ORIGIN AND CHARACTERISTICS

The polluter pays principle, a basic guideline of Environmental Law, emerged in a situation and with an objective unlike the understanding and scope it holds today. If it is currently understood as a general principle of Environmental Law, in its origins it was thought of as an essentially economic assumption geared at the adequate allocation of costs by the internalization of negative environmental externalities.²

In 1972 the polluter pays principle caught the eye of the Organization for Economic Cooperation and Development (OECD) and was incorporated into its Guiding Principles Concerning International Economic Aspects of Environmental Policies (C(72) 128, dated 26/May/1972). In this first document, only the costs of pollution prevention were attributed to the polluter. The extension of the concept to include costs related to environmental damage was later developed, initially within OECD itself, in its subsequent recommendations on PPP.

Since the early 1970s, the polluter pays principle has come a long way. In Europe, in 1986, the Single European Act (Article 130 R) identified

² On the subject, cf. MOREIRA, 2015b, p. 85 -95.

PPP as one of the principles on which community policy is based. In 1992, on the occasion of the United Nations Conference on Environment and Development (Rio 92), the Rio Declaration was signed, which included the polluter pays principle as number 16 of its list of principles.

With the extension of the content of the polluter pays principle beyond its merely economic aspect, and the gradual global awareness of the environmental problem, it can be said that PPP is based on the liability of the polluter (or potential polluter) for environmental protection costs related to the prevention of and relief for the pollution generated (or potentially generated) by them. Herman Benjamin notes that the principle in question includes the internalization of all pollution costs (BENJAMIN, 1993, p. 231), considering an awareness of the actual value of environmental assets.

In Brazilian Law, the polluter pays principle was incorporated into the National Environment Policy (Law 6,938/1981, article 4, VII) and served as a basis for the same law including objective environmental civil liability, thus rendering polluter's guilt irrelevant for making them accountable for repairing environmental damages (Article 14, §1). The PPP purpose can also be found in the 1988 Federal Constitution, especially in its articles 170, VI, and 225, paragraphs 2 and 3. It should be said that, although only the relief aspect of PPP is explicitly mentioned (BENJAMIN, 1993, p. 232), its preventive aspect is implicitly identified, especially from a reading of Article 170, VI, which provides for the defense of the environment, "including by a separate treatment according to the environmental impact of products and services and their processes of preparation and delivery", as a principle that shapes Brazilian economic order.

This is a principle with a redistributive purpose, that is to say, well beyond tackling market failures, it is intended to promote distributive justice in environmental matters by means of appropriate allocation of environmental costs within the production and consumption chain by impacting each one of its links. When there is proper allocation of external environmental costs to production processes, those who are responsible for environmental impact or damage – even if only potential ones – must bear the prevention or relief costs, so the community does not have to bear the burden of pollution. The equitable distribution of environmental burdens in production and consumption chains is what has been called the internalization of negative environmental externalities.³ The intention is to

³ Regarding negative environmental externalities, cf. MOREIRA, 2015b, pp. 95-116. Environmental externalities can be positive or negative and are caused by market failures. These occur due to the market not assigning value to natural resources, which are traditionally considered as of free use –

avoid the so-called “socialization of burdens and privatization of bonuses”, something which always happens whenever negative externalities are borne by the community, rather than by those who originally produced them.

It is important to point out that this is not about buying the “right to pollute”. What is sought with the internalization of socio-environmental costs is to promote distributive justice in environmental matters and raise awareness on the issue, so that economic activities become more responsible and less impacting (RODRIGUES, 2005, p. 232). For Nicolas de Sadeleer, the polluter cannot think that if they pay, they have the right to pollute; this would distort the principle into “paying polluter”, instead of “polluter pays” (SADELEER, 1999, pp. 66 and 67).⁴

In this sense, when talking about the internalization of environmental costs external to production processes, we mean that expenses related to pollution prevention and reparation for possible environmental damages (or even compensation for tolerable and thus authorized environmental impacts) must be borne by the polluter (or potential polluter). The preventive role of PPP is manifested in forcing the potential polluter to take effective measures – and bear their costs – to prevent environmental degradation. The relief aspect – or, the words of Nicolas de Sadeleer, the curative function (SADELEER, 1999, p. 69) – of PPP can be actualized, for example, through environmental civil liability, based on the assumption that the environmental damage is a negative environmental externality, since it translates into environmental costs that are external – suffered by outsiders – to the productive processes. In this respect, we want to stress that many foreign authors disagree with this view,

and abuse, we might add. The market causes distortions when it does not properly acknowledge and translate environmental costs inherent to production and consumption. When a polluting agent does not internalize the costs related to the prevention or repair of the impact or damage they caused, the product does not display the actual price of its production in the market (SILVA FILHO, 2008, pp. 82-87). The negative environmental externality can be easily understood by an example offered by Herman Benjamin: “Suppose the painting of a house located next to a polluting plant is damaged by black smoke. In a traditional legal (and economic) model, the house repainting bill is paid by its owner, and not by the one that actually caused the damage. As a result, the products eventually manufactured by the polluter – since they are not paying for their polluting activity – will not reflect the actual costs of pollution. That is why these costs – as they are not computed in the production process – are said to be externalities or external costs.” (BENJAMIN, 1993, p. 229).

4 According to Marcelo Abelha Rodrigues, “the polluter/user pays axiom cannot be interpreted literally, as it does not reflect the idea of “pay to pollute” or “pay for use”, especially since its reach is immensely broader than the merely repressive aspect it possesses. Often considered as meaning “pay to be able to pollute”, the polluter pays principle is far from meaning that, not only because the environmental cost does not have a corresponding monetary valuation, but also because no one should be given the opportunity to buy the right to pollute and benefit from environmental assets to the detriment of the collectivity that owns it.” (RODRIGUES, 2005, p. 190).

like Maria Alexandra Aragão, who does not acknowledge civil liability as an expression of the principle under analysis (ARAGÃO 1997, pp. 118ff.). On the other hand, the majority of Brazilian writers almost automatically associate PPP with civil liability, as if they were synonyms and only in a limited way recognizing the restorative aspect of the principle.⁵

In addition to the breadth of the PPP focus, it is necessary to define who is the polluter responsible for the internalization of negative environmental externalities; that is, who can be called upon to take measures – and bear their expenses – to prevent and repair environmental degradation.⁶ Under the National Environment Policy Law, polluters are individuals or legal entities directly or indirectly⁷ responsible for environmental degradation activities.⁸

According to Herman Benjamin, “the polluter then becomes the first payer” (BENJAMIN 199. p. 229). They are the one that should internalize environmental costs external to the productive processes. The consumer cannot ultimately be the main culprit since, in addition to having no actual means of avoiding or remedying the damage (or compensating for the impact), they will – due to the “cascade” or “domino” effect – bear the costs related to the internalization that the agent responsible for generating externalities includes into the price of the product or service (SADELEER, 1999, p. 83).

When effectively applied, the polluter pays principle works as a mechanism to reduce pollution (MOREIRA, 2015b, p. 91). It is realized in full when the prevention and relief costs are internalized by the polluter and do not fall on the collectivity, and damages are avoided. This ensures that polluter parties are accountable and, as a consequence, the market is balanced, awareness of producers and consumers is raised, technological advances are stimulated, and more seductive preventive attitudes are fostered in a situation of precise allocation of costs and responsibilities.

⁵ On this issue, cf. MOREIRA, 2015b, pp. 103 a 116.

⁶ Regarding payment, it is understood that the polluter must bear all the costs related to the pollution they cause or that are capable of causing. (BENJAMIN, 1993, p. 231).

⁷ This article is not aimed at exploring the difficulties related defining indirect polluters, since this is not a subject necessary to the case law analysis carried out here. In any case, it should be pointed out that “the ‘polluter-that-must-pay condition’ is therefore attributed to the producer, either as direct or as indirect polluter. As direct polluter, the producer is the one who actually creates and controls the conditions in which pollution is caused, their performance was a *sine qua non* for pollution, and they alone have the means to avoid it. On the other hand, as an indirect polluter the producer is the one who creates and controls the conditions that will trigger pollution, in addition to profiting from them; it is the producer who places on the market a good whose normal and probable use is considered to be harmful to society as a whole” (MOREIRA, 2015b, p. 109).

⁸ Art. 3, III and IV of Law 6,938/1981.

And as a consequence, the implementation of PPP is expected to cause a reduction in existing environmental inequalities in a scenario of privatization of bonuses and socialization of burdens.

Understanding the preventive and remedial functions of the polluter pays principle is vital to identifying the scope and potential of its focus on environmental protection, and therefore to verify how it has been considered and applied in trials of environmental lawsuits. Below is a diagnosis of how PPP has guided judgments and to what extent it has contributed to improving Brazilian legal and environmental protection.

2 RESULTS OF THE RESEARCH ON THE STF AND STJ CASE LAW

Court decisions from the Federal Supreme Court (STF) and the Superior Court of Justice (STJ) were surveyed in order to analyze the incidence of the polluter pays principle and whether its application conforms to the changes in and range of the principle. We selected the following keywords, which either express or translate the preventive and remedial guidelines of PPP: “Polluter and pays”, “polluter pays”, “externality”, “externality and environmental and negative”, “user and pays”, “user pays”, “internalization and environment”, “internalization and environmental”, “cost and environment”, “damage and environment”, “damage and environmental”, “civil and environmental liability”, “degradation and environment” and “degradation and environmental”.

The case law survey, carried out on 24/Mar/2014 and updated on 31/Jul/2017 and 25/Apr/2018, yielded a total of 2,701 judgments for cases tried from 1993 to 2018. We noticed a significant increase in the number of trials in each year we updated the case law survey. The following table shows the total number of occurrences of the keywords in judgments whose summaries have been read and examined in order to identify their thematic relevance to PPP.

Relationship between keywords and hits in the total of judgments surveyed in 2014 and updated in 2017 and 2018

Keywords	Occurrences in STF			Occurrences in STJ		
	2014	2017	2018	2014	2017	2018
Polluter and pays	1	1	1	23	28	31
Polluter pays	0	0	0	22	26	29
Externality	0	0	0	3	5	5
Environmental and negative externality	0	0	0	3	3	3
User and pays	1	1	1	3	5	6
User pays	1	1	1	2	3	4
Internalization and environment	0	0	0	1	1	1
Internalization and environmental	0	0	0	1	1	1
Costs and environment	1	3	3	29	35	35
Costs and environmental	1	2	2	6	6	7
Damage and environment	42	71	73	601	856	930
Damage and environmental	52	98	104	548	901	1,003
Civil and environmental liability	22	41	45	187	301	342
Degradation and environment	9	10	10	91	132	141
Degradation and environmental	9	11	13	103	152	163
TOTAL:	139	239	253	1,623	2,455	2,701

Source: the authors

From the reading and analysis of the summaries of 2,701 judgments surveyed, it was possible to disregard those that, in spite of resulting from hits for the chosen keywords, were not connected to the polluter pays principle. From that total of judgments surveyed and systematized in the survey in 2018, we have selected 208 judgments

considered as relevant to the subject matter and thus analyzed their texts in full. Below are the numerical results obtained after said screening.

Numerical results after qualitative screening

Court decisions selected to have their full text analyzed	
2014	110
2017	183
2018	208

Source: the authors

To see how PPP guidelines have impacted court rulings related to the legal protection of the environment, the full contents of the 208 court judgments considered as relevant were analyzed. From the analysis of the incidence of the principle in these cases, it was possible to divide them in the categories in following table.⁹ Prioritizing of the field of environmental civil liability in the breakdown by theme group is due to the large number of judicial decisions related to relief for environmental damages and their main challenges.

Impact of PPP by theme group

CLASSIFICATION BY THEME GROUP		COURT DECISIONS
Barcode – G1	General environmental civil liability	110
Barcode – G2	Non-property environmental damage. and full risk theory	41
Barcode – G3	Environmental civil liability of the Government for omission	19
Barcode – G4	Possibility of accrual of performance and payment obligation	39
Barcode – G5	Environmental compensation of the National Conservation Unit System (SNUC)	2

⁹ Among the 208 judgments considered as relevant to the subject matter of this research and selected for analysis of their full content, 12 were included in more than one theme group, those being groups G1 to G6. Thus, the sum of the results by group does not represent the total of judgments analyzed, but the number of judgments allocated by group, which results in a total of 220. An attachment with all the judgments analyzed, broken down by groups, shows which ones appear more than once.

Barcode – G6	Administrative environmental liability	9
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Source: the authors

In view of the thematic breakdown identified in the selected judgments, the analyses undertaken based on their respective correspondence with the broad guidelines of the polluter pays principle are given below.

2.1 General environmental civil liability Group 1

This group covers a total of 110 judgments. From table 1, it is possible to see that, from all the judgments, only two show up the expression “polluter pays”, while the words “damage and environment”, “damage and environmental” and “civil and environmental liability” abound in the others.

The snapshot from the previous table, which indicates the incidence of PPP by theme group to identify the judgments allocated to Group 1 (general environmental civil liability), and its developments are presented below.

Judgements assigned to Group 1 (general environmental civil liability)

GROUP	YEARS	PANELS	KEYWORDS	NUMBER OF JUDGMENTS
Barcode – G1 General environmental civil liability	1993 to 2018	STJ 1st to 5th Panels	damage and environment/damage and environmental/ civil and environmental liability/degradation and environment/degradation and environmental/ costs and environment/ costs and environmental/ polluter pays/polluter and pays	110

Source: the authors

Different sub-themes linked to the concept of general environmental civil liability came up within G1; these will be presented together, according to their characteristics and with references to some of the court rulings, by way of example.

Most of the judgments refer expressly to objective environmental civil liability; they address their concepts, legal basis and interpretation both by the law theory and the courts.

In its in Article 14, paragraph 1¹⁰, the National Environmental Policy, Law 6,939/81, already provided for the objective civil liability of the polluter (article 3, IV)¹¹ for damages caused to the environment and to third parties, rendering the agent conduct subjectivity irrelevant, so that there is an obligation to provide relief for environmental damage. This legal provision was approved by Article 225, paragraph 3, of the Federal Constitution.¹² As an example, we can quote Special Appeal 1,346,449-PR¹³ where, based on the aforementioned provisions, it was stated that the business has the obligation “to prevent such [environmental] risks (prevention principle) and to internalize them” (polluter pays principle).¹⁴

Another interesting case is that of Special Review in Special Appeal Bill 1.121.233-SP,¹⁴ which analyzed the claim of change in the judgment that sentenced Petrobras to pay daily fines for releasing toxic gas into the environment, in addition to having to take all possible and appropriate measures for the prevention and control of those emissions, dealing with the environmental damage so as to guarantee its prevention and repair. This ruling, although not expressly mentioning the PPP, manifests – in addition to its relief aspect – its preventive aspect, which can be seen in the express enforcement of measures to prevent and control the cause of pollution.

10 “Without prejudice to the application of the penalties provided for in this article, the polluter is obliged to indemnify or provide relief for damages caused to the environment and to third parties affected by their activity, regardless of being guilty.”

11 A “polluter is an individual or public or private law legal entity directly or indirectly responsible for an activity that causes environmental degradation”.

12 “Conduct and activities considered harmful to the environment shall subject individual or legal entity offenders to criminal and administrative sanctions, irrespective of the obligation to repair the damage caused.”

13 STJ. 4th Panel Special Appeal 1.346.449-PR, Reporting Judge Luis Felipe Salomão. Brasília. DJ 08/Oct/2012.

14 STJ. 1st Panel Special Appeal 282.781-PR, Reporting Judge Arnaldo Esteves Lima. Brasília. DJ 02/Feb/2011.

A subtheme that shows up in a significant number of judgments¹⁵ concerns the responsibility of the new purchaser for the restoration of protected vegetation or remediation of preexisting damage to an already degraded property. Most of the cases deal on environmental damage to property containing areas of permanent preservation or a legal reserve within its boundaries, whose previous owner was directly responsible for the damage. The main defense argument of the owners was that the new acquiror was not standing to sue for damage directly caused by the former owner; there would be no causal nexus between a conduct ascribable to the new owner and the degradation that took place.

Relating to that, the STJ has been consistently deciding that the obligation to maintain the property undamaged (for example, by maintaining environmentally protected areas) is *propter rem*, and it is possible to hold the present owner responsible for environmental damages existing on the property, even if these damages have been caused directly by things done by former owners.¹⁶ In addition to the argument grounded on *propter rem* obligation, it is considered that the new buyer, by allowing the environmental damage in their property to continue, even though

15 STJ. 2nd Panel. Special Appeal 217.858-PR, Reporting Judge Franciulli Netto. Brasília. DJ 04/Nov/2003; STJ. 2nd Panel. Special Appeal 264.173-PR, Reporting Judge José Delgado. DJ 15/Feb/2001; STJ. 2nd Panel. Special Appeal 343.741-PR, Reporting Judge Franciulli Netto. DJ 04/Jun/2008; STJ. 2nd Panel. Special Appeal 453.875-PR, Reporting Judge Herman Benjamin. DJ 18/Oct/2007; STJ. 2nd Panel. Special Appeal 1.056.540-GO, Reporting Judge Eliana Calmon. DJ 25/Aug/2009; STJ. 1st Panel Special Appeal 1.090.968-SP, Reporting Luiz Fux. DJ 15/Jun/2010; STJ. 2nd Panel. Special Appeal 1.237.071-PR, Reporting Judge Humberto Martins. Brasília. DJ 11/May/2011; STJ. 2nd Panel. Special Appeal 1.206.484-SP, Reporting Judge Humberto Martins. Brasília. DJ 29/Mar/2011; STJ. 2nd Panel. Special Appeal 327.254-PR, Reporting Judge Eliana Calmon. Brasília. DJ 19/Dec/2002; STJ. 2nd Panel. Special Appeal 282.781-PR, Reporting Judge Eliana Calmon. Brasília. DJ 27/Mar/2002; STJ. 2nd Panel. Special Appeal 1.622.512-RJ, Reporting Judge Herman Benjamin. Brasília. DJ 22/Sep/2016; STJ. 2nd Panel. Special Appeal 1.644.195-SC, Reporting Judge Herman Benjamin. DJ 27/Apr/2017; STJ. 2nd Panel. Special Appeal 1.241.630-PR, Reporting Judge Herman Benjamin. DJ 23/Jun/2015; STJ. 1st Panel Special Appeal 282.781-PR, Reporting Judge Luiz Fux. Brasília. DJ 18/Oct/2007; STJ. 2nd Panel. Special Review in Special Appeal Bill 231.561-MG, Reporting Judge Herman Benjamin. Brasília. DJ 16/Dec/2014; STJ. 5th Panel. Interlocutory Appeal for Parole 64.124-MS, Reporting Judge Reynaldo Soares da Fonseca. Brasília. DJ 17/Mar/2016; STJ. 5th Panel. Interlocutory Appeal for Parole 64.219-MS, Reporting Judge Reynaldo Soares da Fonseca. Brasília. DJ 17/Mar/2016.

16 Cf., for example, STJ. 2nd Panel. Special Appeal 948.921-SP, Reporting Judge Herman Benjamin. DJ 11/Nov/2009. Consider also that, at the time of the trial of Special Appeal 229.302-PR (STJ. 1st Panel, Reporting Judge Garcia Vieira. DJ 18/Nov/1999), the view that the new purchaser is responsible for repairing the environmental damage on their property, regardless of whether they had caused it, was not yet well established. At the time, it was considered that it was not possible to establish a causal link between the conduct of the new owner and the deforestation of the area and, consequently, their obligation to recover the damage was dismissed. Fortunately, as the various judgments mentioned here demonstrate, such a view has been surpassed. Currently, the responsibility of the new purchaser is expressly provided for in the New Forest Code (Law 12,651/2012), pursuant Article 7, paragraphs 1 and 2.

not having acted in a comissive way to cause it initially, becomes part of the long list of polluters (Art. 3, IV, Law 6,938/1981) responsible for reparation, regardless of being at fault.¹⁷

It can be seen that, although not explicitly mentioned in the text of the judgments, the influence of the PPP is evident in their reparation nature, coming from the need to restore the degraded area – with the necessary assumption of the respective costs – regardless of fault, as determined by objective environmental civil liability.

Another matter that comes up in some of the selected judgments involves the claim for repairing the environmental damage never becomes time-barred. The subject is dealt with in judgments referring to Special Appeal 1,559,396-MG,¹⁸ Special Review in Special Appeal Bill 1,421,163-SP¹⁹ and Motions for clarification in Special Appeal 1,346,489-RS. The cases concern: (i) violations in green areas belonging to the municipality; (ii) construction in a permanent preservation area (PPA) with consequent contamination of the soil and the groundwater; and (iii) contamination of the area by chemicals used in the treatment of wood intended for manufacturing lampposts. In all these cases, the sentence included the obligation to repair the damage caused. The filed class actions were considered as never expiring because they dealt with issues related to inherent, fundamental, unwaivable and untransferable rights inherent to life, as well as the ongoing state of the harm to the environment (MAZZILI, 2002, p. 540).²⁰

17 Tho this end, one of the judgments says that, “I believe the allegations that they did not stand to sue and were not responsible for environmental damage do not deserve to be continue to be accepted, since the latter, as the owner of the area in question, absolutely standing to sue as defendant in this case. The fact that they had already acquired the land with the constructs responsible for the damage is not an obstacle, since they also became responsible for the environmental liability when they bought the property. They took on objective joint and several and *propter rem* liability, and have the duty to maintain the environmental balance in the area of permanent preservation and, in the event of finding it devastated, to reconstitute it, which did not actually took place.” (STJ. 1st Panel Special Appeal 843.036-PR, Reporting Judge José Delgado. DJ 09/Nov/2006).

18 STJ. 2nd Panel. Special Appeal 1.559.396-MG, Reporting Judge Herman Benjamin. DJ 22/Nov/2016.

19 STJ. 2nd Panel. Special Review in Special Appeal Bill 1.421.163-SP, Reporting Judge Humberto Martins. DJ 06/Nov/2014.

20 On the matter, a section of the judgment text of Special Appeal 1.120.117-AC reads:

“4. Besides immediately harming the legal asset that pertains to it, namely the native community, the environmental damage also affects all those who live in the State, spreading to all non-native local community and to future generations, due to the irreversible nature of the damage caused.

5. In the case of broad rights, civil remedy takes on a wide scope with profound implications for the kind of liability of the degrading agent. Said liability is objective, grounded on direct risk or the mere existence of the harmful activity, regardless of the agent causing the damage being guilty.

6. From a hermeneutic point of view, the right to claim relief for environmental damage is protected by it never becoming time-barred, since it is an inherent right to life, vital and essential to the existence of peoples, regardless of whether it is stated in a legal text.

Discussion on the imposition of the obligation to repair the environment in cases where there is *fait accompli* is found in several Group 1 judgments²¹, which deal with buildings constructions in APPs (Permanent Protection Areas), which were preceded by the almost total suppression of protected vegetation. The defendants' answer was based substantially on the argument that there would be an acquired right, on the grounds that the buildings were consolidated in time, together with the argument that the works supposedly had an environmental license authorizing be carried out, at the time. This was not the court ruling, since it was considered that the consolidation of the situation over time did not make the works carried out less illegal. Also, in that situation, once construction in an APP is proven, the illegality of the administrative act that granted the environmental license must be acknowledged. Besides, granting of an environmental license does not, by itself, take away the responsibility for repairing the damage caused to the environment.

Toward that, Herman Benjamin says that there is no acquired right to pollute or degrade the environment, since “decades of illegal use of the environment do not make practices banned by the law-maker legal”. It must be born in mind that we are dealing with a broad right, which also belongs to future generations.²² In the same vein, it is stated that the “theory of *fait accompli* cannot be called upon to grant a non-existent right based on a claim of consolidation of the factual situation over time.”²³

7. Regarding time-barring, it is necessary to distinguish which is the protected legal interest: if it is eminently private, the normal deadlines for indemnity actions apply; if the legal interest is unwaivable, fundamental, and precedes all other interests because without it there is no life, health, work, or leisure, right to reparation is considered to not be subject to time-barring.

8. Environmental damage is included among unwaivable interests and as such, the action that seeks repair for environmental damage is among the few protected by not being subject to time-barring.” (STJ. 2nd Panel. Special Appeal 1.120.117-AC, Reporting Judge Eliana Calmon. DJ 10/Nov/2009).

21 STJ. 2nd Panel. Special Review in Special Appeal Bill 1.494.681-MS, Reporting Judge Humberto Martins. DJ 03/Nov/2015; STJ. 2nd Panel. Special Review in Special Appeal Bill 1.494.988-MS, Reporting Judge Humberto Martins. DJ 01/Oct/2015; STJ. 2nd Panel. Special Review in Special Appeal Bill 1.382.576-MS, Reporting Judge Assuete Magalhães. DJ 13/Jun/2017; STJ. 2nd Panel. Special Review in Ruling on the Motion for Clarification in Special Appeal 1.447.071-MS, Reporting Judge Herman Benjamin. DJ 15/Dec/2016; STJ. 2nd Panel. Special Review in Ruling on the Motion for Clarification in Special Appeal 1.468.747-MS, Reporting Judge Herman Benjamin. DJ 15/Dec/2016; STJ. 2nd Panel. Special Review in Ruling on the Motion for Clarification in Special Appeal 1.381.341-MS, Reporting Judge Humberto Martins. DJ 25/May/2016.

22 STJ. 2nd Panel. Special Appeal 948.921/SP, Reporting Judge Herman Benjamin. DJ 23/Oct/2007.

23 STJ. 2nd Panel. Special Review in Special Appeal Bill 1.494.681-MS, Reporting Judge Humberto Martins. DJ 03/Nov/2015.

It should be noted that the issue gave rise to the publication on 14/May/2018 of STJ's Precedent 613, according to which "the application of the theory of *fait accompli* in Environmental Law is not allowed." Acceptance of the *fait accompli* theory would lead to the perpetuation of a so-called "right to pollute",²⁴ in total disregard to the right to a balanced environment as a common good of the people and that must be guaranteed for present and future generations.²⁵

A discussion about joinder of defendants in public environmental civil actions shows up in several rulings²⁶ based on the assumption that the polluter's liability is objective and jointly liable, and all those who, directly or indirectly, have contributed to causing environmental damage are jointly and severally liable for remedying it.²⁷ The interpretation of the party being a permissive joinder is a matter already settled in the STJ, and was even considered a consolidated argument, in the following terms: "Those responsible for environmental degradation are joint and several obligors, joinder of defendants having become a rule in citizen or class actions."²⁸

Although the polluter pays principle has not been expressly mentioned in the aforementioned judgments, its guidance can be seen in the grounds for several and joint liability, because when there are several polluters, any one of them can be held liable without the others having to become defendants in the action, so as to make relief for the environmental

24 Prior to the issuance of STJ's Precedent 613, the issue had already been considered as a consolidated argument in the following terms: "There is no acquired right to pollute or degrade the environment, and the owner or holder is not permitted to keep up practices that are prohibited by the law-maker." (SUPERIOR TRIBUNAL DE JUSTIÇA. *Jurisprudência em Teses. Direito Ambiental*. N. 30. Brasília, 18 March, 2015).

25 STJ. 2nd Panel. Special Appeal 1.510.392-MS, Reporting Judge Herman Benjamin. Brasília. DJ 25/Apr/2017.

26 STJ. 2nd Panel. Special Appeal 880.160-RJ, Reporting Judge Mauro Campbell. Brasília. DJ045/May/2010; STJ. 2nd Panel. Special Appeal 884.150-MT, Reporting Judge Luiz Fux. Brasília. DJ 07/Aug/2008; STJ. 2nd Panel. Special Appeal 843.978-SP, Reporting Judge Herman Benjamin. Brasília. DJ 09/Mar/2012; STJ. 2nd Panel. Special Appeal 843.978-SP, Reporting Judge Herman Benjamin. Brasília. DJ 31/Aug/2009; STJ. 3rd Panel. Special Appeal 1.363.107-DF, Reporting Judge Paulo de Tarso Sanseverino. Brasília. DJ 01/Dec/2015; STJ. 2nd Panel. Special Appeal 1.517.403-AL, Reporting Judge Herman Benjamin. Brasília. DJ 25/Aug/2015; STJ. 2nd Panel. Special Review in Special Appeal Bill 548.908-DF, Reporting Judge Herman Benjamin. Brasília. DJ 5/May/2015; STJ. 4th Panel Special Review in Special Appeal Bill 223.858-SP, Reporting Judge Luis Felipe Salomão. Brasília. DJ 09/Sep/2014; STJ. 2nd Panel. Special Review in Special Appeal Bill 1.417.023-PR, Reporting Judge Humberto Martins. Brasília. DJ 25/Aug/2015; STJ. 2nd Panel. Special Review in Special Appeal Bill 839.492-SP, Reporting Judge Herman Benjamin. Brasília. DJ 15/dec/2016.

27 Objective joint and several liability is based on Articles 3, IV and 14, § 1 of Law 6,938/81; Article 225, 3 of the 1988 Federal Constitution; and Article 942, *in fine*, of the Brazilian Civil Code.

28 SUPERIOR COURT OF JUSTICE *Jurisprudência em Teses. Direito Ambiental*. N. 30. Brasília, 18 March, 2015.

damage more effective and considering the remedial nature of the PPP.

The judgments of Special Appeal 1.237.893²⁹ and of Special Reviews in Special Appeal Bills 183,202-SP³⁰ and 533,786-RJ³¹ address the possibility of reversing the burden of proof so that it is up to the one charged with environmental damage to prove that in fact they did not cause it. The main grounds for this reversal of the burden of proof are the application of the precautionary principle (*in dubio pro ambiente*), together with a systematic interpretation of Articles 6, VIII, of the Consumer Protection Code and Article 21 of the Public-Interest Civil Action Law.³²

Finally, we must mention the STJ's landmark judgment on post-consumption environmental liability, which deals with the disposal of polyethylene terephthalate (PET) bottles. The Fourth Panel of STJ ruled by majority vote to dismiss Special Appeal 684.753-PR,³³ filed by the company responsible for the packaging beverages in PET-type bottles. The judgment upheld the decision of merit from the court of origin, which considered the company strictly liable for environmental pollution and ordered the adoption of measures regarding environmentally appropriate final destination of plastic packaging of their products. Application of the polluter pays principle is clear here, with a view at recognizing that it is inappropriate and even illegal to transfer to society the charges related to the collection and treatment of waste arising from the consumption of the product placed on the market by the defendant company. This shows a determination of internalizing negative environmental externalities. In confirming the ruling of the Paraná Court of Justice, STJ acknowledged post-consumption environmental liability, an argument based on the polluter pays principle.³⁴

29 STJ. 2nd Panel. Special Appeal 650.728-SP, Reporting Judge Eliana Calmon. Brasília. DJ 24/Sep/2013.

30 STJ. 1st Panel Special Review in Special Appeal Bill 183.202-SP, Reporting Judge Garcia Vieira. Brasília. DJ 09/Jun/1998.

31 STJ. 4th Panel Special Review in Special Appeal Bill 533.786-RJ, Reporting Judge Antonio Carlos Ferreira. Brasília. DJ 22/Sep/2015.

32 Law 8,078/1990; Art. 6. "The following are basic rights of the consumer: [...] VIII – facilitation of the defense of their rights, including by reversal of the burden of proof in their favor in the civil action when, at the discretion of the judge, the pleading is probable or when it is insufficient according to normal rules of experience."

Law 7,347/1985; Art. 21. "The provisions in Heading III of the law that established the Consumer Defense Code defend broad, collective and individual rights and interests in matters to which they apply." On the subject, cf. MOREIRA, 2015a, pp. 1,209 and ff.

33 STJ. 4th Panel Special Appeal 684.753-PR, Reporting Judge Antonio Carlos Ferreira. Brasília. DJ 18/Aug/2014.

34 On the subject of post-consumption environmental liability, cf. MOREIRA, 2015b.

The judgments in Group 1, all dealing with the major issue of environmental civil liability and some of its sub-themes clearly show the guidance of the polluter pays principle, especially in its remedial aspect. Based on the premise that environmental damage is one of the forms taken on by negative environmental externalities, there is no doubt on considering civil liability as a mechanism that actualizes the PPP. In this sense, it can be said that, in the analyzed cases, the remedial function of the PPP was adequately applied, allowing for a correct interpretation of the legal provisions relevant to the subject matter and ensuring enforcement of the responsibility of the polluter for remedying the environmental damages even indirectly caused by them and, as a consequence, this same polluter has to pay the costs related to the remedial measures, and not transfer them to society.

2.2 Non-property environmental damage and full risk theory: Group 2

Among the judgments searched using our keywords, followed by a qualitative selection based on the analysis of their summaries, we selected a group of 41 judgments involving sub-themes of environmental civil liability, which we soon realized were largely perfected by an application of the polluter pays principle. These are judgments on individual and broad non-property environmental damage and full risk theory, presented in detail in table 2, attached hereto, and summarized in the table below.

Judgments placed on Group 2 (non-property environmental damage and full risk theory)

GROUP	YEARS	PANELS	KEYWORDS	NUMBER OF JUDGMENTS
Barcode – G2 Non-property environmental damage. and full risk theory	2002 to 2018	1st and 4th Panels of STJ	Polluter pays/polluter and pays/internalization and environmental/user and pays/ degradation and environmental/ degradation and environmental/ civil and environmental liability/ damage and environment/damage and environmental	41

Source: the authors

In order to properly assess environmental damage, it is necessary to take its immaterial, non-property aspect into account, besides material losses. Acknowledging that the concept of the environment essentially includes non-property values derived from its condition as a fundamental human right, whose integrity is essential to a healthy quality of life, is reflected in the understanding of the breadth of the concept of environmental damage, both in its material and non-property aspect.³⁵ Non-material damages resulting from the degradation of environmental quality can be individual or collective (*lato sensu*) (LEITE e MOREIRA, 2010, pp. 117 and 118).

Regarding the theory of risk applicable to environmental civil liability in Brazil, it must be said that the view that full risk modality is the one best suited to repair environmental damages has prevailed in both case law and law theory, traditional exclusions of liability³⁶ as fortuitous events or force majeure not being accepted.³⁷

Regarding the court decision results in Group 2, it should be noted, for example, that 17 of them correspond to accidents that caused significant damage to the environment and a community of professional fishermen due to water contamination by chemicals (OLAPA case).³⁸ The claims in the lawsuits include the conviction of the defendants for property damage and pain and suffering resulting from the contamination. Among the judgments analyzed, it is worth mentioning the one relating to Special Appeal 1.114.398,³⁹ tried in 2009, since it was from that point on that STJ acknowledged that other cases related to the same facts and with the same matter of law could be tried as repetitive appeals.⁴⁰ Consequently, the remaining 16 judgments⁴¹ followed the legal conclusions of that case,

35 For more details on the recognition of non-property environmental damage, cf. LEITE e AYALA, 2011; STEIGLEDER, 2011; LEITE e MOREIRA, 2010; and MOREIRA, 2003.

36 On the adoption of the full risk theory for Brazilian civil environmental liability cf. MOREIRA, 2012, pp. 234 and ff.

37 Art. 393, sole paragraph, of the Brazilian Civil Code: "Fortuitous event or force majeure obtains from the necessary fact, whose effects could not be avoided or prevented."

38 Cf. Theme/repetitive 707 available in the repetitive index on the theme of Environmental Law at the STJ website.

39 STJ. 2Nd Session. Special Appeal 1.114.398. Reporting Judge Sidnei Beneti. Brasília. DJ 18/Aug/2014.

40 Currently, trial of special appeals in repetitive appeal proceedings is based on Articles 1,036 to 1,041 of the Brazilian Code of Civil Proceeding (Article 543-C of the former Code of Civil Proceeding).

41 STJ. 3rd Panel. Special Review in Special Appeal Bill 89.444-PR, Reporting Judge Paulo de Tarso Sanseverino. Brasília. DJ 24/Aug/2012; STJ. 3rd Panel. Special Review in Special Appeal Bill 119.624-PR, Reporting Judge Ricardo Villas Bôas Cuevas. Brasília. DJ 13/Dec/2012; STJ. 4th Panel Special Review in Special Appeal Bill 249.208-PR, Reporting Judge Marco Buzzi. Brasília. DJ 07/Feb/2013; STJ. 4th Panel Special Appeal 1.346.430-PR, Reporting Judge Luis Felipe Salomão.

which, in view of the defense's argument that the case excluded liability due to the fault being solely from a third party, considered that the "allegation of a fortuitous event was untenable", since full risk theory applies to environmental civil liability,⁴² in addition to the latter being strict liability (Article 225, § 3, CF and Article 14, paragraph 1 of Law 6,938/81).

Of the 41 agreements on non-property environmental damage and full risk theory, 12 expressly refer to the polluter pays principle, always in a way connected to Article 14, paragraph 1 of Law 6,938/81, which confirms the strict civil liability of the polluter. PPP also shows up as associated with both the adoption of the full risk theory and the acknowledgment and enforcement of compensation for non-property environmental damage, always with a view to full relief for environmental damages and, consequently, the internalization of the respective costs by those who gave cause to the damages.

2.3 Environmental civil liability of the Government for omission: Group 3

Of the total of 208 judgments selected for analysis of their full contents, 19 deal with Government environmental liability for omission, as summarized below and detailed in the attached table 3.

Brasília. DJ 21/Nov/2012; STJ. 4th Panel Special Review in Special Appeal Bill 71.324-PR, Reporting Judge Antonio Carlos Ferreira. Brasília. DJ 05/Mar/2013; STJ. 4th Panel Special Review in Special Appeal Bill 92.652-PR, Reporting Judge Antonio Carlos Ferreira. Brasília. DJ 04/Mar/2013; STJ. 3rd Panel. Special Review in Special Appeal Bill 99.092-PR, Reporting Judge Paulo de Tarso Sanseverino. Brasília. DJ 01/Apr/2013; STJ. 3rd Panel. Special Review in Special Appeal Bill 238.427-PR, Reporting Judge Ricardo Villas Bôas Cuevas. Brasília. DJ 09/Aug/2013; STJ. 3rd Panel. Special Review in Special Appeal Bill 254.149-PR, Reporting Judge Sidnei Beneti. Brasília. DJ 01/Mar/2013; STJ. 4th Panel Special Review in Special Appeal Bill 258.263-PR, Reporting Judge Antonio Carlos Ferreira. Brasília. DJ 20/Mar/2013; STJ. 4th Panel Special Review in Special Appeal Bill 273.058-PR, Reporting Judge Antonio Carlos Ferreira. Brasília. DJ 27/Apr/2013; STJ. 4th Panel Special Review in Special Appeal Bill 281.177-PR, Reporting Judge Raul Araújo. Brasília. DJ 08/May/2013; STJ. 4th Panel Motions for Clarification in Special Appeal 1.346.430-PR, Reporting Judge Luis Felipe Salomão. Brasília. DJ 14/Feb/2013; STJ. 2nd Section. Special Appeal 1.354.536-AL, Reporting Judge Luis Felipe Salomão. Brasília. DJ 05/May/2014; STJ. 4th Panel Special Review in Special Appeal Bill 117.202-PR, Reporting Judge Antonio Carlos Ferreira. Brasília. DJ 30/Nov/2015; STJ. 4th Panel Special Review in Special Appeal Bill 232.494-PR, Reporting Judge Marco Buzzi. Brasília. DJ 26/Oct/2015.

42 STJ. 2nd Section. Special Appeal 1.114.398. Reporting Judge Sidnei Beneti. Brasília. DJ 16/Feb/2012. pp. 13-15.

Judgements assigned to Group 3 (Government environmental civil liability for omission)

GROUP	YEARS	PANELS	KEYWORDS	NUMBER OF JUDGEMENTS
Barcode – G3 Environmental civil liability of the Government for omission	2000 to 2017	1st and 4th Panels of STJ	costs and environment/ costs and environmental/ polluter pays/ externalization and environmental and negative/externality/ internalization and environment/ internalization and environmental/degradation and environment/ degradation and environmental/civil and environmental liability/ damage and environment/ damage and environmental	19

Source: the authors

If there is no doubt about the objective nature of the Government's civil liability for acts by commission – whether based on Articles 14, paragraph 1, and 3, IV of Law 6,938/1981, or based on Article 37, paragraph 6 of the Federal Constitution – the same does not happen when government omission gives rise to or help cause damage to the environment. In that case, the arguments go both in the sense that Government's environmental liability for omission is, as a rule, subjective (an argument that has prevailed over the Government civil liability in general),⁴³ and in defense of the argument what is provided in a specific law relating to liability should prevail (which, in the case of compensation for environmental damage, expressly provides that the Government answers strictly for omission – or as an indirect polluter).⁴⁴

This topic has been debated in the Superior Court of Justice

43 The Government would only be liable when proven that its omission was due to fault in violation of its legal duty to avoid the damage. In defense of this interpretation, cf. CARVALHO FILHO, 2012, p. 188; DIPIETRO, 2012, p. 709; MELLO, 2014, p. 1,050.

44 Law 6,938/1981; Art. 3: "For the purposes set forth in this Law, the following definitions shall apply: [...] IV – A polluter is an individual or public or private law legal entity directly or indirectly responsible for an activity that causes environmental degradation".

Law 6,938/1981, Art. 14. § 2 [...] the polluter shall be obliged to, regardless of being guilty or not, repair the damage caused to the environment and to third parties affected by their activity. [...]"

and provides an interesting discussion on the polluter pays principle, whose guidance has been used in order to try to reduce the Government's (ultimately, of society itself) liability as indirect polluter, in order to prevent it from being called upon to repair environmental damage – and thus bear its costs – rather than having the direct polluter to make efforts and allocate resources to that effect. Let us see how the judgments in Group 3 demonstrate the case law evolution of the topic.

Among the judgments, Special Appeals 647.493-SC,⁴⁵ and 1.071.741-SP,⁴⁶ which dealt differently with the Government's environmental civil liability by omission, deserve special mention.

In the first case, the MPF (Federal Prosecutor's Office) filed a citizen suit against several mining companies and the Federal Government for environmental damage resulting from mining activities. Even though the Federal Government was jointly and severally convicted together with the companies directly responsible for environmental damage on the basis of its at fault liability, it must be pointed out that the Government's defense argument asked for its passive illegality to be acknowledged; and they used the very guidance of the polluter pays principle to base this argument. Let us explain that. The Federal Government argued that, by being held strictly liable for damages it did not contribute directly to, it would end up subjecting society to a double loss: the first being embodied in the environmental damage itself – and its direct consequences in loss of quality of life for the population – and the other represented by the contribution of public funds to remedy environmental degradation – which would mean true socialization of the losses and privatization of the gains (since the direct polluters would not pay the financial burden of remediation), thus violating the PPP.

The second Panel of STJ convicted the Federal Government based on its guilty nonfeasance in violation of a legal duty to inspect charcoal mining activities (indirect polluter), considering it jointly and severally liable together with the mining companies (direct polluters) and stressing, at the same time, the need for the government agency to have not only the right but the duty to seek full refunding of the amounts spent (“recourse duty”). This judgment is important because it started the discussion on how the guidance of the polluter pays principle (to avoid socialization of burdens and privatization of bonuses) should be considered in public environmental citizen suits where the Government appears as defendant as an indirect polluter, together with the direct polluter.

45 STJ. 2nd Panel. Special Appeal 647.493-SC. Judge Reporting João Otávio de Noronha. Brasília. DJ 22/May/2007.

46 STJ. 2nd Panel. Special Appeal 1.071.741-SP. Judge Reporting Herman Benjamin. Brasília. DJ 16/Dec/2010.

With this in mind, we must mention the judgment of Special Appeal 1.071.741-SP,⁴⁷ which deals with the case of illegal occupation by individuals of Jacupiranga State Park, in São Paulo, due to the Government – in that case, the State of São Paulo – not carrying out its duty of environmental supervision of the conservation unit under its administration in view of the disruption of and trespassing into a public asset. The assumption, according to the Federal Constitution (Arts. 225, 23, VI and VII, and 170, VI) and the National Environmental Policy Law (Law 6,938/81 Arts. 2, I and V, and 6), the performance of the Public Power in defense of the environment is “unwaivable and not subject to time-barring”.⁴⁸

In the aforementioned case, Reporting Justice Herman Benjamin innovated in deciding that the conviction of the Government as an indirect polluter – even if its responsibility for omission is strict, joint, and unlimited – must obtain in a subsidiary way to that of the principal debtor (direct polluter), so that, in accordance with the polluter pays principle, the burden cannot be socialized and the bonuses, privatized. Thus, in practice, this keeps the direct polluter from not paying the expenses related to the repair of environmental damage, while the community, in addition to suffering the consequences of environmental degradation, has to bear the costs of repairing it using public funds (from the indirect polluter, the Government).

It should be noted that the Government’s civil liability is maintained; however, the community is not encumbered in the same way as the direct polluter. Firstly, direct polluters are called to repair the damage, leaving to the Government the role guarantor, of reserve (even though a joint and several debtor). This assures to the environment the most appropriate legal solution and avoids socialization of burdens and privatization of bonuses,⁴⁹

47 STJ. 2nd Panel. Special Appeal 1.071.741-SP. Judge Reporting Herman Benjamin. Brasília. DJ 16/ Dec/2010.

48 STJ. 2nd Panel. Special Appeal 1.071.741-SP. Reporting Judge Herman Benjamin. Brasília. DJ 16/ Dec/2010. p. 7.

49 As it says in an excerpt from the above-mentioned judgment: “13. The Government is jointly, strictly and unlimitedly liable, pursuant Law 6,938/1981, for urban-environmental damages resulting from the omission of its duty to control and supervise, to the extent that it directly or indirectly should contribute both to environmental degradation in itself, and for its worsening, consolidation or perpetuation, all without prejudice to the adoption of disciplinary, penal, and civil measures, and measures in the field of administrative misconduct, against the omitting or negligent public agency. 14. In the case of neglect of control and inspection duties, the environmental liability of the Government is for subsidiary (or in order of preference) enforcement. 15. Joint and subsidiary and subsidiary enforcement liability means that the Government incorporates the enforceable instrument on the condition that, as a subsidiary debtor, it shall only be called upon to pay off the debt if the original, direct or material debtor (principal debtor) should fail to do so, whether due to total or partial loss of equity or insolvency, or due to impossibility or incapacity, including of a technical nature, to comply with the court-ordered benefit, without prejudice to the right of redress (Article 934 of the Brazilian Civil Code), with disregard of corporate entity (Art. 50 of the Brazilian Civil Code). 16. By safeguarding the full financial and technical solvency of the environmental credit, joint and several liability and subsidiary enforcement

in line with the contents of the PPP.⁵⁰

2.4 Possibility of accrual of performance and payment obligations: Group 4

Group 4 includes 39 judgments of STJ, dealing with the possibility of a request for joinder of the polluter's performance and payment obligations, as summarized below and in detail in the attached table 4.

Judgments assigned to Group 4 (possibility of accrual of performance and payment obligations)

GROUP	YEARS	PANELS	KEYWORDS	NUMBER OF JUDGEMENTS
Barcode – G4 Possibility of accrual of performance and payment obligation	2001 to 2018	1st and 4th Panels of STJ	polluter pays/internalization and environmental/user and pays/polluter and pays/degradation and environment/degradation and environmental/civil and environmental liability/ damage and environment/ damage and environmental/ user and pays/user pays	39

Source: the authors

of the Government does not allow for substitution, mitigation, delaying or hampering of the duty of full recovery of the affected environment and refunding for losses caused by the material of principal polluter, under penalty of doubly encumbering society, violating the polluter pays principle and making internalization of negative environmental externalities impossible. (STJ. 2nd Panel. Special Appeal 1.071.741-SP. Judge Reporting Herman Benjamin. Brasília. DJ 16/Dec/2010).

⁵⁰ Before publication of the paradigm judgment under analysis here, we want to draw attention to two other judgments: Regulatory Reviews in Bill of Review 822.764-MG (STJ. 1st Panel Regulatory Review in Bill of Review 822.764-MG. Judge Reporting José Delgado. Brasília. DJ 05/Jun/2007) and 973.577-SP (STJ. 2nd Panel. Regulatory Review in Bill of Review 973-577-SP. Judge Reporting Mauro Campbell. Brasília. DJ 16/Sep/2008). In both cases, the Government was considered jointly and severally liable with the direct polluter due its omission of its duty to supervise. However, subsidiarity was not established in relation to the fulfillment of the obligation to repair the damage. This is not the best solution for the case considering application of the PPP, since to hold public and private agents, respectively indirectly and directly, accountable for environmental damage, ends up doubly burdening society.

As these are rulings that treat the possibility of joinder of performance and payment obligations in the same citizen suit in a similar way (albeit in some instances sentencing to the obligation to indemnify not obtaining),⁵¹ the judgments will be analyzed together.

Of the 39 selected rulings, 36 are from citizen suits.⁵² Under the terms of Law 7,347/1985, a citizen suit may have as its subject matter “a pecuniary penalty or fulfillment of the performance obligation.” (Article 3). In view of the drafting of the statutory provision, the judgments listed in Group 4 talked about joinder of the performance obligation (the remediation itself) and the payment obligation (indemnification) in environmental citizen suits, based on a non-literal interpretation of the mentioned provision, arguing that the conjunction “or” should be understood as “and” in order to ensure full compensation for environmental damage.⁵³

The rulings analyzed here are rich in legal grounds on the polluter pays principle and full compensation for environmental damage. Justice Herman Benjamin, the reporting judge for five of the judgments, was emphatic in talking about the need for the polluter to pay an amount as

51 From the 39 judgments making up Group 4, 11 waived the indemnification request, despite acknowledging there was the possibility of joinder of claims to perform, not to perform and indemnify. (STJ. 2nd Panel. Special Appeal 1.165.281-MG, Reporting Judge Eliana Calmon. Brasília. DJ 17/May/2010; STJ. 2nd Panel. Special Appeal 1.248.214-MG, Reporting Judge Herman Benjamin. Brasília. DJ 18/Aug/2011; STJ. 2nd Panel. Special Appeal 1.382.999-SC, Reporting Judge Humberto Martins. Brasília. DJ 18/Sep/2014; STJ. 2nd Panel. Special Review in Ruling on the Motion for Clarification in Special Appeal 628.911-SC, Reporting Judge OG Fernandes. Brasília. DJ 01/Jul/2015; STJ. 2nd Panel. Special Appeal 1.486.195-SC, Reporting Judge Humberto Martins. Brasília. DJ 11/Mar/2016; STJ. 2nd Panel. Interlocutory Appeal in Ruling on the Motion for Clarification in Special Appeal 584.736-SC, Reporting Judge Assusete Magalhães. Brasília. DJ 28/Sep/2016; STJ. 2nd Panel. Special Review in Special Appeal Bill 1.154.986-MG, Reporting Judge Diva Malerbi. Brasília. DJ 12/Feb/2016; STJ. 2nd Panel. Regulatory Appeal in a Bill of Review 1.365.693-MG, Reporting Judge Napoleão Nunes Maia Filho. Brasília. DJ 10/Oct/2016; STJ. 2nd Panel. Internal Interlocutory Appeal in Special Appeal 1.532.643-SC, Reporting Judge Assusete Magalhães. Brasília. DJ 23/Oct/2017; STJ. 2nd Panel. Internal Interlocutory Appeal in Special Appeal 1.577.736-SC, Reporting Judge Og Fernandes. Brasília. DJ 09/Aug/2017.) These judgments dealt with situations where no other losses in addition to those already subject to a conviction for *in natura* remediation obligation, were proven, and the STJ did not order payment of indemnity.

52 The citizen suit is the most important procedural instrument used in the defense of broad interests, which include the right to an ecologically balanced environment. The Federal Constitution, in its Article 129, II and III, says that filing a citizen suit is one of the functions of the Prosecution Office, despite that not being the only agency with legal power to do so (cf. Law 7,347/1985).

53 The presence of the word “or” in the article cannot be understood as an alternative, but “has additive value, since according to the *in dubio pro natura* principle, the legislation concerning the rights of society must always be interpreted in the way most favorable to society, so as to allow for the necessary judicial provision.” (STJ. 2nd Panel. Special Appeal 1.165.284-MG, Reporting Judge Herman Benjamin. Brasília. DJ 12/Apr/2012. p. 2). In the same vein: “The ‘or’ conjunction contained in the mentioned norm (as in Arts. 4, VII and 14, § 1 of Law 6,938/1981) has an additive value; it does not introduce an exclusion clause. Banning cumulation of these remedies would undesirably limit the Citizen Suit, an instrument for the prosecution of civil liability for damages caused to the environment, for example, making it impossible to convict in cases of collective pain and suffering.” (STJ. 2nd Panel. Special Appeal 1.198.727-MG, Reporting Judge Herman Benjamin. Brasília. DJ 14/Aug/2012).

compensation, in addition to the obligation to remedy the damage.

It is also important to stress that the duty to repair (perform) and indemnify (pay) is not a sanction; it is part of the set of civil compensatory measures, whenever *in natura* restoration is not sufficient for the complete restoration of the damage.⁵⁴ It is necessary to ensure full restoration of environmental damage by sufficiently internalizing the negative environmental externalities, which does not merely happen through an *in natura* restoration, but depends on the acknowledgment that the loss of quality of life suffered by the community during the environmental degradation must be considered as part of the damage and, therefore, be duly indemnified.⁵⁵

Due to all these aspects, we find out that Brazilian case law, regarding the interpretation and application of the polluter pays principle in the rulings mentioned here, has been acting correctly in ensuring to the environment full protection against the damage caused, ordering internalization of the remediation costs by convictions enforcing the polluter to repair the damage and, as the case may be, also to pay indemnification for it.

2.5 Environmental compensation of the National Conservation Unit System (SNUC) Group 5

⁵⁴ In this sense, the following excerpt of the judgment regarding Special Appeal 1.180.078-MG states:

“3. *In natura* restoration is not always enough to completely reverse or restore the environmental damage caused in the field of civil liability; hence it does not cover all duties associated with the polluter pays principle and reparation *in integrum*.

4. Environmental reparation must be carried out as fully as possible; this way, a conviction to recover the harmed area does not exclude the obligation to indemnify, mainly due to the damage that remains between its occurrence and the full restoration of the affected environment (= interim or intermediate damage), as well as collective pain and suffering and residual damage (= environmental degradation that remains despite all restoration efforts).

5. Joinder of the performance and payment obligations does not amount to joint jeopardy, as the indemnity is not for a specific, already repaired damage, but for its remaining effects, whether they are reflexive or transitory, especially the temporary deprivation of enjoyment of the asset of common use of the people until its effective and full restoration, as well as the return to the public treasury of the illegally obtained economic benefits.” (STJ. 2nd Panel. Special Appeal 1.180.078-MG, Reporting Judge Herman Benjamin. Brasília. DJ 02/Dec/2010).

⁵⁵ In this regard, Machado notes that “it is not only the aggression to nature that must be repaired, but the deprivation imposed on society of the ecological balance, well-being and quality of life provided by this environmental resource, together with other damages. Thus, reparation of environmental damage must also include the period during which the community will be deprived of that asset and the beneficial effects produced by it in itself and as a result of its interaction with society (Article 3, I of Law 6,938/81). If full recomposition of the ecological balance by restoration of the situation prior to the damage should depend, because of natural laws, of an extended period of time, society has the subjective right to be indemnified for the period between the occurrence of the damage and the integral reinstatement of the previous situation.” (MACHADO, 2009, p. 365).

The search using the chosen keywords returned only 2 judgments (1 from STF and 1 from STJ) dealing with environmental compensation of the National System of Conservation Units (SNUC),⁵⁶ as detailed in the attached table 5 and summarized below.

Judgments assigned to Group 5 (Environmental compensation of SNUC)

GROUP	YEARS	PANELS	KEYWORDS	NUMBER OF JUDGEMENTS
Barcode – G5 Environmental compensation of the National Conservation Unit System (SNUC)	2008 to 2011	STF Full Court and 2nd Panel of STJ	costs and environment/ costs and environmental/ degradation and environment/degradation and environmental/ polluter and payer/user-payer/user and payer/ environmental/damage and environment/damage and environmental	2

Source: the authors

The environmental compensation dealt with by the judgments under analysis is the one provided for in Law 9,985/2000 (SNUC Law), required in the scope of environmental licensing of ventures that cause significant environmental impact⁵⁷. It is intended, under the provisions of the law, to support deployment and maintenance of conservation units.⁵⁸

⁵⁶ Conservation Units are a kind of territorial space specially protected under the terms of Article 225, paragraph 1, III of the Federal Constitution and, as specifically defined in Article 2, I of Law 9,985/2000, are “territorial spaces and its environmental resources, including jurisdictional waters, with relevant natural characteristics, that are legally established by the Government with conservation objectives and defined boundaries; they are under a special administration regime, to which adequate protection guarantees apply.”

⁵⁷ Cf. Art. 225, § 1, IV, 1988 Federal Constitution on the requirement of a Baseline Environmental Impact Assessment for the licensing of ventures with the potential of causing significant degradation of the environment.

⁵⁸ Current text of Article 36 of Law 9,985/2000:

“Art. 36. In cases of environmental licensing of ventures with a significant environmental impact, so considered by the environmental agency with jurisdiction based on an environmental impact study and its related report – EIA/RIMA, the business is obliged to support the implementation and maintenance of a conservation unit in the Full Protection Group, pursuant provisions of this Article and the regulation of this Law.

§ 1 The amount of resources to be allocated by the business for this purpose [cannot be less than half

The basis for defining the amount to be contributed as environmental compensation are the Baseline Environmental Impact Assessment (EIA) and its Environmental Impact Report (RIMA), with the objective of guaranteeing the effective compensation for a significant – and unavoidable, albeit tolerable and therefore authorized – impact that will effectively result from the deployment and operation of the licensed activity.⁵⁹

The first of the two judgments listed in Group 5 is the judgment for ADI 3378,⁶⁰ which examines the correlation between the environmental compensation institute and the PPP guidance. Based on the ideal of internalization of negative environmental externalities, STF said that the environmental compensation provided for in the SNUC Law is “a mechanism for the shared assumption of social liability for the environmental costs arising from the economic activity”, as “there is no other effective way to achieve this constitutional purpose [of protecting the environment for present and future generations] but by imposing on the business the obligation to shoulder, at least in part, the costs of preventing, controlling and repairing negative impacts on the environment.”⁶¹ The importance of this direct internalization by the business lies in the fact that it is this business is the “direct beneficiary of the bonuses to be provided by the venture, so that the environmental cost is included in its production cost, so the bill for the negative externalities of the venture should not just be paid by the community, who is the holder of the broad right to the impacted essential good, namely, the environment (Article 225, heading, 1988 Federal Constitution) “(MOREIRA e NEVIANI, 2017, p. 186).

In Special Appeal 896.863-DF,⁶² what was questioned was the

of the total expected costs for the implementation of the venture], the percentage being determined by the environmental licensing agency according to the degree of environmental impact caused by the venture.

§ 2 The environmental licensing agency is responsible for defining the conservation units that will be benefited, considering the proposals presented in the EIA/RIMA and the view of the business, and even creation of new conservation units may be considered.

§ 3 When the venture will affect a specific conservation unit or its buffer zone, the license referred to in the heading of this article may only be granted upon authorization of the agency responsible for its administration, even if the affected unit does not belong to the Full Protection Group, it shall be one of the beneficiaries of the compensation established in this Article.”

The section of the above paragraph 1 in strikethrough saying “cannot be less than half of the total expected costs for the implementation of the venture” was declared unconstitutional in the ADI 3378 ruling. (STF. Full Court. ADI 3.378-6 Federal District. Reporting Judge Carlos Britto. Brasília. DJU: 20/Jun/08).

59 On the subject, cf. MOREIRA e NEVIANI, 2017.

60 STF. Full Court. ADI 3.378-6 Federal District. Reporting Judge Carlos Britto. Brasília. DJU: 20/Jun/08.

61 STF. Full Court. ADI 3.378-6 Federal District. Reporting Judge Carlos Britto. Brasília. DJU: 20/Jun/08.

62 STJ. 2nd Panel. Special Appeal 896.863-DF, Reporting Judge Castro Meira. Brasília. DJ 02/

possibility of joinder of the compensation for environmental damages and the environmental compensation. This possibility was ruled out, since the former concerns payment for results of an illegal activity (environmental damage), while the second is nothing more than a payment intended to offset the expected environmental impact authorized as tolerated by environmental agencies.

The two judgments expressly refer and intend to actualize the guidance of the polluter pays principle, mainly in regard to its remedial aspect, as they identify in the environmental compensation mechanism of incorporating into the productive process those external environmental costs from activities that cause significant environmental degradation, thus avoiding the socialization of losses and the privatization of gains.

3.6 Administrative environmental liability Group 6

As shown below and in the attached table 6, 9 judgments were classified as being related to the issue of administrative environmental liability, and it can be seen that only 1⁶³ expressly refers to the polluter pays principle. However, such judgments were chosen and analyzed because the PPP was considered as implicitly included in them and its (broad) concept was used – though not always accurately – as one of the basis for the rulings therein.

Judgments assigned to Group 6 (administrative environmental liability)

GROUP	YEARS	PANELS	KEYWORDS	NUMBER OF JUDGEMENTS
G 6 Administrative environmental liability	2002 to 2017	1st and 4th Panels of STJ	Externality/externality and environmental and negative/degradation and environment/degradation and environmental/civil and environmental liability/damage and environment/damage and environmental/polluter pays/polluter and pays	9

Source: the authors

Jun/2011.

63 STJ. 2nd Panel. Special Appeal 1.401.500-PR, Reporting Judge Herman Benjamin. Brasília. DJ 16/ Aug/2016.

Broadly speaking, both judgments discuss the objective or subjective nature of administrative environmental liability,⁶⁴ STJ wavering in their understanding of the matter. In the judgment of Special Appeal 1.318.051-RJ,⁶⁵ for instance, it was assumed that both the administrative and the civil environmental liability are strict, whereas other judgments said that application of penalties for administrative environmental violations depends on fault.⁶⁶

The judgment relating to Special Appeal 1.401.500-PR,⁶⁷ the only one of the cases referred to Group 6 where an explicit reference to the polluter pays principle was found, deals with a debt annulment action in which the Court of the State of Paraná ratified a R\$ 12 million fine imposed on Hexion Química company that, despite owning the shipped cargo, had no direct participation in the environmental accident. In this case, the company was administratively liable for environmental damages that occurred as a result of the explosion of the ship *Vicuña* in the Bay of Paranaguá, in November 2014. However, the 2nd Panel of STJ ordered the return of the case records “to their original court to address the issue of subjective administrative liability and analyze whether the appellant was at fault in the occurrence of environmental damage discussed in these case records.”⁶⁸ It must be said that the express reference to the PPP in this case is due only to the analysis made by Justice Herman Benjamin, when he compared the characteristics of administrative and civil environmental liability.⁶⁹

64 On the major characteristics of administrative environmental liability, cf. MOREIRA e 2015.

65 STJ. 1st Panel Special Appeal 1.318.051-RJ, Reporting Judge Benedito Gonçalves. Brasília. DJ 17/Mar/2015.

66 STJ. 1st Panel Special Review in Ruling on the Motion for Clarification in Special Appeal 62.584-RJ, Reporting Judge Regina Helena Costa. Brasília. DJ 18/Jun/2015; STJ. 2nd Panel. Special Appeal 1.401.500-PR, Reporting Judge Herman Benjamin. Brasília. DJ 16/Aug/2016; STJ. 2nd Panel. Special Appeal 1.640.243-SC, Reporting Judge Herman Benjamin. Brasília. DJ 07/Mar/2017; STJ. 2nd Panel. Special Appeal 1.251.697-PR, Reporting Judge Mauro Campbell. Brasília. DJ 12/Apr/2012.

67 STJ. 2nd Panel. Special Appeal 1.401.500-PR, Reporting Judge Herman Benjamin. Brasília. DJ 16/Aug/2016.

68 STJ. 2nd Panel. Special Appeal 1.401.500-PR, Reporting Judge Herman Benjamin. Brasília. DJ 16/Aug/2016, p. 14.

69 It was stated that “in Brazilian law and in accordance with the case law of the Superior Court of Justice, regardless of the legal qualification of the public or private polluter, whether owner or manager of the degraded area, civil liability for environmental damage has an objective, joint and several and unlimited nature, being ruled by the polluter pays, *in integrum* reparation, priority *in natura* of repair, and *favor debilis* principles. 4. However, the present case records deal with a different matter; namely, the nature of the administrative environmental liability, as well as an attempt to prove the whether there was fault or not, since the controversy is related whether an administrative penalty applies. 5. Thus, STJ case law says that, “in the case of administrative environmental liability, as the third party – the owner of the cargo – did not effectively cause the environmental damage, they should subjectively

The other cases analyzed here did not expressly refer to the PPP and deal with the enforcement of administrative sanctions due to environmental violations, and it must be pointed out that these penalties do not constitute negative environmental externalities to be internalized. We say that because, unlike the remedial costs for environmental damage, the value of penalties does not represent costs outside the production process, supported by outsiders in the event of non-internalization. However, all the analyzed situations are either related or they also address, the importance of repairing environmental damages – even though the core of the legal discussions is environmental, not civil, administrative liability – which already allows us to detect why some keywords returned results that somehow express the guidance of the PPP.

CONCLUSION

From a sample of 2,701 judgments selected from the survey using the selected keywords (2018 update) according to the broad guideline assigned to the polluter pays principle – geared at internalizing external environmental costs of a preventive and remedial nature – 208 judgments tried in STJ and STF between 1993 and 2018 were analyzed in detail.

We noticed that the keywords that recurred the most in the trials were “damage and environmental” and “damage and environment”, “civil and environmental liability”, “degradation and environment” and “degradation environmental”. The terms “polluter pays” and “polluter and pays”, which refer more directly and explicitly to the PPP, appeared in only 29 judgments. We must also mention that, during the period in which the law survey was carried out and updated – from April 2014 to April 2018 – there was a significant increase in the number of judgments selected for analysis of their full content (110 in 2014, 183 in 2017 and 208 in 2018), a result that in itself already shows the importance that has been assigned to the PPP.

In almost all of the selected judgments, the presence of the remedial aspect of PPP was identified. Notice that 4 out of the 6 theme groups established for the allocation of judgments (G1 to G4) deal with issues of civil liability; of the 208 judgments selected for reading, 201 deal with civil liability issues; this amounts to 96.63% of the total judgments analyzed in their entirety.

answer for the environmental degradation caused by the shipper.” (STJ, 2nd Panel, Special Appeal 1.401.500-PR, Reporting Judge Herman Benjamin, Brasília, DJ 16/Aug/2016).

It should also be said that the predominance of the remedial aspect of the polluter pays principle in the results of the law case survey is an expected development of the predominant interpretation in Brazilian doctrine, which limits or associates the PPP almost automatically with civil liability, often unduly forgetting its preventive objectives. Although limited, this view of the principle does not preclude acknowledgment of the fact that the rules on redressing environmental damage are – as they should be – inspired by the proposal to internalize negative environmental externalities (since environmental damage is one of its forms of expression); civil liability this appears as an important instrument for actualizing the remedial aspect of the polluter pays principle.

With this in mind, we can say that the PPP was an important drive of change and later settlement of more protective views of the environment regarding the remedy of environmental damages, thus causing an improvement in the interpretation of the main characteristics of environmental civil liability. The application of the polluter pays, together with other grounds,⁷⁰ contributed to have the STJ admit: (i) objective environmental civil liability and some of its developments (e.g. Non-applicability of the *fait accompli* theory in matters of Environmental Law, non-time-barring of the claims to environmental repair); (ii) cumulation of the performance and payment obligation in cases where the remediation of the illegal impact is not sufficient for the full compensation of environmental damage; (iii) holding the Government liability for omission as strict, joint and unlimited, but of subsidiary enforcement, thus keeping the community from suffering doubly from the damage (by bearing its consequences and also the costs of its remediation); (iv) full risk theory as guiding environmental civil liability; and (v) recognition of the need for full compensation for environmental damage in its multiple aspects, including those of a non-property nature, whether individual or broad.

On the other hand, the characteristics of the analyzed judgments indicate that the orientation of the polluter pays principle regarding the internalization of costs to prevent environmental impacts or damages has not yet been appropriated by Brazilian case law. This underutilization of the PPP in its preventive aspect indicates the need for better exploring its potential and scope in order to achieve more complete and efficient environmental protection.

70 CF, Art. 225, and Law 6,938, Arts. 3, 4 and 14, for example.

In this respect, it is possible – and desirable – to apply the polluter pays principle in the courts in a wider way, so as to incorporate its preventive aspect and, as a consequence, to implement and improve legal instruments for the prevention of impacts and damage (e.g., environmental licensing, environmental taxation, etc.).

We expect court decisions to evolve toward ensuring the effective internalization of negative environmental externalities, thus removing this burden from society and transferring it to the true stakeholders, so that the practical effect of the broad application of the polluter pays principle becomes the implementation of distributive justice in environmental matters, with the consequent decrease in environmental inequities, especially in view of the uncertainties, threats and severity that characterize current environmental challenges.

BIBLIOGRAPHY

ARAGÃO, Maria Alexandra de Sousa. *Princípio do Poluidor Pagador: pedra angular do Direito Comunitário do Ambiente*. ed. 1, 1 vol. Coimbra: Coimbra Editora, 1997.

BENJAMIN, Antonio Herman de Vasconcelos e. O princípio do poluidor-pagador e a reparação do dano ambiental. In BENJAMIN, Antonio Herman V. (coord.). *Dano Ambiental: Prevenção, Reparação e Repressão*. São Paulo: Revista dos Tribunais, 1993, p. 226-236.

CANOTILHO, José Joaquim Gomes; LEITE, José Rubens Morato (orgs.). *Direito Constitucional Ambiental Brasileiro*. São Paulo: Saraiva, 2007.

CARVALHO FILHO, José dos Santos. *Manual de Direito Administrativo*. 25ª edição. Rio de Janeiro: Editora Lumen Juris, 2012.

DI PIETRO, Maria Sylvia Zanella. *Direito Administrativo*. 25ª edição. São Paulo: Ed. Atlas, 2012.

D’ISEP, Clarissa Ferreira Macedo. O Princípio do Poluidor-Pagador e sua Aplicação Jurídica: Complexidades, Incertezas e Desafios. In: MARQUES, Cláudia Lima. SILVA, Solange Teles da. (orgs.). *O Novo Direito Administrativo, Ambiental e Urbanístico*. Rio de Janeiro: Revista dos Tribunais, 2010, p. 291-299.

FIGUEIREDO, Guilherme José Purvin de. *A propriedade no Direito*

Ambiental. 4ª ed. São Paulo: Revista dos Tribunais, 2010.

FONSECA, Maria Guadalupe P. da. *Iniciação à pesquisa no direito: pelos caminhos do conhecimento e da invenção*. Rio de Janeiro: Elsevier, 2009.

LEUZINGER, Márcia Dieguez e CUREAU, Sandra. *Direito Ambiental*. 1ª Ed. Rio de Janeiro: Editora Campus Jurídico, 2013.

LEITE, José Rubens Morato; AYALA, Patryck de Araújo. *Dano ambiental: do individual ao coletivo extrapatrimonial: teoria e prática*. 4. ed. rev., atual. e ampl. São Paulo: Revista dos Tribunais, 2011.

LEITE, José Rubens Morato e MOREIRA, Danielle de Andrade. Sociedade de risco, danos ambientais extrapatrimoniais (morais) e a jurisprudência brasileira. Rio de Janeiro: *Revista OAB/RJ*, n. 1, v. 24, 2010, p. 107-144.

MACHADO, Paulo Affonso Leme. *Direito Ambiental Brasileiro*. 20. ed. São Paulo: Malheiros, 2012.

MAZILLI, Hugo Nigro. *A Defesa dos Direitos Difusos em Juízo*. 19ª ed., rev. e ampl. e atual. São Paulo: Saraiva, 2006.

MELLO, Celso Antônio Bandeira. *Curso de Direito Administrativo*. 31ª edição. São Paulo: Ed. Malheiros, 2014.

MILARÉ, Édis. *Direito do Ambiente*. 8ª Edição. São Paulo: Revista dos Tribunais, 2013.

MIRRA, Álvaro Luiz Valery. Princípios Fundamentais do Direito Ambiental. *Revista de Direito Ambiental*. São Paulo: Revista dos Tribunais, Vol. 1, 1996, p. 50-66.

MIRRA, Álvaro Luiz Valery. *Ação Civil Pública e a reparação do dano ao meio ambiente*. 2ª ed. São Paulo: Juarez de Oliveira, 2004.

MOREIRA, Danielle de Andrade. Dano ambiental extrapatrimonial. Dissertação (Mestrado em Direito da Cidade) – Faculdade de Direito, Programa de Pós-graduação em Direito, Universidade do Estado do Rio de Janeiro, Rio de Janeiro, 2003.

MOREIRA, Danielle de Andrade. Inversão do Ônus da Prova: STJ, REsp 1.049.822-RS (Rel. Judge Francisco Falcão): Comentário doutrinário.

Revista do Superior Tribunal de Justiça, v. 239, 2015, p. 1.202-1.224. (2015a).

MOREIRA, Danielle de Andrade. Princípio do Poluidor-Pagador: Origens, Evolução e Alcance. In: SAMPAIO, Rômulo S.R.; LEAL, Guilherme J. S.; REIS, Antônio Augusto (Org.). *Tópicos de Direito Ambiental*. 30 Anos da Política Nacional do Meio Ambiente. Rio de Janeiro: Lumen Juris, 2011. p. 29-52.

MOREIRA, Danielle de Andrade. *Responsabilidade ambiental pós-consumo: prevenção e reparação de danos à luz do princípio do poluidor-pagador*. São Paulo: Letras Jurídicas; Rio de Janeiro: Ed. PUC-Rio, 2015 (2015b).

MOREIRA, Danielle de Andrade. Responsabilidade civil por danos ambientais no direito brasileiro. In: AHMED, Flávio; COUTINHO, Ronaldo. (Org.). *Curso de Direito Ambiental*. Rio de Janeiro: Lumen Juris, 2012, p. 29-52.

MOREIRA, Danielle de Andrade; GUIMARAES, Virgínia Totti. A complexidade do dano ambiental e seus reflexos na responsabilidade civil e administrativa no Brasil: solidariedade e divisão democrática dos riscos e danos. In: Alexandra Aragão; Gisela Maria Bester; Gloriete Marques Alves Hilário. (Org.). *Direito e ambiente para uma democracia sustentável: diálogos multidisciplinares entre Portugal e Brasil*. 1ed. Curitiba: Instituto Memória. Centro de Estudos da Contemporaneidade, 2015, v. 1, p. 142-171.

MOREIRA, Danielle de Andrade; NEVIANI, F. S. Compensação Ambiental do Sistema Nacional de Unidades de Conservação no Estado do Rio de Janeiro. In: Cristiane Jaccoud. (Org.). *Comentários à Legislação Ambiental do Estado do Rio de Janeiro*. 1ed. Rio de Janeiro: Lumen Juris, 2017, v. 1, p. 181-221.

NETO GRAU, Werner. O novo paradigma indutor do trato tributário da questão ambiental: do poluidor-pagador ao princípio da sustentabilidade. In: *Revista de Direito Ambiental*. São Paulo: Revista dos Tribunais, vol. 64.out/dez 2011, p. 11-27.

RODRIGUES, Marcelo Abelha. *Elementos de direito ambiental: parte geral*. 2ª ed. rev., atual. e ampl. São Paulo: Revista dos Tribunais, 2005.

SADELEER, Nicolas de. *Les Principes du Polluer-Payeur, de Prévention de Précaution. Essai sur la genèse et la portée juridique de quelques principes du droit de l'environnement*. Bruxelles: Bruylant, 1999.

SILVA FILHO, Carlos da Costa e. O Princípio do Poluidor-Pagador: da Eficiência Econômica à Realização da Justiça. In: MOTA, Maurício (org.). *Fundamentos Teóricos do Direito Ambiental*. Rio de Janeiro: Elsevier, 2008, p. 81-99.

SILVA, Alceu Calixto. O Princípio do poluidor-pagador na ordem econômica. In: *Revista de Direitos Difusos*. São Paulo, vol. 24, mar/abr. 2004, p. 3.397-3.405.

SILVEIRA, Clóvis Eduardo Malinverni. A inversão do ônus da prova na reparação do dano ambiental difuso. In: LEITE, José Rubens Morato (Org.); DANTAS, Marcelo Buzaglo (Org.). *Aspectos processuais do direito ambiental*. Rio de Janeiro: Forense Universitária, 2004. p. 18-31.

STEIGLEDER, Annelise Monteiro. *Responsabilidade Civil Ambiental: as dimensões do dano ambiental no direito brasileiro*. 2ª ed. Porto Alegre: Livraria do Advogado, 2011.

SUPERIOR COURT OF JUSTICE Jurisprudência em Teses. Direito Ambiental. N. 30. Brasília, 18 March, 2015.

Article received on: 29/08/2018.

Article accepted on: 20/04/2019.

How to quote this article (ABNT):

MOREIRA, D. A.; LIMA, L. M. R. T.; MOREIRA, I. F. O princípio do poluidor-pagador na jurisprudência do STF e do STJ: uma análise crítica. *Veredas do Direito*, Belo Horizonte, v. 16, n. 34, p. 367-432, jan./abr. 2019. Available at: <<http://www.domhelder.edu.br/revista/index.php/veredas/article/view/1341>>. Access on : day month. year.

ANNEX (FULL TABLES)

TABLE 1/GROUP 1: GENERAL ENVIRONMENTAL CIVIL LIABILITY				
Ruling (STJ/STF)	YEAR	Class	Reporting Judge	Keywords
STJ Resp20.401-SP	j. 1993 p. 1994	2nd Panel	Judge Hélio Moissmann	damage and environment/civil and environmental liability
STJ Resp214.714-PR	j. 1999 p. 1999	1st Panel	Judge Garcia Vieira	civil and environmental liability
STJ Resp218.120-PR	j. 1999 p. 1999	1st Panel	Judge Garcia Vieira	civil and environmental liability
STJ Resp229.302-PR	j. 1999 p. 1999	1st Panel	Judge Garcia Vieira	civil and environmental liability
STJ Resp222.349-PR	j. 2000 p. 2000	1st Panel	Judge José Delgado	civil and environmental liability
STJ Resp264.173-PR	j. 2001 p. 2001	1st Panel	Judge José Delgado	civil and environmental liability
STJ Resp295.797-SP	j. 2001 p. 2001	2nd Panel	Judge Eliana Calmon	civil and environmental liability
STJ Resp 346.227-SP (Repeated in G4)	j. 2001 p. 2002	1st Panel	Judge Garcia Vieira	damage and environment
STJ Resp 115.599-RS	j. 2002 p. 2002	4th Panel	Judge Ruy Rosado de Aguiar	damage and environment/civil and environmental liability
STJ Resp282.781-PR	j. 2002 p. 2002	2nd Panel	Judge Eliana Calmon	damage and environment/ damage and environmental/civil and environmental liability
STJ REsp327.254-PR	j. 2002 p. 2002	2nd Panel	Judge Eliana Calmon	damage and environment/damage and environmental

STJ REsp343.741-PR	j. 2002 p. 2002	2nd Panel	Judge Franciulli Netto	damage and environment/civil and environmental liability
STJ REsp217.858-PR	j. 2003 p. 2003	2nd Panel	Judge Franciulli Netto	civil and environmental liability
STJ EDcl no AgRg no REsp 255.170-SP	j. 2003 p. 2003	1st Panel	Judge Luiz Fux	damage and environment/civil and environmental liability
STJ REsp195.274-PR	j. 2005 p. 2005	2nd Panel	Judge João Otávio de Noronha	civil and environmental liability
STJ REsp263.383-PR	j. 2005 p. 2005	2nd Panel	Judge João Otávio de Noronha	damage and environment/civil and environmental liability
STJ REsp453.875-PR	j. 2007 p. 2009	2nd Panel	Judge Herman Benjamin	civil and environmental liability
STJ REsp650.728-SC	j. 2007 p. 2009	2nd Panel	Judge Herman Benjamin	degradation and environment/ degradation and environmental/ damage and environment/civil and environmental liability
STJ REsp745.363-PR	j. 2007 p. 2007	1st Panel	Judge Luiz Fux	degradation and environment/ degradation and environmental/civil and environmental liability
STJ REsp948.921-SP	j. 2007 p. 2009	2nd Panel	Judge Herman Benjamin	civil and environmental liability
STJ AgRg no RESP 471.864-SP	j. 2008 p. 2008	1st Panel	Judge Francisco Falcão	damage and environment/damage and environmental
STJ Resp 884.150-MT	j. 2008 p. 2008	1st Panel	Judge Luiz Fux	damage and environment/damage and environmental

STJ REsp904.324-RS	j. 2008 p. 2009	2nd Panel	Judge Eliana Calmon	civil and environmental liability
STJ REsp769.753-SC	j. 2009 p. 2011	2nd Panel	Judge Herman Benjamin	costs and environment/costs and environmental/ degradation and environment/ degradation and environmental/ polluter pays/polluter and pays/civil and environmental liability
STJ EREsp218.781- PR	j. 2009 p. 2012	2nd Panel	Judge Herman Benjamin	civil and environmental liability
STJ Resp 699.287-AC	j. 2009 p. 2009	2nd Panel	Judge Mauro Campbell Marques	damage and environment
STJ Resp 965.078-SP	j. 2009 p. 2011	2nd Panel	Judge Herman Benjamin	damage and environment/damage and environmental
STJ REsp1.045.746- RS	j. 2009 p. 2009	2nd Panel	Judge Eliana Calmon	damage and environment/ damage and environmental/civil and environmental liability
STJ Resp 1.049.822- RS	j. 2009 p. 2009	1st Panel	Judge Francisco Falcão	damage and environment/civil and environmental liability
STJ Resp 1.056.540- GO	j. 2009 p. 2009	2nd Panel	Judge Eliana Calmon	damage and environment/civil and environmental liability
STJ Resp 1.058.222- SP	j. 2009 p. 2011	2nd Panel	Judge Herman Benjamin	damage and environment/ damage and environmental/civil and environmental liability
STJ Resp 1.079.713- SC	j. 2009 p. 2009	2nd Panel	Judge Herman Benjamin	damage and environment/damage and environmental

STJ Resp 1.087.370-PR	j. 2009 p. 2009	1st Panel	Judge Denise Arruda	civil and environmental liability
STJ Resp 843.978-SP	j. 2010 p. 2012	2nd Panel	Judge Herman Benjamin	damage and environment/damage and environmental/ degradation and environment/ degradation and environmental/civil and environmental liability
STJ Resp 880.160-RJ	j. 2010 p. 2010	2nd Panel	Judge Mauro Campbell Marques	costs and environment/ degradation and environment/ degradation and environmental/ damage and environment/civil and environmental liability
STJ Resp 967.375-RJ	j. 2010 p. 2010	2nd Panel	Judge Eliana Calmon	polluter and payer
STJ Resp 1.069.155-SC	j. 2010 p. 2011	2nd Panel	Judge Mauro Campbell Marques	damage and environment/ damage and environmental/civil and environmental liability
STJ Resp 1.090.968-SP	j. 2010 p. 2010	1st Panel	Judge Luiz Fux	degradation and environment/ degradation and environmental/ damage and environment/civil and environmental liability
STJ Resp 1.107.219-SP	j. 2010 p. 2010	1st Panel	Judge Luiz Fux	damage and environment/civil and environmental liability

STJ Resp 1.186.130-RJ	j. 2010 p. 2012	2nd Panel	Judge Herman Benjamin	damage and environment/civil and environmental liability
STJ EDcl no Ag 1.224.056-SP	j. 2010 p. 2010	2nd Panel	Judge Mauro Campbell Marques	degradation and environmental/ damage and environmental
STJ AgRg no RESP 1.121.233-SP	j. 2010 p. 2011	1st Panel	Judge Arnaldo Esteves Lima	damage and environment/damage and environmental
STJ REsp1.164.630- MG	j. 2010 p. 2010	2nd Panel	Judge Castro Meira	damage and environment/damage and environmental
STJ EDcl nos EDcl no Ag 1.323.337-SP	j. 2011 p. 2011	2nd Panel	Judge Mauro Campbell Marques	degradation and environment/ degradation and environmental/ damage and environment
STJ AgRg no REsp1.001.780-PR (Repeated in G3)	j. 2011 p. 2011	1st Panel	Judge Teori Albino Zavascki	degradation and environment/ degradation and environmental/ damage and environment/civil and environmental liability
STJ AgRg no REsp1.206.484-SP	j. 2011 p. 2011	2nd Panel	Judge Humberto Martins	damage and environment/damage and environmental
STJ Resp 1.237.071- PR	j. 2011 p. 2011	2nd Panel	Judge Humberto Martins	costs and environment/costs and environmental/ damage and environment/damage and environmental/ degradation and environment/ degradation and environmental/

STJ Resp 1.240.122-PR	j. 2011 p. 2011	2nd Panel	Judge Herman Benjamin	degradation and environment/ degradation and environmental/ damage and environment
STJ Resp 1.246.443-PR	j. 2011 Barcode – p.2012	2nd Panel	Judge Mauro Campbell Marques	damage and environment/damage and environmental
STJ Resp 1.247.140-PR	j. 2011 p. 2011	2nd Panel	Judge Mauro Campbell Marques	degradation and environmental/ damage and environmental/civil and environmental liability
STJ AgRg no AREsp173.000-MG	j. 2012 p. 2012	4th Panel	Judge Antonio Carlos Ferreira	damage and environment/civil and environmental liability
STJ Resp 1.285.463-SP	j. 2012 p. 2012	2nd Panel	Judge Humberto Martins	damage and environment/damage and environmental/ degradation and environmental/ degradation and environment
STJ AgRg no REsp1.286.142-SC	j. 2013 p. 2013	2nd Panel	Judge Mauro Campbell Marques	damage and environment/civil and environmental liability
STJ REsp1.346.489- RS (Repeated in G2)	j. 2013 p. 2013	3rd Panel	Judge Ricardo Villas Bôas Cueva	damage and environmental
STJ AgRg no AREsp223.858-SP	j. 2014 p. 2014	4th Panel	Judge Luis Felipe Salomão	damage and environmental
STJ AgRg no AREsp231.561-MG	j. 2014 p. 2015	2nd Panel	Judge Herman Benjamin	degradation and environment/ degradation and environmental
STJ AgRg no REsp1.391.259-SP	j. 2014 p. 2015	3rd Panel	Judge Paulo de Tarso Sanseverino	damage and environmental

STJ AgRg no REsp1.421.163-SP	j. 2014 p. 2014	2nd Panel	Judge Humberto Martins	damage and environment/damage and environmental/ degradation and environment/ degradation and environmental
STJ REsp684753-PR	j. 2014 p. 2014	4th Panel	Judge Antonio Carlos Ferreira	damage and environment/damage and environmental/ degradation and environment/ degradation and environmental/civil and environmental liability
STJ AgRg no AREsp183.202-SP	j. 2015 p. 2015	3rd Panel	Judge Ricardo Villas Bôas Cueva	damage and environment/ damage and environmental/civil and environmental liability
STJ AgRg no AREsp533.786-SP	j. 2015 p. 2015	4th Panel	Judge Antonio Carlos Ferreira	damage and environment/civil and environmental liability
STJ AgRg no AREsp548.908-DF	j. 2015 p. 2015	2nd Panel	Judge Herman Benjamin	damage and environment/civil and environmental liability
STJ AgRg no AREsp616.105-RJ	j. 2015 p. 2015	3rd Panel	Judge Marco Aurélio Bellizze	damage and environment/civil and environmental liability
STJ AgRg no AREsp689.997-SP	j. 2015 p. 2016	3rd Panel	Judge Ricardo Villas Bôas Cueva	damage and environment/damage and environmental
STJ AgRg no AREsp737.887-SE	j. 2015 p. 2015	2nd Panel	Judge Humberto Martins	damage and environment/damage and environmental
STJ AgRg no REsp1.417.023-PR	j. 2015 p. 2015	2nd Panel	Judge Humberto Martins	damage and environment/ damage and environmental/civil and environmental liability

STJ AgRg no REsp1.494.012-PE	j. 2015 p. 2015	2nd Panel	Judge Mauro Campbell Marques	civil and environmental liability
STJ AgRg no REsp1.494.681-MS	j. 2015 p. 2015	2nd Panel	Judge Humberto Martins	damage and environment/damage and environmental/ degradation and environment/ degradation and environmental
STJ AgRg no REsp1.494.792-SP	j. 2015 p. 2015	2nd Panel	Judge Mauro Campbell Marques	damage and environment/damage and environmental
STJ AgRg no REsp1.494.988-MS	j. 2015 p. 2015	2nd Panel	Judge Humberto Martins	damage and environment/damage and environmental
STJ AgRg no REsp1.512.655-MG	j. 2015 p. 2015	2nd Panel	Judge Assusete Magalhães	damage and environment/damage and environmental
STJ AgRg no REsp1.513.156-CE	j. 2015 p. 2015	2nd Panel	Judge Humberto Martins	damage and environment/civil and environmental liability
STJ REsp1.241.630-PR	j. 2015 p. 2017	2nd Panel	Judge Humberto Martins	damage and environment/damage and environmental/ degradation and environment/ degradation and environmental
STJ REsp1.344.525-SC	j. 2015 p. 2015	2nd Panel	Judge Herman Benjamin	damage and environment/damage and environmental
STJ REsp1.363.107-DF	j. 2015 p. 2015	3rd Panel	Judge Paulo de Tarso Sanseverino	damage and environment/ damage and environmental/civil and environmental liability

STJ REsp1.370.125-PR	j. 2015 p. 2015	4th Panel	Judge Maria Isabel Gallotti	damage and environment/damage and environmental/ degradation and environment/ degradation and environmental/civil and environmental liability
STJ REsp1.371.834-PR	j. 2015 p. 2015	4th Panel	Judge Maria Isabel Gallotti	damage and environment/damage and environmental/ degradation and environment/ degradation and environmental/civil and environmental liability
STJ REsp1.507.617-AL	j. 2015 p. 2015	2nd Panel	Judge Humberto Martins	damage and environmental
STJ REsp1.517.403-AL	j. 2015 p. 2015	2nd Panel	Judge Herman Benjamin	damage and environment/damage and environmental/ degradation and environment/ degradation and environmental/civil and environmental liability
STJ AgInt no AResp.768.842-PR	j. 2016 p. 2016	3rd Panel	Judge Marco Aurélio Bellizze	damage and environment/civil and environmental liability
STJ AgInt no AResp.839.492-SP	j. 2016 p. 2017	2nd Panel	Judge Herman Benjamin	damage and environment/damage and environmental/ degradation and environment/ degradation and environmental/civil and environmental liability
STJ AgInt nos EDcl no Resp.1.447.071-MS	j. 2016 p. 2017	2nd Panel	Judge Herman Benjamin	damage and environment/damage and environmental

STJ AgInt no EDcl no Resp.1.468.747-MS	j. 2016 p. 2017	2nd Panel	Judge Herman Benjamin	damage and environment/damage and environmental
STJ RHC 64.124-MS	j. 2016 p. 2016	5th Panel	Judge Reynaldo Soares da Fonseca	damage and environment/ damage and environmental/civil and environmental liability
STJ RHC 64.219-MS	j. 2016 p. 2016	5th Panel	Judge Reynaldo Soares da Fonseca	damage and environment/ damage and environmental/civil and environmental liability
STJ AgRg no AREsp479.026-SP	j. 2016 p. 2016	1st Panel	Judge Regina Helena Costa	civil and environmental liability
STJ AgRg no AREsp820.915-MA	j. 2016 p. 2016	4th Panel	Judge Luis Felipe Salomão	damage and environmental
STJ AgRg nos EDcl no REsp1.381.341-MS	j. 2016 p. 2016	2nd Panel	Judge Humberto Martins	damage and environment/damage and environmental
STJ AgRg no REsp1.500.062-MT	j. 2016 p. 2016	1st Panel	Judge Regina Helena Costa	damage and environment/ damage and environmental/civil and environmental liability
STJ EDcl no REsp1.517.403-AL	j. 2016 p. 2016	2nd Panel	Judge Herman Benjamin	damage and environmental/ degradation and environmental/civil and environmental liability
STJ REsp1.407.649-CE	j. 2016 p. 2016	2nd Panel	Judge Herman Benjamin	damage and environment
STJ REsp1.559.396-MG	j. 2016 p. 2016	2nd Panel	Judge Herman Benjamin	damage and environment/damage and environmental

STJ REsp1.622.512-RJ	j. 2016 p. 2016	2nd Panel	Judge Herman Benjamin	damage and environment/ damage and environmental/civil and environmental liability
STJ AgInt no REsp1.382.576-MS	j. 2017 p. 2017	2nd Panel	Judge Assusete Magalhães	damage and environment/ damage and environmental/civil and environmental liability
STJ AgInt no REsp1.389.613-MS	j. 2017 p. 2017	2nd Panel	Judge Assusete Magalhães	damage and environment/ damage and environmental/civil and environmental liability
STJ AgInt no REsp1.565.568-PR	j. 2017 p. 2017	3rd Panel	Judge Nancy Andrighi	damage and environment/damage and environmental
STJ AgRg no REsp1.223.499-SP	j. 2017 p. 2017	1st Panel	Judge Napoleão Nunes Maia Filho	damage and environment/civil and environmental liability
STJ REsp1.644.195-SC	j. 2017 p. 2017	2nd Panel	Judge Herman Benjamin	damage and environment/damage and environmental/ degradation and environment/ degradation and environmental/civil and environmental liability
STJ REsp1.666.017-RJ	j. 2017 p. 2017	2nd Panel	Judge Herman Benjamin	damage and environment/civil and environmental liability
STJ AgInt no Resp 1355428-MS	j. 2017 p. 2017	2nd Panel	Judge Francisco Falcão	damage and environment/damage and environmental
STJ AgInt nos EDcl no AREsp 359.140-MS	j. 2017 p. 2017	2nd Panel	Judge Assusete Magalhães	damage and environment/damage and environmental

STJ AgInt no AREsp 268.217-PE	j. 2017 p. 2018	1st Panel	Judge Gurgel de Faria	damage and environment/ damage and environmental/civil and environmental liability
STJ AgInt no Resp 1363943-SC	j. 2017 p. 2017	1st Panel	Judge Gurgel de Faria	damage and environment/damage and environmental
STJ AgRg no AREsp 796.146-SP	j. 2017 p. 2017	1st Panel	Judge Napoleão Nunes Maia Filho	damage and environment/damage and environmental
STJ AgInt no Resp 1391986-MS	j. 2017 p. 2017	2nd Panel	Judge Assusete Magalhães	damage and environment/damage and environmental
STJ AgInt no AREsp 1060669-SP	j. 2017 p. 2017	2nd Panel	Judge Herman Benjamin	civil and environmental liability
STJ AgRg no Resp 1223499-SP	j. 2017 p. 2017	1st Panel	Judge Napoleão Nunes Maia Filho	civil and environmental liability
STJ AgInt no Resp 1382576-MS	j. 2017 p. 2017	2nd Panel	Judge Assusete Magalhães	civil and environmental liability
STJ AgInt no Resp 1495757-MS	j. 2018 p. 2018	2nd Panel	Judge Francisco Falcão	damage and environment/damage and environmental
STJ AgInt no AREsp 1031389-SP	j. 2018 p. 2018	1st Panel	Judge Napoleão Nunes Maia Filho	damage and environmental/ degradation and environmental/ degradation and environment

TABLE 2/GROUP 2: NON-PROPERTY ENVIRONMENTAL DAMAGE. AND FULL RISK THEORY				
Ruling (STJ/STF)	YEAR	Class	Reporting Judge	Keywords
STJ REsp442.586-SP (Repeated in G6)	j. 2002 p. 2003	1st Panel	Judge Luiz Fux	degradation and environment/degradation and environmental/damage and environment/damage and environmental/civil and environmental liability
STJ REsp578.797-RS (Repeated in G6)	j. 2004 p. 2004	1st Panel	Judge Luiz Fux	degradation and environment/degradation and environmental/damage and environment/damage and environmental/civil and environmental liability
STJ REsp598.281-MG	j. 2006 p. 2006	1st Panel	Judge Luiz Fux Rapporteur for Award: Judge Teori Albino Zavascki	degradation and environment/degradation and environmental/damage and environment/damage and environmental/civil and environmental liability
STJ REsp1.120.117-AC	j. 2009 p. 2009	2nd Panel	Judge Eliana Calmon	damage and environment/damage and environmental/civil and environmental liability
STJ REsp1.114.893-MG (Repeated in G4)	j. 2010 p. 2012	2nd Panel	Judge Herman Benjamin	degradation and environment/degradation and environmental/damage and environment/damage and environmental/polluter pays/polluter and pays
STJ REsp1.145.083-MG (Repeated in G4)	j. 2011 p. 2012	2nd Panel	Judge Herman Benjamin	degradation and environment/degradation and environmental/damage and environment/damage and environmental/polluter pays/polluter and pays/civil and environmental liability

STJ AgRg no AREsp89.444-PR	j. 2012 p. 2012	3rd Panel	Judge Paulo de Tarso Sanseverino	damage and environment/ damage and environmental/ polluter pays/polluter and pays/civil and environmental liability
STJ AgRg no AREsp119.624-PR	j. 2012 p. 2012	3rd Panel	Judge Ricardo Villas Bóas Cuevas	damage and environment/ damage and environmental/ polluter and pays
STJ AgRg no AREsp137.851-PR	j. 2012 p. 2012	3rd Panel	Judge Sidnei Beneti	damage and environment/ damage and environmental/ civil and environmental liability
STJ AgRg no AREsp249.208-PR	j. 2012 p. 2013	4th Panel	Judge Marco Buzzi	damage and environment/ damage and environmental
STJ AgRg no AREsp258.212-PR	j. 2012 p. 2013	3rd Panel	Judge Sidnei Beneti	damage and environmental
STJ REsp1.114.398- PR	j. 2012 p. 2012	2nd Session	Judge Sidnei Beneti	damage and environment/ damage and environmental/ polluter pays/polluter and pays/civil and environmental liability
STJ REsp119.8727- MG (Repeated in G4)	j. 2012 p. 2013	2nd Panel	Judge Herman Benjamin	degradation and environment/degradation and environmental/damage and environmental/damage and environmental/polluter pays/polluter and pays/civil and environmental liability/ user and pays
STJ REsp134.6430- PR	j. 2012 p. 2012	4th Panel	Judge Luis Felipe Salomão	damage and environment/ damage and environmental/ polluter pays/polluter and pays/civil and environmental liability
STJ AgRg no AREsp71.324-PR	j. 2013 p. 2013	4th Panel	Judge Antonio Carlos Ferreira	damage and environment/ civil and environmental liability
STJ AgRg no AREsp92.652-PR	j. 2013 p. 2013	4th Panel	Judge Antonio Carlos Ferreira	damage and environment/ damage and environmental/ civil and environmental liability

STJ AgRg no AREsp99.092-PR	j. 2013 p. 2013	3rd Panel	Judge Paulo de Tarso Sanseverino	damage and environment/ damage and environmental/ civil and environmental liability
STJ AgRg no AREsp238.427-PR	j. 2013 p. 2013	3rd Panel	Judge Ricardo Villas Bóas Cuevas	damage and environmental/ polluter pays/polluter and pays/civil and environmental liability
STJ AgRg no AREsp254.149-PR	j. 2013 p. 2013	3rd Panel	Judge Sidnei Beneti	damage and environmental
STJ AgRg no AREsp256.505-PR	j. 2013 p. 2013	3rd Panel	Judge Sidnei Beneti	damage and environment/ damage and environmental
STJ AgRg no AREsp258.263-PR	j. 2013 p. 2013	4th Panel	Judge Antonio Carlos Ferreira	damage and environment/ damage and environmental/ civil and environmental liability
STJ AgRg no AREsp273.058-PR	j. 2013 p. 2013	4th Panel	Judge Antonio Carlos Ferreira	damage and environment/ damage and environmental/ civil and environmental liability
STJ AgRg no AREsp281.177-PR	j. 2013 p. 2013	4th Panel	Judge Raul Araújo	damage and environment/ civil and environmental liability
STJ REsp1.269.494- MG (Repeated in G4)	j. 2013 p. 2013	2nd Panel	Judge Eliana Calmon	damage and environment/ damage and environmental
STJ REsp1.346.489- RS (Repeated in G1)	j. 2013 p. 2013	3rd Panel	Judge Ricardo Villas Bóas Cuevas	damage and environment/ damage and environmental/ civil and environmental liability
STJ REsp1.367.923- RJ	j. 2013 p. 2013	2nd Panel	Judge Humberto Martins	degradation and environment/degradation and environmental/damage and environment/damage and environmental
STJ REsp1.374.342- MG	j. 2013 p. 2013	4th Panel	Judge Luis Felipe Salomão	damage and environment/ damage and environmental/ civil and environmental liability

STJ EDcl no REsp1.346.430-PR	j. 2013 p. 2013	4th Panel	Judge Luis Felipe Salomão	damage and environment/ damage and environmental/ civil and environmental liability
STJ EDcl no REsp1.373.788-SP	j. 2014 p. 2014	3rd Panel	Judge Paulo de Tarso Sanseverino	damage and environment/ damage and environmental/ civil and environmental liability
STJ REsp1.175.907-MG	j. 2014 p. 2014	4th Panel	Judge Luis Felipe Salomão	damage and environment/ damage and environmental/ civil and environmental liability
STJ REsp1.354.536-SE	j. 2014 p. 2014	2nd Session	Judge Luis Felipe Salomão	damage and environment/ damage and environmental/ polluter pays/polluter and pays/civil and environmental liability
STJ REsp1.374.284-MG	j. 2014 p. 2014	2nd Session	Judge Luis Felipe Salomão	damage and environment/ damage and environmental/ civil and environmental liability
STJ REsp1.381.211-TO	j. 2014 p. 2014	4th Panel	Judge Marco Buzzi	damage and environment/ damage and environmental/ civil and environmental liability
STJ AgRg no AREsp117.202-PR	j. 2015 p. 2015	4th Panel	Judge Antonio Carlos Ferreira	degradation and environment/degradation and environmental/ damage and environment/ damage and environmental/ polluter and pays/civil and environmental liability
STJ AgRg no AREsp232.494-PR	j. 2015 p. 2015	4th Panel	Judge Marco Buzzi	damage and environment/ damage and environmental/ civil and environmental liability
STJ AgRg no AREsp820.193-MA	j. 2017 p. 2017	3rd Panel	Judge Moura Ribeiro	damage and environment/ civil and environmental liability
SRJ AgInt no AREsp 1100789-SP	j. 2017 p. 2017	2nd Panel	Judge Assusete Magalhães	polluter and pays/ polluter pays/damage and environment/damage and environmental/ civil and environmental liability/degradation and environmental

STJ Resp 1669185-RS (Repeated in G4)	j. 2017 p. 2017	2nd Panel	Judge Herman Benjamin	polluter and pays/polluter pays/user and pays/user-pays and environment/damage and environment/damage and environmental
STJ AgInt no AREsp 931.188-PR	j. 2017 p. 2018	3rd Panel	Judge Marco Aurélio Bellizze	damage and environment
STJ Resp 1602106/PR	j. 2017 p. 2017	2nd Section Repetitive Appeal	Judge Ricardo Villas Bôas Cueva	damage and environment
STJ AgRg no AREsp 150.735-PR	j. 2018 p. 2018	4th Panel	Judge Marco Buzzi	damage and environment/damage and environmental

TABLE 3/GROUP 3: ENVIRONMENTAL CIVIL LIABILITY OF THE GOVERNMENT FOR OMISSION

Ruling (STJ/STF)	YEAR	Class	Reporting Judge	Keywords
STJ REsp28.222-SP	j. 2000 p. 2001	2nd Panel	Judge Eliana Calmon Rapporteur for award: Judge Nancy Andrighi	damage and environment/damage and environmental/civil and environmental liability
STJ REsp333.056-SP	j. 2005 p. 2006	2nd Panel	Judge Castro Meira	civil and environmental liability
STJ REsp604.725-PR	j. 2005 p. 2005	2nd Panel	Judge Castro Meira	damage and environment/damage and environmental/civil and environmental liability
STJ AgRg no Ag 822.764-MG	j. 2007 p. 2007	1st Panel	Judge José Delgado	damage and environment/damage and environmental/civil and environmental liability

STJ REsp647.493-SC	j. 2007 p. 2007	2nd Panel	Judge João Otávio Noronha	costs and environment/costs and environmental/ degradation and environment/ degradation and environmental/damage and environment/ damage and environmental/civil and environmental liability
STJ AgRg no Ag 973.577-SP	j. 2008 p. 2008	2nd Panel	Judge Mauro Campbell	damage and environment/damage and environmental/ civil and environmental liability
STJ REsp1.071.741- SP	j. 2009 p. 2011	2nd Panel	Judge Herman Benjamin	degradation and environment/ degradation and environmental/ damage and environment/damage and environmental/ externality/externality and environment and denial/internalization and environment/ internalization and environmental/ polluter pays/civil and environmental liability
STJ REsp1.113.789- SP	j. 2009 p. 2009	2nd Panel	Judge Castro Meira	damage and environment/damage and environmental/ civil and environmental liability
STJ REsp1.195.421- RJ (Repeated in G4)	j. 2010 p. 2010	2nd Panel	Judge Mauro Campbell	damage and environment/civil and environmental liability

STJ AgRg no REsp1.001.780-PR (Repeated in G1)	j. 2011 p. 2011	1st Panel	Judge Teori Albino Zavascki	degradation and environment/ degradation and environmental/damage and environment/ damage and environmental/civil and environmental liability
STJ REsp1.236.863-ES	j. 2011 p. 2012	2nd Panel	Judge Herman Benjamin	damage and environmental
STJ REsp1.266.920-PR	j. 2012 p. 2012	2nd Panel	Judge Mauro Campbell	damage and environment/damage and environmental
STJ REsp1.376.199-SP	j. 2014 p. 2016	2nd Panel	Judge Herman Benjamin	degradation and environment/ degradation and environmental/damage and environment/ damage and environmental/civil and environmental liability
STJ AgRg no REsp1.379.030-RJ	j. 2014 p. 2014	2nd Panel	Judge Mauro Campbell	damage and environmental
STJ AgRg no AREsp1.218.902-SC	j. 2015 p. 2015	1st Panel	Judge Napoleão Nunes Maia Filho	civil and environmental liability
STJ AgRg no REsp1.497.096-RJ	j. 2015 p. 2015	2nd Panel	Judge Mauro Campbell	degradation and environmental/damage and environmental
STJ REsp1.581.124-SP	j. 2016 p. 2016	2nd Panel	Judge Humberto Martins	damage and environment/damage and environmental/ civil and environmental liability
STJ Resp 1666027/SP	j. 2017 p. 2018	2nd Panel	Judge Herman Benjamin	damage and environment/damage and environmental/ civil and environmental liability/degradation and environment
STJ Resp 1693624/SP	j. 2017 p. 2017	2nd Panel	Judge Herman Benjamin	damage and environment/damage and environmental

TABLE 4/GROUP 4: POSSIBILITY OF ACCRUAL OF PERFORMANCE AND PAYMENT OBLIGATION				
Ruling (STJ/STF)	YEAR	Class	Reporting Judge	Keywords
STJ Resp 346.227-SP (Repeated in G1)	j. 2001 p. 2002	1st Panel	Judge Garcia Vieira	damage and environment
STJ Resp 605.323-MG	j. 2005 p. 2005	1st Panel	Judge José Delgado	damage and environment/damage and environmental/ polluter pays
STJ Resp 625.249-PR	j. 2006 p. 2006	1st Panel	Judge Luiz Fux	damage and environment/damage and environmental/ polluter pays
STJ AgRg no Resp 1.170.532-MG	j. 2010 p. 2010	1st Panel	Judge Hamilton Carvalho	damage and environment/damage and environmental
STJ Resp 880.172-SP	j. 2010 p. 2010	2nd Panel	Judge Mauro Campbell	polluter and pays/ polluter pays/civil and environmental liability/damage and environment
STJ Resp 1.114.893-MG (Repeated in G2)	j. 2010 Barcode – p.2012	2nd Panel	Judge Herman Benjamin	degradation and environment/ degradation and environmental/ damage and environment/polluter and pays/polluter pays
STJ Resp 1.165.281-MG	j. 2010 p. 2010	2nd Panel	Judge Eliana Calmon	civil and environmental liability
STJ Resp 1.173.272-MG	j. 2010 p. 2011	3rd Panel	Judge Nancy Andrighi	damage and environment/civil and environmental liability
STJ Resp 1.178.294-MG	j. 2010 p. 2010	2nd Panel	Judge Mauro Campbell	polluter pays/polluter and pays

STJ Resp 1.180.078-MG	j. 2010 p. 2012	2nd Panel	Judge Herman Benjamin	degradation and environment/ degradation and environmental/ damage and environment/ polluter and pays/ polluter pays/civil and environmental liability
STJ Resp 1.181.820-MG	j. 2010 p. 2010	3rd Panel	Judge Nancy Andrichi	damage and environment/civil and environmental liability
STJ Resp 1.195.421-RJ (Repeated in G3)	j. 2010 p. 2010	2nd Panel	Judge Mauro Campbell	civil and environmental liability
STJ Resp 1.115.555-MG	j. 2011 p. 2011	1st Panel	Judge Arnaldo Esteves Lima	damage and environment// polluter pays/polluter and pays
STJ Resp 1.145.083-MG (Repeated in G2)	j. 2011 p. 2012	2 n d Panel	Judge Herman Benjamin	degradation and environment / degradation and environmental / damage and environment/polluter pays/polluter and pays/civil and environmental liability
STJ Resp 1.164.587-MG	j. 2011 p. 2012	2 n d Panel	Judge Herman Benjamin	damage and environment/polluter pays/polluter and pays/civil and environmental liability
STJ Resp 1.165.284-MG	j. 2011 p. 2012	2 n d Panel	Judge Herman Benjamin	damage and environment // polluter pays/polluter and pays
STJ Resp 1.248.214-MG	j. 2011 p. 2012	2 n d Panel	Judge Herman Benjamin	damage and environment/civil and environmental liability

STJ Resp 1.264.250-MG	j. 2011 p. 2011	2 n d Panel	Judge Mauro Campbell	Degradation and environmental/damage and environmental
STJ Resp 119.8727-MG (Repeated in G2)	j. 2012 p. 2013	2 n d Panel	Judge Herman Benjamin	Polluter pays/internalization and environmental/user and pays/polluter and pays/degradation and environment/degradation and environmental/civil and environmental liability/damage and environment
STJ Resp 1.269.494-MG (Repeated in G2)	j. 2013 p. 2013	2 n d Panel	Judge Eliana Calmon	damage and environment/damage and environmental
STJ Resp 1.307.938-GO	j. 2014 p. 2014	1 s t Panel	Judge Benedito Gonçalves	damage and environment/damage and environmental/civil and environmental liability
STJ Resp 1.382.999-SC	j. 2014 p. 2014	2 n d Panel	Judge Humberto Martins	damage and environment/damage and environmental
STJ AgRg no Resp 1.415.062-CE	j. 2014 p. 2014	2 n d Panel	Judge Humberto Martins	damage and environmental
STJ AgRg no AREsp 628.911-SC	j. 2015 p. 2015	2 n d Panel	Judge OG Fernandes	damage and environmental
STJ Resp 1.410.698-MG	j. 2015 p. 2015	2 n d Panel	Judge Humberto Martins	damage and environment/damage and environmental
STJ Resp 1.212.723-PR	j. 2016 p. 2016	2 n d Panel	Judge Humberto Martins	damage and environment/damage and environmental
STJ Resp 1.255.127-MG	j. 2016 p. 2016	2nd Panel	Judge Herman Benjamin	damage and environment/damage and environmental/polluter pays/polluter and pays/user-pays/user and pays

STJ Resp 1.355.574-SE	j. 2016 p. 2016	2nd Panel	Judge Diva Malerbi	damage and environment/damage and environmental
STJ Resp 1.454.281-MG	j. 2016 p. 2016	2nd Panel	Judge Herman Benjamin	degradation and environment/ degradation and environmental/ damage and environment/polluter pays/polluter and pays/civil and environmental liability/user-pays/ user and pays
STJ AgRg no Resp 1.486.195-SC	j. 2016 p. 2016	2nd Panel	Judge Humberto Martins	damage and environment/damage and environmental
STJ AgRg no AREsp 338.744-RJ	j. 2016 p. 2016	1st Panel	Judge Benedito Gonçalves	damage and environment/ damage and environmental/civil and environmental liability
STJ AgInt no AREsp 584.736-RJ	j. 2016 p. 2016	2nd Panel	Judge Assusete Magalhães	damage and environmental
STJ AgRg no Resp 1.154.986-MG	j. 2016 p. 2016	2nd Panel	Judge Diva Malerbi	damage and environmental
STJ AgRg no Ag 1.365.693-MG	j. 2016 p. 2016	1st Panel	Judge Napoleão Nunes Maia Filho	damage and environment/damage and environmental
STJ AgInt no Resp 1532643/SC (Repeated in G6)	j. 2017 p. 2017	2nd Panel	Judge Assusete Magalhães	polluter and pays/ polluter pays/damage and environment/ damage and environmental/civil and environmental liability/degradation and environment/ degradation and environmental

STJ Resp 1669185-RS (Repeated in G2)	j. 2017 p. 2017	2nd Panel	Judge Herman Benjamin	polluter and pays/ polluter pays/user and pays/user-pays and environment/ damage and environment/damage and environmental
STJ Resp 1516278/SC	j. 2017 p. 2017	2nd Panel	Judge Herman Benjamin	damage and environment/damage and environmental
STJ AgInt no Resp 1577376/SC	j. 2017 p. 2017	2nd Panel	Judge Og Fernandes	damage and environment
STJ AgInt no Resp 1548960-SC	j. 2018 p. 2018	2nd Panel	Judge Mauro Campbell Marques	damage and environmental

TABLE 5/GROUP 5: ENVIRONMENTAL COMPENSATION OF THE NATIONAL CONSERVATION UNIT SYSTEM (SNUC)

Ruling (STJ/STF)	YEAR	Class	Reporting Judge	Keywords
STF ADI 3.378-6-DF	j. 2008 p. 2008	T Pleno	Judge Carlos Ayres Brito	costs and environment/ costs and environmental/ degradation and environment/degradation and environmental/polluter and pays/user-pays/user and pays
STJ Resp 896.863-DF	j. 2011 p. 2011	2 n d Panel	Judge Castro Meira	damage and environment/ damage and environmental

TABLE 6/GROUP 6: ADMINISTRATIVE LIABILITY

Ruling (STJ/STF)	YEAR	Class	Reporting Judge	Keywords
STJ Resp 442.586-SP (Repeated in G2)	j. 2002 p. 2003	1st Panel	Judge Luiz Fux	degradation and environment/degradation and environmental/damage and environment/civil and environmental liability
STJ Resp 578.797-RS (Repeated in G2)	j. 2004 p. 2004	1st Panel	Judge Luiz Fux	degradation and environment/degradation and environmental/damage and environment/civil and environmental liability

STJ Resp 1.137.314-MG	j. 2009 p. 2011	2nd Panel	Judge Herman Benjamin	Externality /externality and environmental and negative
STJ Resp 1.251.697-PR	j. 2012 p. 2012	2nd Panel	Judge Mauro Campbell Marques	degradation and environment/degradation and environmental/damage and environment/damage and environmental/civil and environmental liability
STJ AgRg no AREsp 62.584-RJ	j. 2015 p. 2015	1st Panel	Judge Regina Helena Costa	degradation and environment/degradation and environmental/damage and environment/damage and environmental/civil and environmental liability
STJ Resp 1.318.051-RJ	j. 2015 p. 2015	1st Panel	Judge Benedito Gonçalves	damage and environment/ damage and environmental/ civil and environmental liability
STJ Resp 1.401.500-PR	j. 2016 p. 2016	2nd Panel	Judge Herman Benjamin	degradation and environment/ degradation and environmental/damage and environment/damage and environmental/polluter pays/ polluter and pays/civil and environmental liability
STJ Resp 1.640.243-SC	j. 2017 p. 2017	2nd Panel	Judge Herman Benjamin	damage and environment/ damage and environmental/ civil and environmental liability
STJ AgInt no Resp 1532643/SC (Repeated in G4)	j. 2017 p. 2017	2nd Panel	Judge Assuete Magalhães	polluter and pays/polluter pays/damage and environment/ damage and environmental/ civil and environmental liability/degradation and environment/degradation and environmental