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COMPLIANCE AND SUSTAINABILITY

BRAZILIAN AND PORTUGUESE PERSPECTIVES

ORGANISERS
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COMPLIANCE AND SUSTAINABILITY
AN INTRODUCTION

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Today's world has new, increased demands that need to be met with the appropriate means; with the close, responsible intervention of different social actors; and, as far as possible, from all of society.

This is a very sensitive issue in the environmental field, and it is indispensable that sustainability must be ensured.

Over the centuries, the world population has grown slowly, and it is interesting to recall that in eight centuries, between 1000 and 1800, the population grew from 310 million to 980 million. By 1900, it had reached 1650 million.

In turn, over the centuries, this population put little pressure on the resources of nature, not only because it was small but also because people lived in a framework of low demands, modest living standards and production processes that caused low resource depletion, in particular almost no pollution.

This picture changed profoundly in the twentieth century.

By the middle of the century, 1950, the population had increased to 2530 million inhabitants. At present, the population has grown to an impressive 7300 million (and there are forecasts that point to 11 billion by the end of the 21st century…).

However, in addition to the attention that these numbers alone deserve, special attention must be paid to the new ways of life and production that have emerged, particularly in the industrial and transport areas.

Interestingly, the Malthusian fear of the general insufficiency of the earth's resources has been largely overcome. The current issue is different. In addition to the demand for certain mining and energy resources, which risk becoming insufficient, what will be at stake in the future, following the industrial revolution, are new forms of production and behaviour in many different areas, with a great emphasis on transport. Humans threaten to compromise natural resources and harm the environment.

New concerns must now be taken into account, not only at the national level but naturally in wider areas, as there are no frontiers for environmental damage.

This is symptomatic of a recent problem. It is worth remembering that in the Treaty of Rome establishing the European Economic Community in 1957, environmental issues were not even considered; only with the Single European Act in 1985 was the environment added as a concern (and more so in 1992 with the Maastricht Treaty, when the precautionary principle was established). In addition, as one author happily pointed out, "before there was a single market for goods, services and production factors there were already no borders for pollution."

It is understood that independently, and in addition to the treaties since 1985, the issues of environment and sustainability have received a great deal of attention, increasingly in recent years, from European leaders. Now, the environment and

sustainability must be considered in all initiatives, conditioning and defining many policy contours. Bearing in mind the calculations of past damage due to the lack of enforcement of environmental legislation, the COM (2018) 10 final of 18.1.2018 recently established "EU actions to improve environmental compliance and governance".

However, this problem cannot be considered in the limited space of a continent, such as Europe (where the European Union is naturally of great importance); it must be considered worldwide.

This has indeed been the case, and one of the most significant steps was taken in 1983, within the United Nations, with the constitution of the World Commission on Environment and Development (Bruntland Commission, with a report in 1987) and the Earth Summit in Rio de Janeiro in 1992; the same city was again marked by another summit twenty years later, in 2012 (Rio+20). The Global Reporting Initiative (GRI, inspired by the Triple Bottom Line) took place in 1999, followed by the Paris Agreement on Climate Change in 2015 and the United Nations 2030 Agenda for Sustainable Development in 2016.

With this global scope being the scope for concerns, commitments and actions, it is, however, increasingly recognized that alongside global commitments and actions, there must also be close interventions, with all social actors being held accountable, in a line that has been developed and deepened through the modern notion of compliance.

Against this background of growing concern and recognition of the role that can and should be played by compliance, a seminar entitled "Compliance and Sustainability. Brazilian and Portuguese perspectives" took place at the Faculty of Law of the University of Coimbra on February 7, 2019. Part I, "General Part", frames the theme, and Part II, "Special Part", with the generic title "The Strategies and Instruments of Public and Private Compliance", is subdivided, first considering various forms of intervention in different domains and then examining

how the question has been raised and answered in various sectors, such as energy, agriculture, tourism and mining.

In addition to other aspects, emphasis must be given to the statement that environmental protection is by no means an alternative to greater efficiency and economic growth. These objectives must not be sacrificed if we are to preserve environmental values.

These are undoubtedly high-priority values that must be safeguarded. However, the experience at our disposal already very clearly shows that in general, more efficient production processes and higher quality of life are both better and worse from an environmental point of view. This is the case in industrial production and transport, with energy saving being desirable from both economic and environmental points of view. In the case of transport, collective transport using renewable and less polluting energy sources, such as electricity, should be increasingly emphasized; in housing, for example, environmental and economic interests are also combined, with thermal requirements being taken into account while incurring lower energy costs.

In all areas, this is a combination of interests and commitments in which the logic of compliance is of particular importance, with all social actors having to make irreplaceable contributions. Compliance is of the utmost importance for the defence and promotion of environmental values and to ensure, at the same time, economy and efficiency.

This problem has received great attention and major contributions in Brazil and Portugal from academics and other highly accredited officials.

These countries have very different dimensions and highly diverse characteristics, which means that in many cases, a wide range of known experiences and policies have been put into practice.

This circumstance was an enriching factor of the Coimbra seminar, given the number of participants and the improved knowledge of what is happening on the other side of the

Atlantic. These are common problems, and it is always inspiring to know that intervention experiences have been verified.

The publication now coming to light allows a much larger number of interested people to access the valuable contributions presented at the Coimbra Seminar.

Since the world beyond Brazil and Portugal has problems that concern and interest us all, this publication is being released not only in Portuguese but also in English to benefit a larger public with the knowledge of the contributions made.

FOREWORD

CLÓVIS DE BARROS FILHO

To preface a book is always a difficult task. It is not expected to be a synthesis or an annotated index. It is not a mere repetition of the highlights. The preface needs to be a complement, a contribution that adheres to the theme without being repetitive. It should introduce the themes without spoiling them, announce the best and still leave expectations, and act as an aperitif without pretending to be the main dish.

Here, on these pages, the difficulty increases because the writers of the book express their subjects with excellence and master them in depth; their texts are structured, coherent and didactic — perfectly suited to the material.

To plan a climb of Everest, another climber is necessary, an expert in such a task who is relevant to every word and elegant in style.

Therefore, dear reader, to preface this book is a task that very few people would be willing to perform. I accepted the task because of the privilege of having my name among so many other important names.

It is about ethics

Let us start with the word ethics. Ethics is, perhaps, the oldest word in our vocabulary; until thirty years ago, such a word was used exclusively by experts. Today, it is the most repeated word in public agendas in Brazil and elsewhere.

Herein, there is no room to retrieve the history of the concept; just keep in mind that over more than two thousand years, ethics has had multiple meanings. All of these meanings have been consecrated by proponents interested in providing a single definition. Each of these proponents was eager to make his or her definition "the definition", the legitimate one for the most distinct audience.

Today, ethics is understood by many as a space for discussion and argumentation, where shared intelligence pursues the best possible coexistence and collective reflection on the limits of action aims at the improvement of life in common.

This ethics can be seen from three perspectives. None of them exhausts the richness of the theme; thus, we will respect the recurrent nomenclatures.

The first perspective is coexistence values, which are ethical in nature and bring together the most relevant relationships between people and between humankind and the world.

The second perspective is principles of conduct, referring to the deliberate and protective values mentioned above. The third perspective is rules of conduct that provide values and principles with a normative substance as well as any duty or ban associated with particular actions.

All ethics answer the question "What should we do?"

Ethics refers to all that we, as a society, freely impose on and forbid ourselves. It is the limits that we legitimately accept and respect. In full, it is a self-founded sovereignty in the absence of all repression and of any external vigilance.

It is an answer to how we should act, therefore.

We should not act in the name of this or that pleasure or any personal happiness. That would be nothing more than selfishness, strategy, a struggle for survival. We should aim for the best possible coexistence among all and for all.

In this respect, Plato's example (428-348 BC) of the "Gyges ring" is well known: a person of good repute realized that when he had a certain ring, he could become invisible. His authentic bad character was revealed as he committed atrocities under the protection of his invisibility.

What is the moral of the story? The person was not as good as others had thought, and his good behaviour, always praised, had resulted only from the fear of others' gaze. Therefore, the instant he became immune to that gaze, he revealed his true character.

The timeliness of this myth is remarkable. After all, we have never been so closely watched, from speed cameras to cameras in large corporate reception areas and elevators, from magnetic badges to credit cards, from cell phones to GPS devices. None of this is relevant to our theme because no reader would confuse ethics with chips and cameras or with police or judicial power.

A matter of respect

Acting ethically means respecting all those directly or indirectly affected by your actions. Such respect, in turn, requires putting yourself in others' shoes and being able to imagine yourself in the position of the adversary, the rival and even the enemy.

Therefore, it means putting yourself in anyone else's shoes.

Formulas to meet this requirement abound, from religious literature to other works, restricted to the limits of simple reason. For instance, in the categorical imperative of Immanuel Kant, when you act on your thoughts, you should do so in a way that motivates others to think in the same way. That is,

in deliberating, this deliberation is intended to be a universal commandment.

An example that sometimes helps to facilitate intimacy between the author's concept and the reader's knowledge is always welcome for authors such as Kant. According to the categorical imperative, when a thief decides to steal, he is legislating that conduct and communicating a norm to the world: anyone is allowed to do the same.

This thief's action, if we think about it, is something nobody wishes: allowing anyone to take what is yours. After all, as they say, a thief who steals a thief.... Perhaps the convenience, for him, ends when he may become the victim of his own practice.

However, we, entrenched in idleness, can go further

If it were not for the fear of suffering the same injustices that we cause, we would remain rooted in strict selfishness; then, ethics would be nothing but a bargain, a web of indebtedness in which moral actions would result only from fear and cowardice.

In this case, I would merely strive not to be caught. I would not swear not to offend. In addition, I would maintain allegiance only so that I would not be betrayed and for no other reason.

However, ethics is not to be confused with fear or with practical consequences. It requires genuine adherence to an understanding of what is fair, even when it contravenes our immediate interests. It therefore implies the conscious and lucid application of principles to particular situations of life, thus claiming universality.

All ethics regulate the relative by gazing towards the absolute. It guides the particular with thinking in universal terms. It is based in respect for the people who emerge in our world, indicative of the respect that we hope always prevails in the relationship of everyone with everyone else, even if there is

renunciation, loss, pain and suffering for those who deliberate and act.

Therefore, respect is not enough, nor is acknowledging what is due to others. It takes more. The most important elements are respect and acknowledging what is due to others because it is due — doing what is right because it is what is right. Therefore, we must deliberate or resist for good reasons, decide for the right, and think in the right way.

In the event that just action coincides with the agent's desired gains, pleasures, and outcomes, doubt arises over the status of his or her will. He or she acted thinking only of him- or herself and ended up doing what was due without much awareness of it. Perhaps he or she was driven by moral conscience and ended up doing well.

This is not an irrelevant detail that is suitable only for academic speculation. After all, if the scenario changes, the second actor, whose action is always defined by the good use of practical reason, will continue to act well, while the former actor, who thinks only of himself, will eventually strip off his disguise.

Equality and difference

This understanding of ethics as a space for collective production through the confrontation of arguments with a view of improving coexistence has two implications.

The first implication is clearly equality. Without equality, ethics would be but a by-product of the will of the powerful and nothing more. Only equality guarantees everyone an equivalent right to speech, to being heard and effectively considered.

I respect the other, his or her existence, positions, speeches, arguments, and understandings, because first of all, this other is just like me. Certainly, equality is not the same as cloning, as the perfect equal or the impeccable copy.

Equality in the field of duty must always be expressed as

rights, as prerogatives, never a de facto concept. Therefore, I do not have — nor do I intend to have — rights that no one else has, for example, the right to vote, to express myself freely, and to have a decent education, job opportunities, etc.

The second implication is difference, respect for the other precisely for what otherness makes different from the self — your own body, thoughts, beliefs, emotions, way of being. If we differ in religion, sexual orientation, and representations of the perceived or ideal world, there can still be respect.

Therefore, respect for others demands that I recognize them as my equals in rights and also as different from me in existence. This implication represents both the deliberate and the succumbing parts of life. After all, no one else interacts with the world as each of us does, in choices, certainly, but also in the misfortunes of chance.

Therefore, we are equal in rights —such as voting, preserving property and being married — but different in choices such as the choice of a party or a candidate, the choice to become the owner or to retain ownership of this or that, and the choice to marry this or that person.

Equality in rights and difference in choice make us assume that ethics is unique to humans although many other species coexist all the time.

Human specificity

Rousseau exemplified this concept in his Discourse on the Origin and Basis of Inequality among Men in 1755. Cats "do cat things", and pigeons "do pigeon stuff". They do not create, they do not innovate, they do not take risks, they do not improvise, and they do not choose or make decisions; they just live according to the inclinations and propensities dictated to them by nature.

Now, humans are neither cats nor pigeons. The understanding of ethics is embedded in this realization. At

birth, we are not given everything and are not even given enough. Instinct, if it exists, is weak and cannot manage life. A newborn child abandoned to its own devices will be dead within hours. Humans, to live, must go beyond their nature, transcend it and depart from it.

That is why humans are embarrassed to learn to live, and since they inherited legacies that are not sufficient to solve ever-new problems, it is up to them to take risks on their own — to invent, create, improvise, make things happen. They must think of solutions never thought of before for problems never experienced before. For human will — that is, discernment, reason — speaks even when human nature is silent.

Imagine if it were not so. We would be like other living beings. Our life would be entirely governed by our instinct. Our inclinations would be inexorable. Everything in our life would necessarily be as it is or as it was. We would not have a sliver of freedom to decide. We would be the purest result of our nature's encounter with a world to which it must adapt. In this case, there would be no ethics.

Beyond Compliance

In fact, people are wrong about ethics. They usually relate it to a right way of living, a solution to the puzzle of life, the correct answer to how we should act and interact, or a code or set of standards respected by good or ethical people.

This impoverished understanding of ethics has been the subject of a fine jest. In the film by the English group Monty Python titled The Meaning of Life, 1983, Moses returns from Mount Sinai bringing three tablets with five commandments each: "Here are fifteen commandments". When one of the tablets falls to the floor and breaks, Moses does not pause: "Well, the ten commandments".

The above indicates that ethics should not be confused, as common sense may suggest, with some kind of table in two

columns that tabulates all cogitable actions into two categories: authorized and unauthorized. Ethics is not coded to meet zealously printed standards of conduct. It is not compliance. It is not a question of suitability or alignment.

It is more than all that.

Ethics teachers are often asked: is it ethical to do this or that? Such a question presumes that, as teachers, they are among the few who can memorize the whole table and, knowing it by heart, quickly resolve such doubts.

And why not?

First, the situations faced by humans in the world are increasingly unheard-of. Thoughts, deliberations and actions occur that have never been considered before. How can any table or code elaborated in past times account for the contemporary that is so liquid and overwhelming?

Moreover, there is always the question of the legitimacy of the proposer of the table or the legislator of such a code. Compliance demands an answer based on a mould, but according to what principle? We are more than regulatory abidance. It is up to us to discuss what is most fundamental to respect and, above all, why.

Before there is an uproar against me, it is obvious that once the values and principles that count most in coexistence are discussed and defined, the norms underpinned by them will be rigorously applied.

Complexity

Values are so named because they really are. This is not mean just verbal use. There are expressive tautologies such as economic value in the price of a merchant, affective value in the gift of a deceased grandmother, and ethical value in the improvement of coexistence.

This value depends on concrete, flesh-and-blood lives interacting, the concreteness of coexistent lives, and situations

effectively lived by their protagonists. Therefore, it does not correspond to any generic object that hangs over the world. It has metaphysical sovereignty over all who are alive.

As a macro-example, in a society in which there is misery, any action that reinforces social inequality or that does not prioritize the immediate reduction or annihilation of such inequality will be considered by many to be condemnable. However, that will not necessarily be everyone's priority. This situation may even set up a dominant understanding.

As a micro-example, two students share a small apartment. They write their theses. In addition, they agree that silence is a precious ethical value. Composers or musicians living in similar situations may agree that being able to make noise is too much of a conflict.

The reader understands well. Silence has ethical value, as does its opposite.

The same goes for transparency and privacy or transparency and secrecy. Enabling everyone to know everything about everyone else ensures justice in endless scenarios. At the same time, judges, lawyers, psychoanalysts, priests, accountants, auditors, teachers, and everyone else need a certain degree of secrecy to protect the fair relations of coexistence.

Principles vs. Effects

Amid the complexity, one issue has particular prominence in the history of thought: the dilemma. Is the value of an action tied to the decision-making process and the possible respect for principles of conduct? What happens when the intended action is achieved or not achieved?

Max Weber saw the dimensions of the thread better than anyone. In Science and Politics, 1919, the German philosopher diagnosed two ethics.

The first ethics was conviction, or principles. Here, the value of an action is measured by the effective use of a principle at

the time of deliberation. Therefore, given as many behaviours as possible, let us see whether the agent depended on the principle of honesty to choose his behaviour. The same goes for loyalty, faithfulness, generosity and many more principles.

Second, ethics is the responsibility of consequences and results. Weber thought of political professionals and statesmen to give them some appeal that is almost never deserved. However, nothing prevents us from extending such an ethics to all those whose decisions affect many people — leaders in general, such as CEOs, VPs, supervisors, and rulers of every order.

All of these need, in their deliberations, to consider what is to be achieved, what their actions will produce. It is not enough for them to check whether each of their acts conforms to principles or commandments. Whatever they are, we must investigate what effects they will have.

Therefore, ethics should prioritize the ends, the goals, or the projects. However, the ends can be determined only after the action taken has resulted in something, in a transformation imposed on the world.

Of course, the reader has seen far before me.

The problem lies in the incompatibility between the two ethics, between principles and effects. For example, a seller, to sell, may have to lie. A seducer, to seduce, may have to fake feeling. An executive, to increase profits, may have to defraud. A ruler, to conserve power and continue to be applauded, may have to lie.

Sustainability

Sustainability is the principle of conduct that accompanies us from an early age. “Da. Nilza”, my mother warned, “if you keep throwing it against the wall, you will destroy the toy soon, and you can’t play anymore”. Mr. Clovis, my father, was not far behind: “This backpack has to last all year. If it is spoiled, shame on you”.

After childhood, what changes is the widening of what is to be sustained, what needs to continue to exist and last a little longer, and our responsibility for such conservation.

When we think of not destroying the toy, the backpack or the environment, what is the practical thinking structure that imposes itself? The action that is being decided upon regarding the use of all this must have limits, which means not enjoying everything we can. We cannot exhaust all creative possibilities at once, get the most pleasure, use the full amount of what the world provides — but why? What justifies giving up this full use?

The answer is simple: the possibility of future use. To play with the cousins next week; load more material by December; have oxygen to breathe for generations to come. Thus, when we talk about sustainability, we use a principle to decide the conduct of today according to what is to come, what is becoming.

What about this future? Is it already out there? Is it already real? Of course not. Interestingly, we propose giving up what is in the name of what is not. Then, what future is this? What does it consist of? What is its materiality?

It is a production of the mind, a time of the soul, that anticipates in the imagination what has not yet occurred in reality. As such, the future has materiality. It does exist; it integrates reality in the strict present where all that exists.

Thus, by applying the principle of sustainability through reasoning, we contrast — in a precise moment of deliberation — the eventual exhaustion of the use of the world with the conditions of the repetition of that use in the future.

Thus, it is possible to define the limits of present use so that these conditions are met.

Invariably, one counters immediate pleasures with assumptions of future pleasures. We do so because becoming is always merely an assumption. After all, the cousins who want to play with toys may change in the meantime. The school

that receives zealous students and their backpacks may close its doors for lack of funds, and the environment that would shelter us for many years may encounter by the devastation of a meteor and be annihilated.

This assumption, of course, may be supported by research, studies, probabilities, and scientific laws that continually convert chance into almost absolute predictability. However, this same science wisely allows itself to be defined by the denial of the assumption rather than the true, absolute and eternal.

Sustainability protects many valuable things. Without sustainability, coexistence would suffer. Ethics warns of the deliberation of the now in the name of surviving a human coexistence that, if not cared for today, experiences all the risks of simply ceasing to be.

From here on, the reader stays with the experts.

To my fellow colleagues and following the authors of this work, I say goodbye with the feeling of having taken you from where you were and prepared the bed for your company. Therefore, reading the following pages will make more sense and provide greater pleasure and joy.

Thank you for your attention!

I

GENERAL PART

1.

ENVIRONMENTAL COMPLIANCE: OPPORTUNITIES AND CHALLENGES TO ENSURE GREENER BUSINESS PERFORMANCE, REAL AND NON-SYMBOLIC

ALEXANDRA ARAGÃO

Abstract: With the emergence of environmental compliance, the protection of the environment is assumed as a goal by economic operators, along with profit. In the new paradigm of business sustainability, companies seek *clean* profits and *green* profits and have good incentives for doing so.

Keywords: environmental compliance; fourth sector; EMAS; SMEs; non-financial information

1. Compliance and business sustainability

The Colloquium "Compliance and Sustainability" was held at the University of Coimbra on February 7, 2019, in the aftermath of yet another environmental tragedy that successively stained brown and black the history of ecological catastrophes in Brazil and the world. Mud and mourning have painted brown and black the green of nature and the green of hope in a region whose development has been marked by predictable tragedies.

In this context, it is important to reflect on a new business strategy in which environmental protection ceases to be merely an ambition and a fundamental right of citizens and an objective for which the public authorities are constitutionally responsible. With the emergence of environmental compliance, protection of the environment is assumed to be a goal of economic operators, together with profit. No more mere economic performance, no more profit at any cost – companies now want both *clean* and *green* profits. Performance is no longer measured exclusively in euros, dollars or reais. Performance is measured in hectares of planted forests, in cubic metres of reused water, in tons of gases not emitted, in *negawatts* of energy saved. *Clean* profits (which result from non-polluting activities) and *green* profits (which are partially invested in environmental restoration, contributing to improving the state of the environment) attract more investment, ensure consumer loyalty and differentiate companies in increasingly competitive markets.

After decades of "playing cat and mouse" with public authorities, enforcement agencies and non-governmental environmental organizations, some companies propose to lead the process of developing their economic activity in accordance with state-of-the-art environmental practices in their field.

In an ideal world, companies respect environmental laws not out of fear of sanctions, not to receive public support, and not to appear *greener* to customers but rather because they obtain commercial advantages in ensuring and demonstrating good environmental performance that not only respects the threshold of legislation but also goes far beyond the legislative *minimum.*

2. **The fourth sector**

In an ideal world, the traditional cleavage between the 'good guys' and the 'bad guys' disappears. The environment is the responsibility of all citizens and civic associations, states and international organizations, companies and business associations. Both internally and internationally, new actors embody the recent approach to this *new world*. Internally, the so-called fourth sector joins the three classics: the business sector, with its lucrative scope, and the public and the social sectors, with public interest scopes. The fourth sector is an emerging sector of activity that is characterized by merging social and environmental objectives with entrepreneurial approaches[1].

The fourth sector comprises organizations that aspire to obtain benefits (not profits) but distribute the advantages obtained to stakeholders, sharing returns among investors, workers, customers and the community; that use negotiating methods but assume social and environmental responsibility, simultaneously pursuing their business, environmental and social objectives and integrating all stakeholders in a participatory and transparent *governance model*[2].

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[1] *Corporate Design. The Missing Business and Public Policy Issue of Our Time*, Boston: Tellus Institute, november 2007 (available at <http://www.fourthsector.net/learn>).

[2] *The emerging fourth sector*, Heerad Sabeti with the fourth sec-

Internationally, hybrid international organizations such as the Intergovernmental Panel on Climate Change (https://www.ipcc.ch/) and the International Platform for Biodiversity and Ecosystem Services (https://www.ipbes.net/) have emerged. These entities have strong legal and political legitimacy as well as technical-scientific authority and enhanced credibility.

However, between the ambitions of a perfect world and the majority of cases of business reality in the early twenty-first century, there is still a gap that needs to be crossed.

Companies, under the crossfire of customers, consumers, citizens, public opinion, the media, social networks, public authorities, supervisors, producers, regulators, auditing entities, certification entities, private partners, shareholders, lenders, investors, suppliers and insurers, are genuinely concerned about the environment. Either for the noblest reasons or for profit, they feel compelled to change their practices, to readjust their objectives, and to adapt their communication strategies.

Legal reflection on the business compliance movement is necessary to avoid wasting this turning point during the current period of ecological transition[3]. Such a legal reflection can prevent companies' pro-environmental initiatives from turning into mere façades aimed at camouflaging, with green *make-up*, old practices based on a *modus operandi* and a vision of nature as an inexhaustible source of raw materials and energy and as an infinite sink of waste and pollutant emissions.

In addition to social pressure, the European business sector has several legal reasons to take seriously the need to *be* and to

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tor network concept working group, 2009 (available at <https://assets.aspeninstitute.org/content/uploads/files/content/docs/pubs/4th%20sector%20paper%20-%20exec%20summary%20FINAL.pdf?_ga=2.233662494.1662677419.1562150820-936377084.1562150820>).

[3] Agathe Van Lang, coord., *Penser et mettre en oeuvre les transitions écologiques*, Mare et Martin, 2018.

look more sustainable. We will highlight four that stand out at the European Union level: the environmental management and auditing system, the rules on the disclosure of non-financial information, guidance on Compliance Management System (CMS) supervision, and direct action by the European Union for compliance and environmental governance.

3. **Environmental Management and Auditing scheme**

Since the 1990s, companies in the industrial sector[4] in the European Community have been allowed to participate voluntarily in an environmental management and audit scheme (EMAS). In 2001, this possibility was extended to all organizations. An organization is understood as "a company, corporation, firm, enterprise, authority or institution, or a part or combination thereof, whether incorporated or not, public or private that has its own functions and administration"[5]. With the objective of extending the system scope, the 2009 regulation on the voluntary participation by organizations in a Community eco-management and audit scheme[6], amended successively in 2017[7] and 2018[8], currently applies to any company, legal person, undertaking, authority or institution,

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[4] Regulation 1836/93 of 29 June 1993.

[5] Article 2 (s) of the Regulation 761/2001 of 19 March 2001.

[6] Regulation 1221/2009 of 25 November 2009, available at <https: // eur-le x. europa.eu / legal-content / EN/ TXT / uri = CELEX: 02009R1221-20130701>.

[7] Regulation (EU) 2017/1505 of the Commission of 28 August 2017, available at <https://eur-lex.europa.eu/legal-content/PT/TXT/PDF/?uri=CELEX:32017R1505&from=EN>.

[8] Commission Regulation (EU) 2018/2026 of 19 December 2018, available at <https://eur-lex.europa.eu/legal-content/PT/TXT/PDF/?uri=CELEX:32018R2026&from= PT>.

whether located within or outside the Community, or any part or combination of such entities, whether or not they have legal personality, whether public or private, having their own functions and administration[9].

The objective of the system "is to promote the continuous improvement of organizations' environmental performance through the establishment and implementation of environmental management systems by them. systematic, objective and regular reporting on the performance of such systems, reporting on environmental performance and open dialogue with the public and other stakeholders, as well as the active participation of staff and their appropriate training"[10].

However, to prevent companies from using the EMAS for self-promotion based on false or hardly verifiable allegations *(greenwashing*[11]), the environmental information published by an organization may use the EMAS label only if it has been validated by an environmental auditor and if, additionally, it is possible to demonstrate that the organization's environmental actions are rigorous, justified and verifiable; are relevant and used in an appropriate context; show the overall environmental performance of the organization; and are unlikely to be misinterpreted and meaningful in terms of the overall environmental impact[12].

Clearly, the EMAS is ambitious – so ambitious that the

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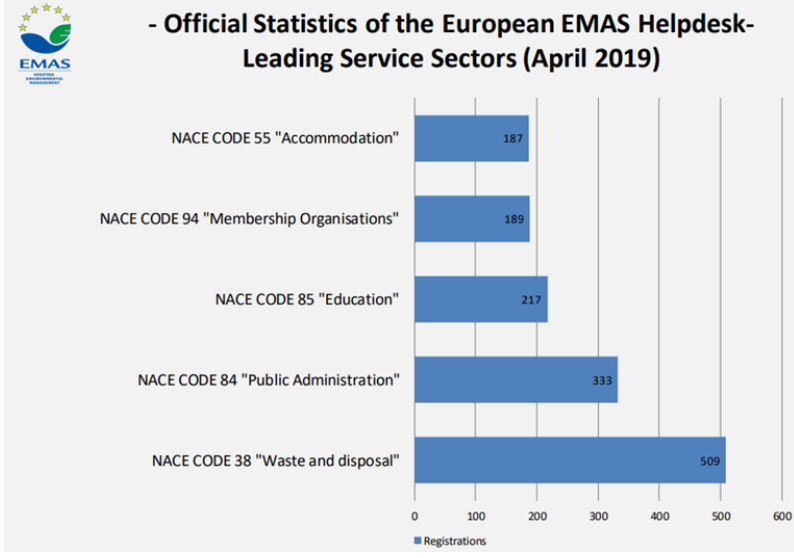
[9] Article 2 of the 2009 Regulation n. º21 the current version.

[10] Article 1 §2 of the 2009 directive.

[11] On greenwashing or green make-up, see Patrícia Faga Iglecias LEMOS *et al., Caderno de Investigações Científicas – Volume 3: Consumo Sustentável*, Brasília: Ministério da Justiça, 2013. (available at <https://justica.gov.br/seus-direitos/consumidor/Anexos/consumo-sustentavel.pdf>).

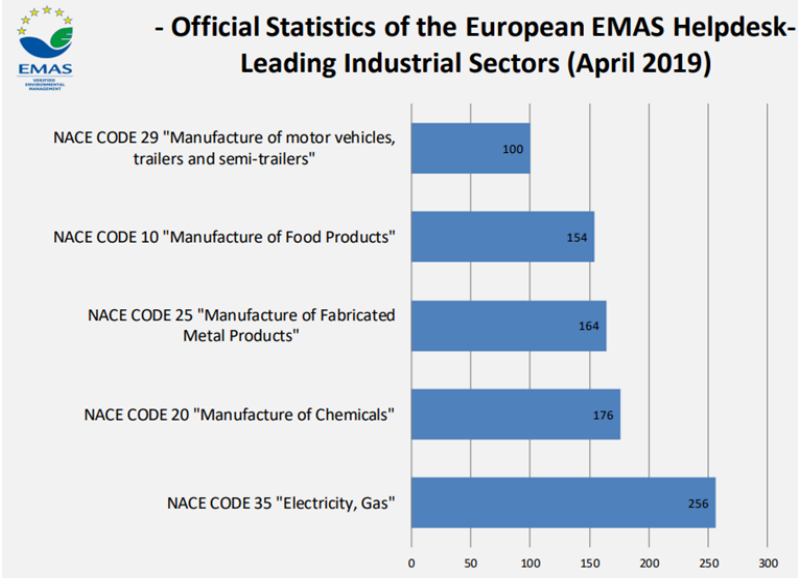
[12] Article 10 paragraph 5 of the 2009 Regulation. In Portugal, see Alexandra ARAGÃO "A credibilidade da rotulagem ecológica dos produtos", *Revista do CEDOUA* 27/1 (2011) 157-170 (available at <https://impactum.uc.pt/pt-pt/node/113681>).

system's adherence rates have fallen short of expectations. The official statistics[13] show that the main service activities that adhere to the system are waste management and disposal, with approximately 500 organizations registered as EMAS adherents throughout Europe.



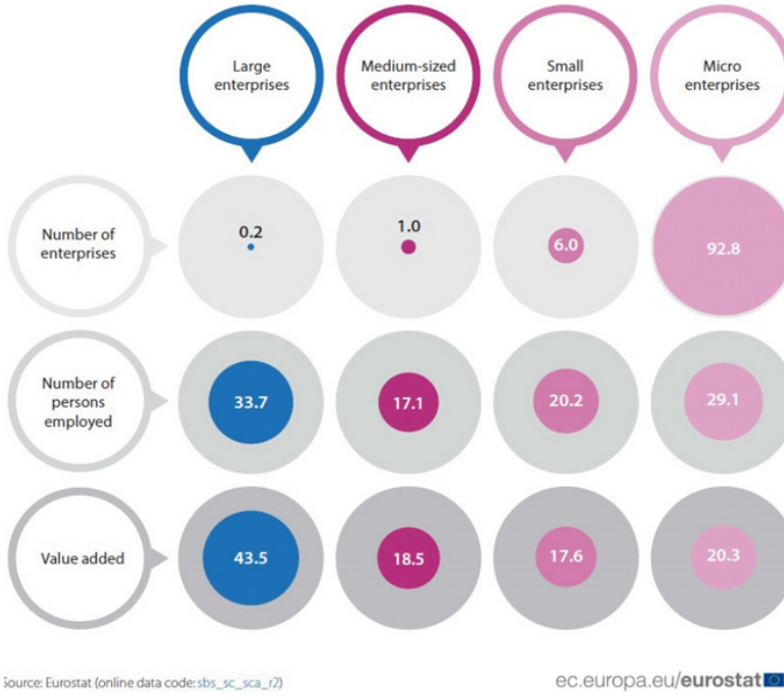
With regard to industrial sectors, organizations for the production and distribution of energy (electricity and gas) are the leaders of the EMAS, with approximately 250 organizations.

[13] Data for 2019 available at <http://ec.europa.eu/environment/emas/pdf/statistics/EMASStatistics_April2019.pdf>.



That is why the European Union realized that participation in a voluntary but bureaucratic system, such as EMAS, is much easier financially for large companies than for small and medium-sized enterprises (SMEs).

However, the relative weight of SMEs in the European business sector justifies special attention to this business segment, which accounts for 98.8% of the total number of enterprises, 49.3% of jobs and 37.9% of value added.



Non-financial business economy in the EU[14]

That is why the Community began, as early as 2001, to include specific provisions in the environmental management and auditing system for small organizations[15] to encourage

[14] Information available at <https://ec.europa.eu/eurostat/web/products-eurostat-news/-/EDN-20181119-1>.

[15] Under the 2009 Regulation, 'Small organizations are a) the micro, small and medium-sized enterprises as defined in Commission Recommendation 2003/361/EC of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises; b) Local authorities governing less than 10,000 inhabitants or other local authorities employing less than 250 people and having an annual budget of not more than EUR 50 million, or an annual balance sheet of not more than EUR 43 million:

i) government administrations or other public administrations or public advisory bodies at the national, regional or local level,

their participation in the EMAS.

In the current version of the Regulation, the incentives for SMEs include limitations on registration costs, specific technical assistance, facilitated access to information, support funds, greater flexibility in verifying requirements and even derogations from mandatory requirements provided that there are no significant associated environmental risks or problems[16].

4. **Disclosing non-financial information**

The 2014 Directive on the Disclosure of Non-Financial Information and Diversity Information by Certain Large Enterprises and Groups[17] represented a paradigm shift in European environmental and business law.

This scheme is compulsory only for large companies (here, those having more than 500 employees) and is voluntary only for other organizations.

After the transposition of the directive[18] and at the latest from the financial year beginning on 1 January 2017, large companies will be obliged to include in their management reports a "consolidated non-financial statement containing information to the extent necessary for an understanding of

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ii) natural or legal persons performing public administration functions in accordance with the provisions of their national law, including the exercise of specific duties, the performance of activities or the provision of services relating to the environment, and

iii) natural or legal persons having public responsibilities or duties or performing environmentally related public services under the control of a body or person referred to in point (b).

[16] Articles 7, 1, 26, 32 (4), 36, 37 (3) of the 2009 Regulation.

[17] The Directive 2014/95 of 22 October 2014, available at <https: // eur-lex.europa.eu/legal-content/PT/TXT/PDF/ uri = CELEX: 32014L0095 & from = EN>.

[18] Scheduled for no later than 6 December 2016 in all member states (Article 4 (1) of the Directive).

the group's development, performance, position and impact of its activity, relating to, as a minimum, environmental, social and employee matters, respect for human rights, anti-corruption and bribery matters"[19].

The environmental impacts of the activities of large companies are now known to the state, business partners, competitors and citizens through their annual management reports, which should include information on the environmental policies followed by the group and the results of those policies; the environmental due diligence procedures applied; the products or services that are likely to have negative environmental impacts; the main environmental risks linked to the group's activities and how these risks are managed by the group; and the key environmental performance indicators[20].

To clarify the content of the companies' obligations, the European Commission adopted, in 2017, a Communication containing methodological guidelines on the reporting of non-financial information[21].

Using detailed explanations and examples, the Commission clarified the characteristics that the non-financial information provided by the company should have, focusing specifically on information on environmental issues pertaining to the company's activity. The information should be

– *relevant or "material"* in the sense that it must be important to understand the evolution, performance, position and impact of the environmental activities of the company, taking into account internal and external factors[22].

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[19] Article 29a (1) *ab initio*.

[20] Article 29a (1) *(b), (c), (d) (e).*

[21] Communication C (2017) 4234 final, Brussels, 06.26.2017, available at <http://ec.europa.eu/ ransparency t / regdoc / rep / 3/2017 / E / C-2017-4234-F1- PT-MAIN-PART-1.PDF>.

[22] Communication, 11.

– *rigorous and balanced,* meaning that it includes evidence, refers to solid and reliable internal control systems, and involves effective stakeholder engagement, with reliability assurance provided by independent external entities.
– *understandable,* using simple language and coherent terminology, with definitions of technical terms, where appropriate, and with adequate contextualization to facilitate understanding[23].
– *Comprehensive but concise,* being transmitted with a breadth and depth that help stakeholders understand the evolution, performance and position as well as the impact of the activities[24].
– *Strategic and prospective,* showing the progress made with regard to previously established goals or scientifically based scenarios. The public assumption of compromises helps users benchmark the company's progress in meeting long-term goals[25].
– *Stakeholder oriented,* meaning oriented towards investors, employees, consumers, suppliers, customers, local communities, public authorities, vulnerable groups, social partners and civil society[26].
– *Logical and coherent,* with a clear indication of the interconnections between the information presented in the non-financial statement and other information disclosed in the management report[27].

[23] Communication 13.

[24] Communication, 15.

[25] Communication, 16.

[26] Communication, 16.

[27] Communication, 17.

In this context, the disclosure of non-financial information is expected to contribute to the improvement of corporate governance, to evaluate the environmental performance of companies and to consider their overall impact on society.

5. **Guidance on CMS supervision**

In December 2014, the European Union, through the European Network for Environmental Law Implementation and Enforcement (IMPEL)[28], together with member states' environmental administrations, created a Guide entitled "Guidance on Compliance Management System Supervision"[29]. This document is intended to provide inspectors with guidance on principles and strategies for corporate inspection so that the purpose of inspection is not to measure compliance levels but rather to assess corporate compliance strategies. The ultimate goal of the inspections is therefore to serve companies in improving their internal processes to ensure compliance rather than to operate outside the law and seek to conceal situations of non-compliance. Thus, sanctions will be imposed only on companies that ultimately fail to correct violations. Risk prevention whenever public interests are at stake is considered more important than mere formal compliance with the law.

To help inspectors examine the relevant environmental aspects of business, the European Union Guide includes a list of 48 questions divided into six groups covering topics such as the knowledge, understanding and application of applicable regulatory provisions; company vision and behaviour;

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[28] European network for the implementation and enforcement of environmental law (<https://www.impel.eu/>).

[29] Available at <http://impel.eu/wp-content/uploads/2015/03/FR-2014-16-2013-15-CMS-Supervision-Guidance-Document.pdf>.

concern for quality, training, critical thinking and continuous improvement; the existence of a compliance department and proactive measures; an open attitude towards business partners, customers, the general public and public entities; the existence and quality of environmental reports; and, finally, the relationship with employees and the application of disciplinary measures.

6. **Direct actions of the European Union**

The most recent EU compliance strategy started in 2018 following the report published in September 2011 that estimated the costs of non-application of environmental legislation in the European Union at € 50 billion per year[30].

On January 18, 2018, the European Commission launched a set of actions to improve compliance and environmental governance[31] with the ultimate aim of "more effectively protecting Europe's common heritage"[32]. Another measure, adopted at the same time, consisted of setting up a group of experts on environmental compliance and governance[33].

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[30] European Commission, Directorate-General Environment, the costs of not implementing the environmental acquis. Final report ENV.G.1 / FRA / 2006/0073, September 2011 (available at <http://ec.europa.eu/environment/enveco/economics_policy/pdf/report_sept2011.pdf>.

[31] Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions of the EU actions to improve compliance and governance on the environment. (COM (2018) 10 final Brussels, 18.1.2018, (SWD (2018) 10 final)) (available at <https://ec.europa.eu/environment/legal/pdf/COM_2018_10_FI_COMMUNICATION_FROM_COMMISSION_TO_INST_EN_V8_P1_959219.pdf>).

[32] Communication of 2018, p. 9.

[33] Decision 2018 / C 19/03 of the Commission of 18 January 2018, available at <https://eur-lex.europa.eu/legal-content/PT/TXT/PDF/?uri=CELEX:32018D0119(01)&from=FR>.

According to the Commission, "non-compliance may occur for different reasons, including confusion, poor understanding or lack of acceptance of rules, lack of investment, opportunism and criminality"[34].

To overcome this problem, the Commission identified three mechanisms for ensuring environmental compliance:

- compliance promotion helps duty holders to comply through means such as guidance, 'frequently asked questions' and help desks;
- compliance monitoring identifies and characterizes duty-holder conduct and detects and assesses any non-compliance, using environmental inspections and other checks; and
- follow-up and enforcement draw on administrative, criminal and civil law to stop, deter, sanction and obtain redress for non-compliant conduct and to encourage compliance[35].

A set of operational measures for the new compliance strategy is planned for 2019, based on the idea that the EU already has a large *body* of consolidated environmental legislation and that, at present, the main challenge is *just*... application.

Conclusion

If, as the international scientific community asserts, during the Anthropocene, the current period of Earth history, human influence on the state, dynamics, and future of the Earth system is greater than the influence of any other natural

[34] Communication of 2018, 2.

[35] Communication of 2018, 2.

force[36], such as earthquakes, volcanoes, tornadoes or tsunamis; if "the notion of the Anthropocene challenges us to develop resilience to the impact we are having on what is after all a vulnerable, finite planet"[37], then we are all in the same "boat", and we cannot do anything but sail consciously, firmly and in an orderly manner to the same destination.

The environmental sustainability destination.

[36] INTERNATIONAL STRATIGRAPHIC COMMISSION, *Results of the binding vote by AWG, Anthropocene working group*, released May 21 st, 2019 (available at <http://quaternary.stratigraphy.org/working-groups/anthropocene/>).

[37] Louis J KOTZÉ, "Rethinking Global Environmental Law and Governance in the Anthropocene", *Journal of Energy & Natural Resources Law* 32/2 (2014) 121-156, p. wa. 123, <DOI: 10.1080/02646811.2014.11435355>.

2.

THE PRINCIPLES OF EQUATOR AS STRENGTHENING MECHANISMS OF SUSTAINABLE INVESTMENTS

THE CONFORMITY OF INVESTMENT

GRACE LADEIRA GARBACCIO
DOUGLAS DE BARROS LAGES

Abstract: This paper aims to demonstrate, through a textual systematization, the application of the Equator Principles, by financial institutions, integrated to a compliance system capable of generating sustainability in the area of banking investments. In this sector, this practice becomes fundamental, since the objective is to create a long-term sustainability environment, where financing of projects that put the environment in serious danger should be avoided. It sought to clarify how the Principles can be applied based on an efficient governance system, through business ethics and / or national regulatory frameworks. The article presents the theme discussed during the International Seminar, entitled "Compliance and Sustainability: Brazilian and Portuguese Perspective", through a research inserted in the deductive logic method, based on a bibliographical review of the Brazilian literature, concomitantly based on national standards, held on February 7, 2019, at the Faculty of Law, University of Coimbra, Portugal. Thus, it is intended to expose a relational basis of the importance of Compliance Management in the financial area, in order to promote the spirit of sustainable development in the practices of projects with relevant environmental impacts.

Keywords: compliance management; Equator principles; sustainable investments; risk management

1. The application of the Equator Principles in interdependency with the compliance pillars for the sustainable management of investment

The function of an investment bank is currently understood as "funneling personal and institutional savings to productive endeavors, contributing to economic development" (Ladd / Wright 1965, 76). However, for the effective development of this market, it is necessary to understand, from the perspective of sponsoring institutions, that certain risks may occur that lead to negative returns on capital, as "corporations are also subject to unpredicted or even unforeseen situations throughout their history" (Arima / Gil / Nakamura 2013, 136).

As the legal risk is attached as much to the internal adoption of more recent legislation as to an eventual technical and juridical lack of knowledge on how to apply the norm to a specific type of business, the internal application of the pillars of corporate governance is necessary to "enlighten the contingencies through which knowledge sustained by the cause-effect vector can better understand the uncertainties of contingent events" (*Ibid.,* 41), meaning to prevent possible risks that may undermine a specific investment.

The aforementioned application of the compliance pillars is especially important in the banking industry, as "banks are institutions that fundamentally assume and manage risk, be it credit operations, resource management or cash flow management" (*Ibid.,* 133), and because "as a function of the increase in complexity of financial markets […] investment capital is nowadays more exposed and susceptible to speculation" (*Ibid.,* 133).

Based on this idea, "in October of 2002 a small number of banks […] met in London, together with International Finance Corporation (IFC), the financial arm of the World Bank" (Santos 2012, 05) to discuss questions related to project finance, "aiming to develop a common system of environmental and social policies and guidance lines, to be applied globally" (*Ibid.,* 05). Therefore, in 2003, the Equator Principles were defined as "a set of socio environmental demands applied in the approval of finance for large projects, supported by financial clauses that limit its application to a minimum financial amount" (international finance corporation 2005 *apud* Dias / Machado 2007, 8). With this public policy, it is expected that such principles "are used as the basis and as a common standard to implement procedures and individual, internal standards in social and environmental issues in financing activities" (*Ibid.*, 8).

In this context, it is understood that both the pillars of compliance and the Equator Principles are intended to safeguard project investment. Therefore, compliance should "be considered as an internal business support area, characterized by three specific lines […] based on the prevent, detect and react logic" (Assi 2018, 27). These approaches should be applied internally in financial institutions, together with the Equator Principles, to achieve effective and efficient security in financing contracts.

Therefore, prior to venturing specifically into the systematization of compliance management together with the Equator Principles, it is necessary to explicitly identify the corporate governance pillars included in this study and, in similar fashion, to specify the principles structured in the management system so that they can be dissected later in a theoretical-practical-professional approach.

Compliance programmes are based on 9 (nine) pillars that guide the security of a corporation, namely: *a)* support executive management; *b)* risk assessment; *c)* code of conduct; *d)* internal

controls; *e)* training and communication; *f)* third-party evaluation (due diligence); *g)* complaint channels; h) internal investigation; and *i)* audit and improvement review (*Ibid.,* 34).

Likewise, the Equator Principles that must be incorporated in a financial organization to allow sustainable investments are 1) review and categorization; 2) environmental and social assessment; 3) applicable environmental and social standards; 4) the environmental and social management system and Equator Principles action plan; 5) stakeholder engagement; 6) a grievance mechanism; 7) independent review; 8) covenants; 9) independent monitoring and reporting; and 10) reporting and transparency (ASSOCIAÇÃO DOS PRINCÍPIOS DO EQUADOR 2013, 6-11).

Regarding the application of the first equator principle — review and categorization — it is important to highlight that the financial institution, upon receiving a request for project financing, should "categorize it based on the magnitude of its potential environmental and social risks and impacts" (*Ibid.,* 06) and order them according to the social and environmental categorization developed by the International Finance Corporation (IFC), thus filtering the project into one of three categories: Category A — projects with potential significant adverse environmental and social risks and/or impacts that are diverse, irreversible or unprecedented; Category B — projects with potential limited adverse environmental and social risks and/or impacts that are few in number, generally site-specific, largely reversible and readily addressable through mitigation measures; and Category C — projects with minimal or no adverse environmental and social risks and/or impacts (*Ibid.,* 6).

Principle 2 — environmental and social assessment — is required for the financing of projects that fall into Categories A and B, meaning "the client (is) to conduct an Assessment process to address, to the *Equator Principles Financial Institution*'s (EPFI) satisfaction, the relevant environmental and social risks and impacts" (*Ibid.,* 6) and

should provide "assessment documentation (which) should propose measures to minimize, mitigate, and offset adverse impacts in a manner relevant and appropriate to the nature and scale of the proposed project" (*Ibid.*). The EPFI presents examples of projects that should provide the above-referenced assessment documentation, such as those that use and require the handling of hazardous materials; those that include the efficient production, transmission and consumption of energy; those that involve labour issues (including the four fundamental labour rights); those that involve health issues; and, finally, those that involve human rights, and requires that due diligence be employed to prevent, mitigate and manage adverse impacts to those rights.

It is easily noted that both Principle 1 and Principle 2 can be applied in a financial institution via the second compliance pillar — risk management — since this "should encompass the mapping of risks including key points in the organization, significant interactions with third parties, the specific and general objectives and the threats that may be faced" (AVALOS 2009, 65). Furthermore, after mapping the risks in a joint application of the abovementioned principles and the pillars of compliance, the institution should "move to developing rules to be complied with by every member of the corporation as a way to mitigate such risks" (ASSI 2018, 37).

Next, under Principle 3 — applicable environmental and social standards — "the Assessment process should, in the first instance, address compliance with relevant host country laws, regulations and permits that pertain to environmental and social issues" (ASSOCIAÇÃO DOS PRINCÍPIOS DO EQUADOR 2013, 7). The assessment determines "to the EPFI's satisfaction the Project's overall compliance with, or justified deviation from, the applicable standards." In similar fashion, to meet the ideal of positive compliance, a relationship is established with the application of Principle 8 — covenants — under which "the client will covenant in the financing documentation to comply

with all relevant host country environmental and social laws, regulations and permits in all material respects" (*Ibid.,* 10).

In a more in-depth analysis, it is clear that Principles 3 and 8 are related to the application and fulfilment of internal (corporate culture) and external (government regulation) norms and are fully connected to the implementation of the third pillar of a compliance programme, codes of conduct. In the ideal situation, these documents are necessary to the preservation and security of financing institutions, as they explicitly state "what should be done versus what is forbidden from being done, under penalty of being subject to a determined consequence" (Assi 2018, 38). By instituting such ethics codes and behaviour manuals, financial institutions can explicitly specify the types of investments with which employees may not be associated, including therefore, an ethical-moral analysis of the action.

Regarding Principle 4 — the environmental and social management system and Equator Principles action plan — and Principle 9 — independent monitoring and reporting — it is important to mention they are institutionalized with the following objective: "for all Category A and Category B Projects, the EPFI will require the client to develop or maintain an Environmental and Social Management System (ESMS)" — citing Principle 4 (ASSOCIAÇÃO DOS PRINCÍPIOS DO EQUADOR 2013, 8), which is intended to "outline gaps and commitments to meet EPFI requirements in line with the applicable standard" (*Ibid.,* 8). Principle 9 aims to "ensure ongoing monitoring and reporting after Financial Close and over the life of the loan" (*Ibid.,* 11).

It is notable that such principles may be attached systemically to the pillar of audit and improvement review within compliance systems, as this pillar is intended to "measure efficacy and the application of norms, policies, procedures and other internal controls" (Assi 2018, 42).

In addition, Principle 4 is connected to aspects of the internal controls of a company, as it highlights "the importance

and need to perform correctly its function, guaranteeing with such the expected results derived from management processes" (*Ibid.,* 38). In other words,

The control environment is related to non-operational controls, which are attached to the personal values of each person in the organization and are likewise important to generate a healthy control environment. Environmental analysis aims to collect information to support the identification of risk events, as well as contributing to choosing the most appropriate actions to achieve the macroprocess objectives (BRASIL 2017, 24).

Furthermore, see Principle 5 — stakeholder engagement — which, by its nomenclature, can be immediately connected with the need to obtain support from executive management (main pillar of compliance), as it is "the basis to building an organizational culture in which employees and third parties effectively cherish an ethical conduct" (MENDES / CARVALHO 2017, 129).

It is important to highlight the importance of such implementation in a sustainability programme since "the function of compliance involves a series of activities of a diverse nature […] that must be articulated in a coherent form so its effectiveness is maximized" (MENDES / CARVALHO 2017, 130). To support the maximization of integrity programmes, it is suggested that applying Principle 5 is also attached to the training and communication actions demanded by Compliance because "there is no use to identifying the inherent risks to the organization's field of activity, followed by the implementation of norms and policies to mitigate them if, at last, nothing gets out of paper" (ASSI 2018, 39).

In the same field, equator principle 6 — a grievance mechanism — is directly connected to the previous principle since "communication channels have two functions: the first is related to resolving doubts […] about how to act; the second is aimed at the communication of potential illicit activities" (MENDES / CARVALHO 2017, 140). This principle

can be attached to the second idea; for example, when there is "identification of fraudulent or damaging practice by a certain manager or collaborator, a denunciation channel must be available to report, investigate and apply the required sanctions" (Assi 2018, 40). Therefore, the grievance mechanism may be implemented along with one of the pillars of compliance — complaint channels — as the EPFI requires the client with projects in Categories A and B "to receive and facilitate resolution of concerns and grievances about the Project's environmental and social performance" (ASSOCIAÇÃO DOS PRINCÍPIOS DO EQUADOR 2013, 9).

In the same way, it is important to mention Principle 7 — independent review — in which the EPFI establishes that, to finance Category A and B projects, "an Independent Environmental and Social Consultant, not directly associated with the client, will carry out an Independent Review of the Assessment Documentation" (*Ibid.,* 09). This Principle aims to guarantee security in high-risk projects by giving that responsibility to third-party management (due diligence), a system that is also used in conformity programmes.

Nevertheless, Principle 10 — reporting and transparency — complements the basic ideals of Principle 5 in aiming to obtain a crystal-clear view of the ethics of the project and its financing. To that end, the EPFI "will report publicly, at least annually, on transactions that have reached Financial Close" (ASSOCIAÇÃO DOS PRINCÍPIOS DO EQUADOR 2013, 12) as well as reporting on "Equator Principles implementation processes and experience, taking into account appropriate confidentiality considerations" (*Ibid.,* 12). In addition, the clients of financial institutions shall "ensure that, at a minimum, a summary of the ESIA is accessible and available online" (*Ibid.,* 12) and "will publicly report GHG emission levels […] during the operational phase for Projects emitting over 100,000 tonnes of CO2 equivalent annually" (*Ibid.,* 11).

Finally, regarding corporate security and sustainability, it is possible to understand that the Equator Principles have the advantage of being a common base of orientation for financial agents, which, when analysing investments, can therefore understand whether a project is being developed in a socially responsible way. Therefore, the application of the principles is made possible and easier through their insertion into the pillars of compliance management. In summary, the adoption of each of the ten principles can be related directly to the nine pillars of an integrity programme, thus allowing the expansion of the sustainability of financial organizations.

2. Analysis of control of Brazilian financial agents: applicable legislation

As previously stated, the Equator Principles are used primarily as mechanisms of risk prevention for financial agents. In that sense, it is important to highlight that the Brazilian juridical order currently possesses instruments establishing rules and control criteria for those agents, including banking institutions that are part of the association of said principles, as is the case for Banco do Brasil (BB), which "was the first public bank at the global level to adhere to the Equator Principles [...] in 2005" (BANCO DO BRASIL, 2005, 2).

As this bank reports, "Social and environmental responsibility and capacity to generate employment and returns from the enterprise must be considered in the decision about operations with credit risk" (*Ibid.,* 2). In addition, adhesion to the principles is clear, as the Bank states that it does not assume "credit risk with a client liable for malicious damage to the environment, which submits workers to degrading work conditions or keeps them in conditions analogous to slave work" (*Ibid.,* 2), in accordance with Principle 2 — environmental and social assessment.

A thorough national analysis shows that in addition to Banco do Brasil, only 4 (four) other banks adhere to the aforementioned principles, namely, Banco Bradesco S.A., Banco Votorantim s.a, Caixa Econômica Federal and Itaú Unibanco s.a, Furthermore, in international terms, the European continent is represented by the largest number of banks in the instituted Equator Principles system, with forty subscribing banks, followed by the Asian continent and North America, each with fourteen banks, and finally Africa and Latin America, with ten each.

Turning the focus to Brazil, it is observable that the application of the Equator Principles by financial institutions provides safeguards and avoids ill-advised investments in projects with social and environmental impacts. In the same fashion, the Central Bank of Brazil issued Resolution nº 4.327 of 25/04/14, which states directives for the "implementation of Social and Environmental Responsibility Policies by financial institutions and other institutions authorized to operate by Central Bank of Brazil" (banco central do brasil 2014, 1). Such an example is article six of the aforementioned resolution, which establishes that the management of social and environmental risk of the referred institutions should consider a) systems, routines and procedures that allow the identification, classification, evaluation, monitoring, mitigation and control of social and environmental risks presented in the activity and operations of the institution; b) a registry of data referred to effective losses due to social and environmental damage for a minimum period of five years, including the value, type, location and economic sector object of the operation; c) prior evaluation of potential negative social and environmental impacts of new modes of products and services, including risks to reputation; and d) procedures to adjust social and environmental risk management to legal, regulatory and market changes.

In a similar fashion, another national regulation by the Central Bank in accordance with the objectives of the

Equator Principles is Resolution nº 3.545/2008, which "establishes a demand of probatory documentation of environmental compliance and other conditions, to permit agricultural financing in the Amazonian Biome" (*Ibid.* 2008, 1). Furthermore, in another policy for the application of sustainable financing, the Banco Nacional de Desenvolvimento (BNDES), promotes the idea of sustainable development with the "main objective of a Social and Environmental Policy […] with a focus on an integrated conception of economic, social, environmental, and regional dimensions" (BNDES, 2018) in addition to establishing "operational procedures for an efficient social and environmental analysis of projects postulating to financing" (BNDES, 2018).

Consequently, these examples of national standards demonstrate their importance given that "following what is happening with other enterprises, the role of banks is being redefined, answering to significant pressure from society to intensify their actions in reducing social inequality" (Vinha / Hacon / Marques 2005, 6). In addition, the standards incentivize financial organizations to focus on "economic growth and democratizing banking services and products and financing socially and environmentally sustainable development projects" (*Ibid.* 2005, 6).

3. **Conclusion**

This work seeks to conceptually present the Equator Principles, which originated in 2003 in response to the need to create mechanisms for social and environmental policies and guidelines in a financial-corporate setting for a group of specific banks. Furthermore, this study aims to identify a systematization of the possible application of the abovementioned principles through a structured system of compliance. Finally, the study briefly investigates national legislation related to the theme, meaning, and risk management and intended to enact sustainable investments in Brazil.

In regard to the ten Equator Principles, it is important to understand that their mission is to aid and direct the actions of financial agents, specifically banks, by implementing positive practices against possible investments that negate sustainable investments, whether such investments cause damage to the environment, have high-risk impacts or affect human rights. The execution of the principles can be organized by inserting them into the nine pillars of compliance management, thereby facilitating, their institutional adoption.

Not least important, this paper presents a brief national and international overview through which it is possible to understand the strict and low number of 4 (four) Brazilian banks involved in the principles association. Meanwhile, even with such low representation, the country has achieved a high level of legal positivity that facilitates the development of risk management policies in sustainable investments, with the examples of Resolution nº 4.327 of 25/04/14 and Resolution nº 3.545 of 2008, both from the Central Bank.

Finally, considering all of the factors described above, it is possible to conclude that the Equator Principles may and should be applied by financial institutions as internal-cultural parameters that aim to create financial enterprise value. Furthermore, the integration of the principles may occur in an accessible way by fitting them into the compliance programme pillars in an ordered, wholesome, effective and efficient way, enabling institutions to create a successful extension of their corporate activities through the promotion of sustainable investments.

References

Arima, Carlos Hideo / Gil, Antonio de Loureiro / Nakamura, Wilson Toshiro. *Gestão: controle interno, risco e auditoria.* São Paulo: Saraiva, 2013.

Assi, Marcos. *Compliance: como implementar.* São Paulo: Trevisan Editora, 2018.

associação dos princípios do equador. *Os Princípios do Equador.* 2013. Disponível em <https://equator-principles.com/wp-content/uploads/2018/01/equator_principles_portuguese_2013.pdf> Acessado em 14 abr. 2019.

Avalos, José Miguel Aguilera. *Auditoria e Gestão de Risco.* São Paulo: Instituto Chiavenato, 2009.

banco central do brasil. Resolução nº 3.545, de 29 de fevereiro de 2008. *Altera o MCR 2-1 para estabelecer exigência de documentação comprobatória de regularidade ambiental e outras condicionantes, para fins de financiamento agropecuário no Bioma Amazônia.* Disponível em <https://www.bcb.gov.br/pre/normativos/busca/downloadNormativo.asp?arquivo=/Lists/Normativos/Attachments/47956/Res_3545_v1_O.pdf> Acessado em 29 mai. 2019.

banco nacional do desenvolvimento. *Política Socioambiental*. Disponível em <https://www.bndes.gov.br/wps/portal/site/home/quem-somos/responsabilidade-social-e-ambiental/o-que-nos-orienta/politicas/politica-socioambiental> Acessado em 29 mai. 2019.

— Resolução nº 4.327, de 25 de abril de 2014. *Dispõe sobre as diretrizes que devem ser observadas no estabelecimento e na implementação da Política de Responsabilidade Socioambiental pelas instituições financeiras e demais instituições autorizadas a funcionar pelo Banco Central*

do Brasil. Disponível em <https://www.bcb.gov.br/pre/normativos/res/2014/pdf/res_4327_v1_O.pdf> Acessado em 29 mai. 2019.

BRASIL. *Manual de gestão de integridade, riscos e controles internos da gestão.* Controladoria-Geral da União — CGU. Brasília, DF, jan. 2017.

DIAS, Marco Antonio / MACHADO, Eduardo Luiz. *Princípios do Equador: sustentabilidade e impactos na conduta ambiental dos bancos signatários brasileiros.* Paraná, 2007. Disponível em <https://docs.ufpr.br/~rtkishi.dhs/TH045/TH045_03_Principios%20do%20Equador.pdf> Acessado em 23 mai. 2019.

LADD, James Wrighí / WRIGHT, Richmond Miles. "Obstáculos ao desenvolvimento do mercado brasileiro de capitais". *Rev. adm. empres.,* São Paulo, 5/15 (1965). Disponível em <http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0034-75901965000200004&lng=en&nrm=iso> Acessado em 18 mai. 2019.

SANTOS, Tânia Cristina Simões de Matos dos. "A aplicação dos princípios de Equador pelas instituições financeiras portuguesas". *Workingpaper* 85 (2012), globADVANTAGE — Center of Research in International Business & Strategy. Disponível em <http://globadvantage.ipleiria.pt/files/2012/01/working_paper-85_globadvantage.pdf> Acessado em 26 jun. 2019.

VINHA, Valéria da / HACON, Sandra / MARQUES, Vania de Lourdes. *Os Princípios do Equador e o sistema financeiro — ferramentas para a gestão socioambiental brasileira. VIII Encontro Internacional sobre Gestão Empresarial e Meio Ambiente (ENGEMA).* Rio de Janeiro, 2005. Disponível em <http://www.ie.ufrj.br/gema/pdfs/Artigo_Os_principios_do_Equador_e_o_Sistema_Financeiro-Ferramentas_para_a_Gestao_Socioambiental_Brasileira._VII_ENGEMA.pdf> Acessado em 26 jun. 2019.

3.

ALIGNING CORPORATE SUSTAINABILITY STRATEGY WITH THE GLOBAL OVERVIEW

IVAN DE PAULA RIGOLETTO

Abstract: This article intends to contextualize the evolution of sustainable development and sustainability concepts in the business environment happened in the recent past. It also addresses the theme of corporate strategies focused on sustainability, offering a structured model that is widely used, based on compliance management, risk management and strategies to address global and common issues that are present in the society aspirations.

Keywords: sustainable development; sustainability; strategy; environment; management

1. **Introduction**

I participated as an IPPIC delegate in the United Nations Conference on Sustainable Development in Rio de Janeiro in June 2012 (Rio + 20). At one moment, I had the opportunity to direct a question to Dr Ignacy Sachs and Dr Gro Brundtland about how they had formulated the evolution of ecodevelopment and sustainable development concepts from the 1970s and 1980s to the present day. (SACHS 1986, 1993, 2002, 2007; WCED 1991). Both responded similarly that the concepts remain the same and do not require modifications or changes. They need to be effectively implemented by involving all the actors in the process — governments, civil society, NGOs and the private sector (TV BrasilGov, 2012).

It is worth mentioning that there are different implementation stages of such concepts around the world. Some countries, societies or companies have truly incorporated the concept of sustainable development into their decision-making processes, and they are already reaping very positive results with such a stance. However, others remain completely refractory to sustainable policies and practices in their day-to-day operations. Moreover, there is yet a third category of which the members, such as the United States, are moving slowly but steadily in the direction of seeking a better ecological footprint and governmental changes to stimulate a complete reformation of its conduct.

If we look back in time, it is possible to see that much has happened since the Brundtland Report was published in 1987, including the concept of sustainable investment being associated with other aspects that are not necessarily related to financial return. We will discuss this concept in the next pages.

2. **Where we are in the private sector**

In the business world, the perception of environmental preservation and sustainable development has varied at different times. After the Second World War and until the 1960s, the socio-environmental theme was understood in this atmosphere as a reaction against development, and the notion that pollution is a social problem was denied. This concept changed in the 1970s and 1980s to a command-and-control strategy, focusing on controlling the parameters and reducing the negative impacts of productive activities at the "end of the pipeline". Between the 1980s and 1990s, the themes of pollution prevention and eco-efficiency emerged and migrated to notions of sustainability, life cycle and clean technologies (Carvalho 2008).

Even with the increasing presence of the environmental theme, part of the corporate world still sees sustainable development as a necessary evil, usually associated with costs. It is worth emphasizing that sustainability, instead of being impossible to manage, has been shown in recent years to be a competitive and value-generating aspect for shareholders and the community. Sustainable development, more broadly, can be understood as a moral issue, a legal requirement, and an intrinsic cost of the activity performed (necessary evil) but also as a business opportunity. In addition, the connection between sustainability and value creation must be made by the decision makers. Thus, there is a challenge for companies to operate in a transparent and accountable way since there is a very conscious group of what are called "stakeholders" (Hart 1997).

Sustainable investment in the technical field involves creating value by reducing the consumption of raw materials (and consequently emissions) and developing new technologies that are capable of reaching the base of the pyramid around

the world and can represent improvements for the low-income population without a significant impact on natural capital. In addition, this approach should include other themes present on the agenda today, such as the ecological footprint, climate change and biodiversity protection.

It is important to emphasize that combatting pollution and reducing risks can maximize the profits of an industrial operation. The hypothesis that emissions reduction contributes to improved financial performance in the following year through the reduction of the costs inherent in the consumption of raw materials and disposal or emissions was validated by Hart and Ahuja (1996).

The adoption of clean technologies, involving the optimization of natural capital use and practices of technological innovation, can also be understood as a natural approach based on the reduction of the impacts of productive activities and substitutions for toxic materials in the products. New cutting-edge solutions such as nanotechnology, renewable energy sources and new fuels, as long as they reduce environmental impacts, complement this strategy.

The current context requires action not only in the field of administration but also in the field of concept sedimentation. To become a sustainable society, all sectors must be sustainable, which is the greatest challenge facing the entire global society in the first half of the 21st century — integrating eco-efficiency, sustainability and other broad-based concepts into current management practices to enable the private sector to play its role.

Business management experts, such as Michael Porter, state that there is an inherent trade-off in environmental issues — ecology versus economics — and this situation leads to new rules and negotiated standards. They argue that in the future, natural capital productivity will be directly related to environmental protection and competitiveness, producing eco-efficiency. How industries respond to such challenges is already a leading indicator of global competitiveness.

Companies and sectors that seek innovation as a strategy will certainly find that their initial costs are compensated for by the competitive advantage that is achieved (Porter / Linde 1995).

Regarding the role of governments as public policy-makers, Porter (1991) proposed that increasing rigor in environmental regulation (under the condition that it is efficient) can lead to the development of cleaner technologies and environmental improvements, making processes and products more efficient. Finally, governments should encourage innovations that will certainly have repercussions on competitiveness as a whole, which is the cornerstone of Porter's hypothesis.

Elkington (2001, 2004) proposes a management model with strategies focused on the three pillars of sustainability, the economic pillar, the environmental pillar and the social pillar, which, once properly balanced, lead an activity towards sustainability. This model is a simplification of the ecodevelopment model proposed by Sachs.

The first pillar to be analysed is the economic pillar, which considers operating profit. However, the novelty is the inclusion of natural capital and social capital, thus preventing the application of traditional accounting. In the sustainability concept, profit is also the economic benefit received by society through natural capital. The environmental pillar involves the use of clean technologies, the minimization of natural capital consumption and its associated emissions, the development of environmentally responsible products, and the use of indicators to evaluate performance and product life-cycle considerations — in other words, actions that minimize the adverse impacts of the activities carried out.

The Elkington concept is translated into a graphic representation shown in Figure 1.

Triple bottom line: economically viable, socially fair, and environmentally friendly

Figure 1 — The three components of the *triple bottom line* (Elkington 2001)

Considering this concept, it will always be a great challenge to determine the degree of sustainability of an activity or company, especially when introducing the concept of the three pillars. One can imagine that at the end of a given period, the company that is able to keep the biosphere in the same condition in which it was found (that is, at the beginning of the company's activities) is on the correct path. However, considering the social and ethical dimensions, the complexity of the questions raised increases significantly. In a very simplistic way, the economy and profits can even grow, provided that this growth is not "compensated for" by environmental losses and/or social losses. Sooner or later, this analysis will have to be performed; therefore, the use of strategic planning application and management tools for sustainable investments that consider this model can be understood as an action towards sustainability.

The market interprets these concepts in several ways. One way is the creation of indexes in stock exchanges that consider

companies acting for sustainability to channel investments oriented towards this variable. Companies with outstanding sustainability performance can be grouped into specific indexes on some stock exchanges around the world. The most representative index is the Dow Jones Sustainability Index, which integrates economic, social and environmental criteria, consolidating them into a sustainability indicator. Other indicators exist in several countries, such as the Business Sustainability Index from B3 in São Paulo, Brazil (Rigoletto 2010).

It can be said that the capital market has incorporated sustainability concepts into its indicators, albeit in a very synthetic way, and several investors have begun to consider these concepts in their investment decision-making processes.

3. **A sustainable investment management model**

It is very common for companies to adopt integrated strategies from the creation of committees or directories associated with sustainable development and usually reporting to the ceo. These groups — committees or boards — are intended to develop the company's initial medium- and long-term strategies for sustainable development, focusing mainly on environmental aspects (minimizing the impact of activities carried out), social aspects (ensuring respect for employees and nearby communities) and governance (defining the "sustainability tone" at the top of the organization).

Next, it is important to develop a road map that considers a detailed assessment of the internal and external elements of each process as follows:

Internal perspectives

- Internal *stakeholder* identification
- Profile of teams and people to act sustainably
- Interviews with the executive committee and general managers
- Review of all inputs received by the various channels
- Identification and risk assessment exercises
- Sustainability-related research

External benchmarks

- Review of selected companies' sustainability strategies, main topics addressed and communication channels
- Review of selected companies' strategies related to the themes of climate change, biodiversity, and the circular economy
- Review of ongoing internal environmental, safety and social programmes, including local programmes around the world

External perspectives

- Identification and mapping of external *stakeholders*
- Research and review of external perceptions of the company image

Megatrends integration

- identification of megatrends in sustainability that have the potential to affect the company, such as climate change, biodiversity, or sector-specific issues (e.g., dam safety in the case of mining)
- internal discussions to analyse the relevant megatrends

- alignment of indicators with those proposed in the *UN Global Compact* / *UN Sustainable Development Goals*
- *analysis of the maturity* of safety and environmental procedures based on systems and practices adopted around the world.

Considering these aspects, one can define the steps and/or stages to be accomplished during the elements of the strategy implementation. A widely adopted suggestion is the concept of 3 or 4 steps that can be described as follows:

- *Step 1* — Mandatory assurance that the group complies with current regulations by monitoring regulatory requirements and implementing ongoing assessments and audits. It also involves the establishment of a sustainability policy and the definition of support structures for the various subjects.
- *Step 2* — Environmental risks and impacts reduction, such as soil or water pollution, air emissions, waste, transport, noise, etc.
- *Step 3* — Environmental footprint reduction, improving sustainability results and leading initiatives related to rational natural resources use, climate change, biodiversity, etc. through sustainable investment plans. It also involves establishing partnerships with NGOs and associations with goal and action synergies.
- *Step 4* — Re-evaluate the process in the search for continuous improvement, possibly involving external benchmarks with other companies and, especially, with other sectors of the economy, aiming to expand the horizons and perspectives of action.

Other strategies, based on Value Chain, Porter's Five Forces or PMBOK models, can also be used.

4. **Final considerations**

Sustainability-related strategies are crucial to companies' survival in the present day. Nevertheless, such strategies must be in line with the concepts developed during the 1970s and 1980s, which remain the same. The key is implementing these strategies in an effective and efficient way. The role of governments is to define consistent public policies and ensure *enforcemen*t where necessary.

Finally, the role of civil society is to supervise the entire process, ensuring that it evolves in fact and not only through messages and/or actions without effect, which can be defined only as *greenwashing*.

References

Carvalho, A., Sustentabilidade empresarial. In *Congresso de Atuação Responsável, 12.º, 2008, São Paulo. Anais...* São Paulo: Abiquim, 2008. 17 p.

comissão mundial sobre meio ambiente e desenvolvimento (wced). *Nosso futuro comum.* Rio de Janeiro: Editora da Fundação Getúlio Vargas, 1991. 430 p.

Elkington, J., *Canibais com garfo e faca.* São Paulo: Makron Books, 2001. 444 p.

— "Enter the Triple Bottom Line". In A. Henriques / J. Richardson, org., *The Triple Bottom Line, Does It All Add Up?: Assessing the Sustainability of Business and csr.* London: Earthscan Publications, 2004. cap. 1, p. 1-16.

Hart, S., "Beyond greening: Strategies for a sustainable world". *Harvard Business Review* (Jan-Feb, 1997) 66-76.

— / Ahuja, G., "Does it pay to be green?: An empirical examination of the relationship between emission reduction and firm performance". *Business Strategy and the Environment* 5 (1996) 30-37.

Porter, M.E., "America's Green Strategy". *Scientific American* 264 (1991) 168.

Porter, M.E. / Linde, C.V.D. "Green and competitive: ending the stalemate". *Harvard Business Review* 73/5 (1995) 120-134.

— / — "Toward a new conception of the environment — competitiveness relationship". *Journal of Economic Perspectives* 9/4 (1995) 97-118.

Rigoletto, Ivan de Paula. *Implantação no Brasil do programa "Coatings Care" de prevenção de poluição e de acidentes do setor de tintas.* 2010. Tese de Doutorado proposta à Faculdade de Engenharia Mecânica, Universidade Estadual de Campinas, Campinas, 202 p.

Sachs, I., *Ecodesenvolvimento: crescer sem destruir.* São Paulo: Vertice, 1986. 207 p.

— *Estratégias de transição para o século xxi: desenvolvimento e meio ambiente.* São Paulo: Studio Nobel, 1993. 103 p.

— *Caminhos para o desenvolvimento sustentável.* Rio de Janeiro: Garamond, 2002. 96 p.

— *Rumo à ecossocioeconomia: teoria e prática do desenvolvimento.* São Paulo: Cortez, 2007. 472 p.

tv BrasilGov. Especial Rio+20 - 17.06.12: Entrevista coletiva à imprensa, com dois debatedores do painel da manhã deste domingo (17), detalha o debate sobre economia sustentável na produção e consumo. *Youtube*, 17 jun. 2012. Disponível em <https://www.youtube.com/watch?v=7sqgVg8FrHU&t=7s>. Acesso em: 7 jun. 2019.

4.

THE ESG INFORMATIONS (ENVIRONMENTAL, SOCIAL AND GOVERNANCE) DISCLOSED ON SUSTAINABILITY REPORTING AS A CURRENT PARADIGM FOR FINANCIAL INVESTMENTS IN CORPORATIONS AND ITS REGULATION IN BRAZIL AND THE EUROPEAN UNION

VINÍCIUS MEIRELES LAENDER

Abstract: From the twentieth century onwards, it began a movement to organize the international environmental community, in order to establish an acceptable condition of global growth under an environmental perspective, in substitution of the model from the "Industrial Revolution". Many actions have been taken and after completion of the work of the Brundtland Commission and the Earth Summit (Rio 92), there is an increasingly significant presence in environmental sustainability. With that, the sustainable development and sustainability as a principle are inserted on the international agenda as obligated item for governments, businessman's and corporations, which permitted

the development of the environmental accounting methodologies and sustainability reporting. In March, 1999, the "Global Reporting Initiative — GRI", inspired by "Triple Bottom Line" from Elkington, which means the corporate reporting must consider the environmental, social and economic (ESE) aspects of an activity/corporation on its reporting's platform. The combination of environmental, socials and economic indicators was in force for two decades, when the companies, organizations, governments and investors linked their economic risks to the finance accounting aspects. Recently, there was an evolution of meaning and comprehensiveness of the economic aspect, which is recognized as "governance" and considers on its scope indicators like representation and composition of Boards, gender issues, practices anticorruption, ethics on business, payment of managers, human rights and suppliers' management and others, creating the concept of ESG (Environmental, Social and Governance). On light of this, globally, it has been intensified the association between enterprises, investment and profit, as well the increase of the level of regulation in many countries and economic organizations, like Brazil and European Union.

Keywords: ESG (Environmental, Social and Governance); sustainability reporting; GRI indicators; regulation; Brazil; European Union

Introduction

The Global Reporting Initiative (GRI) and other regional and international organizations provide a methodology called "sustainability reporting" that has been propagated worldwide; its purpose is to parameterize the social, economic and environmental performance of a company at the organizational and local levels. This methodology explores different nuances of polluting activities and seeks to obtain facts and data to assess the performance of the enterprise and the organization as a whole. Several companies throughout the world adhere to this practice, setting an example that has been followed by the national governments of some countries.

The parameterized use of sustainability reporting is an important mechanism to obtain information about corporate performance and to provide strategic and informational management at a systemic level.

The economic indicators of a sustainability report have undergone important changes and conceptual evolutions that concern not only accounting issues but also aggregate variables as a way of evaluating the representation and composition of boards of directors, gender issues, anticorruption practices, business ethics, executive compensation, human rights, supplier management, etc.

This new approach has expanded the perception of the economic indicator of a company, entitled "governance", represented by the letter G in the abbreviation ESG (environmental, social and governance). Currently, ESG information is a strategic and differentiated method of assessment of an organization and one of the main beacons for investors in the financial market.

This paper, taking a qualitative approach to the investigation, aims to assess which measures of ESG information have been used by financial investors to guide their investments and how the regulatory environment in Brazil and the European Union has responded to this worldwide practice.

1. The construction of the sustainability model: reports, methodologies, database and adhesion

In the 1980s, the world observed and experienced a significant increase in incidents involving environmental damage and noted the increasingly disorderly use of the planet's natural resources. Therefore, concern for assessing the global environmental reality emerged to offer preventive and protective measures and public policies and to contain the rapid decline of the environmental quality of the planet.

In 1983, the United Nations (UN) created the World Commission on Environment and Development, commonly called the Brundtland Commission, whose specific goals were revised to address the critical issues related to the environment and reformulate proposals to approach them as well as to

propose new ways of international cooperation in this field to guide global policies and actions.

In 1987, the aforementioned Commission, then presided over by Gro Harlem Brundtland, published the report "Our Common Future", also known as the "Brundtland Report" which, among other aspects, presented the concept of sustainable development, defining it as "development that satisfies the needs of the present without compromising the capacity of the future generations to supply their own needs[1]".

However, it was through the "Earth Summit", held in Rio de Janeiro in 1992, that the subject of sustainable development more clearly entered the debates in the international environmental policy arena[2], including doctrinal divergences regarding to its meaning.

With this, sustainability became a partially guiding principle or paradigm for the preparation and execution of public policies, productive processes and environmental management. Moreover, the increasingly significant presence of sustainability on the environmental agenda at the beginning of the 1990's allowed the development of the environmental audit, reflected in the expansion of systems such as BS7750, EMAS and ISO14000, which began to incorporate aspects of environmental and sustainability nature into their structures[3].

Therefore, the latent demand for environmental data increasingly became complete and specific, a situation that caused the emergence of organizational sustainability reports,

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[1] WCED. *Our common Future.* Oxford: Oxford University Press, 1987.

[2] J. BEBBINGTON. "Sustainable development: a review of the international development, business and accounting literature". *Accounting Forum* 25/2 (2001) 128-157, 2001.

[3] J. BEBBINGTON / R. GRAY. *Environmental Accounting, Managerialism and Sustainability: Is the Planet safe in the hands of business and accounting?*. Centre for Social and Environmental Accounting Research, 2009, 1-16.

initially inspired by the social and environmental reports that arose in the 70's and 80's.[4].

With descriptive and analytical characteristics of companies' social, economic and environmental performance, sustainability reports have experienced vertiginous growth, although they are still restricted to large organizations, with a focus on private aspects and an assessment of the reliability of the disclosure of environmental information [5].

As an example, in March 1999, the Global Reporting Initiative (GRI), founded in the North American city of Boston in partnership with the Tellus Institute and the Coalition for Environmentally Responsible Economies (CERES) and inspired by the "triple bottom line" from Elkington[6], according to which corporate reports should consider the economic, social and environmental (ESE) aspects of an activity/company, introduced the "GRI Guidelines", guidance for voluntary initiatives to disclose information that, once collected and consolidated, certified the sustainability of the company or an activity developed by it[7].

As a consequence of this new paradigmatic environmental reality, corporate organizations worldwide began to periodically publish corporate sustainability reports aiming to prove the environmental impacts caused by their activities[8].

Several companies around the world choose to disclose their data based on a structure developed by the GRI because the

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[4] J. Bebbington / R. Gray. *Environmental Accounting*.

[5] J. Bebbington / R. Gray. *Environmental Accounting*.

[6] John Elkington. *Cannibals with forks: the triple bottom line of 21st century business.* Oxford: Capstone, 1997.

[7] J. Raar. "Environmental initiatives: towards triple-bottom line reporting". *Corporate Communications: An International Journal* 7 (2002) 169-183.

[8] M. Lenzen / C. J. Dey / S. A. Murray. "Historical accountability and cumulative impacts: the treatment of time in corporate sustainability reporting". *Ecological Economics* 51/3-4 (2004) 237-250.

internationally recognized assessment deals with a wide range of realities of a company that operates in the global economy with a methodological development focused on rationalizing the corporate assessment through audit structures suitable for capturing the different indicators of sustainability[9].

In 1997, Netherlands became one of the first countries to require certain companies to publish sustainability reports. In 2003, Netherlands refined its legislation, determining that corporate reports should note all aspects inherent to sustainability and align them with the GRI structure [10].

In France, economic rules adopted in 2001 required that certain companies include in their annual reports information related to environmental and social issues, while countries such as Japan, South Korea and Denmark published guides for the publication of environmental reports [11].

In this context, a study[12] from "Linstock and Imagination" noted that 798 companies listed in Standard & Poor's Global 1200 Index do not have sustainability or environmental reports, while 193 companies had published sustainability reports based on the GRI Guidelines.

According to the "Benchmark Survey of the State of Global Reporting Initiative", in 2001, more than 50% of the world's largest companies published environmental and social reports compared to 44% in 1999 and 39% in 1998; the Internet was the disclosure tool used in 65% of the cases[13].

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[9] M. Lenzen / C. J. Dey / S. A. Murray. "Historical accountability".

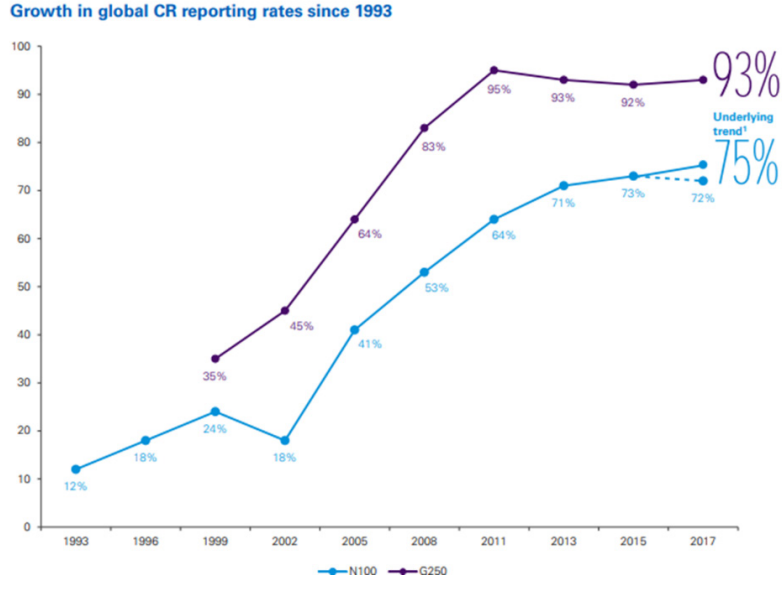
[10] A. S. Gilbert. "The Evolution of Business Reporting: Make Room for Sustainability Disclosure". *Environmental Quality Management* 14/1 (2004) 41-48.

[11] A. S. Gilbert. "The Evolution of Business Reporting". 41-48.

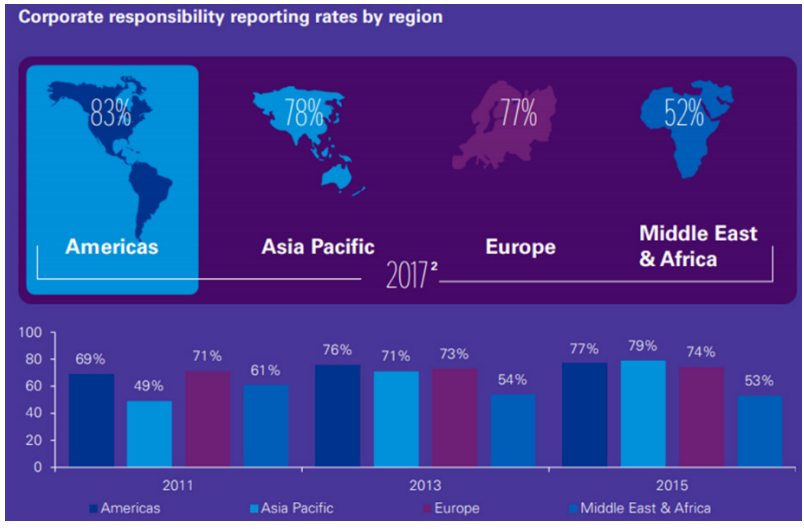
[12] A. S. Gilbert. "The Evolution of Business Reporting". 41-48

[13] M. Line. "The development of Global and Environmental and Social Reporting". *Corporate Environmental Strategy* 9/1 (2002) 69-78.

The charts[14] below demonstrate the exponential growth of the publication of sustainability reports since 1993, either in the sample N100 (the world sample of the 100 largest companies by revenue in each of the 49 countries researched) or in the G250 (the world sample of the 100 largest companies listed in the Fortune Global 500 ranking), including segmentation by continent, between 2011 and 2017:



[14] KPMG Survey of Corporate Responsibility Reporting 2017.



Thus, it can be noted that over time, the number of companies that adhere to the publication of sustainability reports has increased.

2. The evolution of the economic indicator in sustainability reporting and the environmental, social and governance (ESG) concept

The "Guidelines" for sustainability reports from the GRI is a set of principles, standards and guidelines of an indicative and non-mandatory nature intended to help corporate organizations disclose their economic, social and environmental performance.

In March 1999, the "Global Reporting Initiative" (GRI) introduced its "Guidelines", inspired by Elkington's "triple bottom line", according to which corporate reports should consider the economic, social and environmental (ESE) aspects of an activity/company in developing the first platform for a report.

However, through the consolidation process of sustainability reports, the economic indicators of a sustainability report,

until then based on the financial accounting aspects of a company, suffered a significant evolution, incorporating in their framework aspects of the governance of an organization, such as the representation and composition of boards of directors, gender issues, anticorruption practices, business ethics, executive compensation, human rights and supplier management.

With this, the ESG concept became broader, covering the publication of environmental, social and governance information through organizational sustainability reports.

Therefore, when an organization makes its governance report, it considers the representation and structure of the board of directors, for example, whether there is gender parity on the board; whether there is a place for environmental departments or a relationship with the community; and whether the working class, blacks and LGBT people are represented, among other issues.

Regarding anticorruption practices and business ethics, governance is assessed through the verification of measures adopted by organizations, such as the publication of a code of conduct, institutional relationship policies, and compliance rules.

Regarding the compensation of executives, another aspect assessed in the "governance" indicator, the structure of the compensation of managers and its position in relation to the regional, national and international markets is noted.

Likewise, how human rights are internalized in an organization is an important variable for the formation of a high index of governance, as is the management of the suppliers that participate in the production chain of the company disseminating the report. Regarding this aspect, the monitoring and surveillance of agreements, of contracted and outsourced with the same rules applicable to the client or supply tends to show a high level of governance of the organization.

In this regard, the initial conception of the economic indicator uncovered through a company's accounting and financial data demonstrated the incipience of this information and, consequently, the weakness of the report. For this reason, new variables were incorporated into the indicator, in line with the global corporate practice, under the label "governance", which was added to the environmental and social indicators to form the abbreviation ESG — the three letters that are changing the reality and the dynamic of financial investment and regulation worldwide.

3. The ESG indicators, financial investments and financial returns

The ESG indicators have been receiving worldwide attention because they are associated with solid business practices, low capital costs and resilience against risks associated with weather and sustainability. The indicators are a mechanism to assess companies according to their impacts and performance in three fields: environment, society and governance.

The ESG indicators are considered an important measure of how corporate decisions and financial investment decisions are made, in other words, what aspects a contemporary financial investor privileges in a risk analysis when deciding to make a financial investment.

The environmental metrics help investors understand the relationship of the company with the natural world and its dependency on natural resources, for example, whether polluting activities are performed under valid environmental licenses, whether environmental constraints are being fulfilled, whether mitigation measures are being met, whether the corporate activity is performed in the dynamic of the circular economy, whether there is extensive investment in research and development (R&D), whether there is water reuse in the production process, what is the volume of carbon emissions,

whether native vegetation is used in the industrial process, and whether renewable energy sources are used in the industrial facilities.

Social metrics help investors understand potential concerns related to human rights, labour relationships, the community and the public in general, that is, whether there is an institutional relationship with stakeholders, whether the labour relationships are in compliance with the applicable legislation, whether unions and thematic commissions participate in the corporate universe, whether the work environment is salubrious, whether there is transparency in the information shared with the public, whether there is compliance with the rules regarding the employment of people with special abilities, minorities in general and gender issues.

Governance metrics help investors understand the relationship of organizations with market and government agents, for example, whether there is a conduct code of a binding nature, including individuals and legal entities, as part of the supplier chain; whether anticorruption practices have been adopted, and whether the compensation of executives is aligned with the market to inhibit acts of active or passive bribery.

In this scenario, the demand for ESG corporate indicators for decision-making about financial investments is increasing. As of 2016, 82% of the companies in the S&P (Standard and Poor's) 500 produced sustainability reports[15], compared to 20% in 2011. Regarding the investors, 94% aimed to "do good", and 86% wanted to invest in companies that make the world a better place[16].

This behaviour of financial investors is increasingly noted in the markets, which have created their own measurement

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[15] Governance & Accountability Institute, June 2017.

[16] Wells Fargo/Gallup Investor and Retirement Optimism Index, as of December 12, 2017.

metrics of corporate sustainability through indexes that measure companies' adherence to ESG indicators.

One such index is the Corporate Sustainability Index (CSI) [*Índice de Sustentabilidade Empresarial (ISE)*][17], created in 2005 by B3, the Stock Exchange of São Paulo. It is a tool for comparative analysis of the performance of the companies listed in B3 with respect to corporate sustainability based on economic efficacy, environmental balance, social justice and corporate governance.

When the profitability of the CSI from B3 is observed, it is notable that since its creation in 2005, the CSI B3 presented share profitability of +203,8% compared to +175,38% from Ibovespa (closing base on 11/27/2018), an index that follows the value of the shares without the sustainability bias. In the same period, the CSI B3 had even lower volatility: 24.67% compared to 27.46% from Ibovespa.

This means that the disclosure of the ESG corporate indicators has generated financial results that are more expressive than the regular market shares, which allows us to conclude that a company that has satisfactory levels of ESG is valued and capitalized more robustly than a company that operates in the regular market.

Furthermore, it is important to add that is not only the company that discloses the ESG indicator that benefits in the financial market but also the entire community and the environment affected by it because the better the ESG indicators are, the better the environmental, social and governance indicators of an organization tend to be. Therefore, it is a process in which everyone tends to benefit — the company with its appreciation and financing, the environment with its preservation or sustainable use, the society through egalitarian practices and the propagation of human rights,

[17] <www.iseb3.com.br>.

and the governments through more transparent and ethical institutional relationships.

4. The Regulation of ESG indicators in Brazil and the European Union

The adhesion of countries to the ESG indicators in their regulations and legal systems is increasing.

In Brazil, in 1981, the Environmental Policy Law, Law No. 6,938, already provided in item II of Art. 2 that one of its principles is the monitoring of environmental quality. It is not specifically an ESSE or ESG regulation but is a pioneer normative approach to this practice that years later was strengthened and established throughout the world.

Law 13,303/20, better known as the State-Owned Law, provided in Art. 8 that public companies and government-controlled companies should annually disclose integrated or sustainability reports. Therefore, it is an objective rule that currently is already met by large Brazilian companies, such as Petrobras, Banco do Brazil and Banco de Desenvolvimento do Estado de Minas Gerais (BDMG).

In addition, Resolution No. 4.237/20 from the Brazilian Central Bank, which provides guidelines that should be published in the place of business and in the implementation of the Social and Environmental Responsibility Policy by financial institutions, determines in Art. 3, chapter "Governance", that financial institutions should maintain a structure of governance compatible with their size, their business nature, and complexity of the services and products offered as well as the activities, processes and systems adopted to ensure the fulfilment of the guidelines and goals in the policy. On its turn, Art. 5º from the same rule determines that the social and environmental risk should be identified by financial institutions as a component of the several modalities of risk to which they are exposed.

Within the National Electric Energy Agency, Resolution No. 444/200, which provides the Manual of Accounting of the Public Service of Electric Energy, gathers social and environmental information from the concessionaire company of the sector.

Within the National Health Agency, Regimental Resolution No. 01/20 provides in Art. 1., item VIII, that the board of directors is responsible for establishing the sustainability and social and environmental responsibility policy within the National Health Agency.

Within the European Union, Directive 2014/95/EU, which amended Directive 2013/34/EU, requires the publication of sustainability reports by European companies of the largest public interest that have more than 500 employees, which covers 6 thousand companies. The directive determines that the report should contain information about environmental protection, social responsibility and the treatment of employees with respect to human rights, anticorruption and diversity.

In this scenario, it is increasingly likely that the internalization of the ESG indicators through sustainability reports in the legal systems of countries and economic blocs as a mandatory corporate practice will identify or suggest not only the best approach for financial investment but also how to prepare public policies and improve the engagement of society in the ESG areas.

Conclusion

Corporate sustainability reports play a relevant role in the current environmental scenario of the increasing degradation of natural resources and climate change. In this context, the disclosure of information of a social and environmental nature is of great importance because it allows society to be aware of corporate actions related to the well-being of the community and the sustainable use of natural resources.

International organizations and research institutes have developed methodological tools to measure through objective indicators the environmental performance of each company, enterprise or activity that is a potential polluter. With global acceptance, these tools are increasingly being propagated and accepted in countries and economic blocs with a greater vocation for sustainability.

The utility of a corporate sustainability report has been optimized over time, for example, through the insertion of new variables, currently referenced as governance, in the context of environmental, social and governance (ESG) indicators.

Data demonstrate that the ESG indicators have been widely used by financial institutions and investors around the world as important landmarks in decision-making at the moment of investment. For example, there are financial indexes available that measure the results of the companies from the ESG perspective.

In Brazil, the legal system in force requires that public companies report the ESG indicators as an action of corporate transparency. Even so, the Brazilian regulations are presently sparse. In the European Union, the regulation provided through the Directive from the European Commission demonstrates the high level of the requirements.

In this context, the ESG indicators are increasingly present in corporate culture and in the financial market as strategic variables in the decision-making process for financial investments and as references for the adhesion of companies to environmental, social and governance issues.

However, for the ESG indicators to be propagated, strengthened and increasingly reliable, it is necessary to adopt consistent standards for reports; improve the quality, amount and accessibility of ESG data; and review internal policies and standards aiming to promote the ESG indicators.

With these actions, the increase and enhancement of ESG regulation in Brazil, the European Union and other countries

will allow the propagation of this good practice in the context of legal security, thus benefiting all stakeholders.

References

Bebbington, J. "Sustainable development: a review of the international development, business and accounting literature". *Accounting Forum* 25/2 (2001) 128-157.

— / Gray, R. *Environmental Accounting, Managerialism and Sustainability: Is the Planet safe in the hands of business and accounting?*. Centre for Social and Environmental Accounting Research, 2009, 1-16.

Elkington, John. *Cannibals with forks: the triple bottom line of 21st century business.* Oxford: Capstone, 1997.

Gilbert, A. S. "The Evolution of Business Reporting: Make Room for Sustainability Disclosure". *Environmental Quality Management* 14/1 (2004) 41-48.

Gray, R. / Bebbington, J, "Environmental accounting, managerialism and sustainability: is the planet safe in the hands of business and accounting?", in B. Jaggi / M. Freedman, ed., *Advances in Environmental Accounting and Management*, Emerald Publishing, 2000, 1-44.

iso. *International Organization for Standardization.* 2016. Disponível em <http://www.iso.org/iso/home/about.htm>. Acesso em 29 de abril de 2016.

kpmg Survey of Corporate Responsibility Reporting 2017.

Line, M. "The development of Global and Environmental and Social Reporting". *Corporate Environmental Strategy* 9/1 (2002) 69-78.

Lenzen, M. / Dey, C. J. / Murray, S. A. "Historical accountability and cumulative impacts: the treatment of time in corporate sustainability reporting". *Ecological Economics* 51/3-4 (2004) 237-250.

Raar, J. "Environmental initiatives: towards triple-bottom line reporting". *Corporate Communications: An International Journal* 7 (2002) 169-183.

wced. *Our common Future.* Oxford: Oxford University Press, 1987.

II

SPECIAL PART

STRATEGIES AND PUBLIC AND PRIVATE COMPLIANCE INSTRUMENTS

1.

COMPLIANCE AUDITS IN THE PUBLIC SECTOR
WHERE ARE WE GOING?

MATILDE LAVOURAS

Abstract: This article aims to appreciate the contribution of auditing in the public sector to compliance, emphasizing the analysis of public policies and the regulation and control of public expenditure. It also states the importance of compliance in the public sector and of achieving a high level of compliance at all levels.

Keywords: compliance, audit, public sector

1. **Introduction**

The study of the compliance audit in the public sector is not recent, but only in recent decades has it become central in economic studies. The main reasons for this increased attention are the relationship with state activity, the current recognition of the importance of the quality of the auditing

control of public funds and the relationship with the effective implementation of public policies. We will refer here to just one of those aspects: the compliance audit in the public sector.

Therefore, it is mandatory to take into account the relation of this concern to the increase in public spending as a percentage of GDP from the 1930s onwards, above all in the decade that is considered the *golden age of public expenditure:* the 1980s. The design and implementation of public policies have not always taken into account the harmful effects of these policies in various economic and social sectors. In other words, both the design and the implementation of public policies have not always considered all the benefits and all the negative (or positive) implications of certain policies. In some cases, this happened — and still happens today — because some of the economic and social effects were not known or, if known, could not be internalized. In other cases, the effects were not knowable, and in the remaining cases, economic valuations were not properly performed.

From the 1960s onwards, it is possible to observe the accentuation of new ideas related to economic growth, especially those that identified economic stagnation and decline, and an increase in the number of those defending the need to take into account economic and social goals in several sectors and even the non-monetary effects caused by public policies[1]. Public policies would no longer be designed in a restricted or sectoral way and would to some extent take into account the effects in several areas, stressing the importance of sustainable growth. This idea — sustainability — is now well established in the millennial development goals from 2005 onwards and in the sustainable development goals (SDG) of

[1] Technological evolution supported by changes in the ways of measuring the cost-benefit ratio has contributed to a greater degree of internalization of both positive and negative externalities. See Paul SAMUELSON / William NORDHAUS, *Economics*, 19.ª ed., McGraw-Hill, 2010, 34 s.

2030, revealing a growing concern with environmental issues and with social and sociological factors that influences the effects of public policies.

This aim cannot be achieved without establishing levels, guidelines and measures to take advantage of the opportunities that arise during the implementation of projects and, therefore, to optimize the results. On the other hand, risk management is important throughout the process, and although risk and uncertainty are dissimilar, it is very important to obtain the proper attention from the various actors involved in the design and implementation of public policies. However, all these possibilities and the softness of the policies allow greater discretion at the moment of implementation. This greater discretion may obstruct compliance, particularly at the financial level.

The actual diversity of public policies, aggregated to the diversity of public entities' performances and to the diversity of effects, strongly suggests the impossibility of a closed definition of the forms of public action. However, the benefits linked to the variety of actuations are well known and very relevant, and the effects are more visible in situations in which a given behaviour is expected to generate negative global externalities. It is possible to find many examples in environmental policy and in financial market actuations[2].

Our intent in this short summary of the evolution of public expenditure[3] is, on the one hand, to diffuse the idea

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[2] We refer to only two broad areas in which the existence of global public goods is very visible and in which the consumption or supply of those goods leads inexorably to the production of (very strong) global positive and/or negative externalities. It is not possible in most cases — we venture to say in any case — to circumscribe these effects to a particular geographical territory.

[3] Regarding the evolution of public expenditure, see Vito Tanzi / Ludger Schuknecht, "Reforming Public Expenditure in industrialised countries are there trade-offs?", *Working Paper Series (BCE)* 435 (fevereiro de 2005), disponível em <https://www.ecb.europa.eu/pub/pdf/scpwps/ec-

of paradigm change in the design of public policies and, on the other hand, to note the existence of increasing pressure by citizens — persons and legal entities or other equivalent entities — because they are able to recognize the economic and non-economic effects of a given policy or, during a policy change, require some control over the allocation of public revenues. It has become important to design a public policy that assures the maximization of the outcomes expected by public decision-makers and, at the same time, maximizes the benefits to the managed ones.

It is especially important at an early stage of the implementation of this method of investigating public policies to benefit from a model of normative public policies to the detriment of models of positive public policies. Additionally, policy design should permit, at any moment, the implementation of a public spending monitoring and control platform. In models of self-control and external state control — political, administrative or jurisdictional — it is necessary to take into account the scrutiny of society.

2. How can the public sector contribute to high compliance levels in public spending?

One of the usual ways to contain non-compliant behaviours and limit the negative effects of these behaviours is precisely regulation: if standards are adopted that make the economic effects of deviant conduct more visible, the agent can more easily make the necessary adjustments. Those adjustments are needed because the agent is lacking the consciousness of the impacts of a certain behaviour on the level of income, deriving

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bwp435.pdf?404078fb7d9d237953568dd9df0d63fd> e, dos mesmos autores, *Public Spending in the 20th Century: a global perspective*, Cambridge University Press, 2000, 3-49.

from the 'lack of visibility' of the economic effects, and this deficiency can lead to inappropriate conduct.

These rules may, on the one hand, establish exclusions or limit the licit options for action — in a Hobbesian, paternalistic state — or may reward conduct, actions, or results. However, the effectiveness of these regulations is guaranteed only if they are able to shape behaviours to make them more "conducive" to compliance.

Frequently, the choice of a simple and understandable standards design with clear procedures for multiple decisions, but interconnected and not disproportionately bureaucratic, is the most effective model because it is easy to internalize and to fulfil.

Another model is based on the evidence, that is, showing the advantages derived from the adoption of behaviours conforming to the established rules. In addition, if the regulatory norms and sanctioning rules do not always have the expected effects, it is through disclosure and compliance policies that the desired results are achieved, and it is not uncommon for such policies to enable the achievement of much higher compliance levels than initially expected.

3. **Auditing as an important contribution to the individual's benefits maximization**

From the economic point of view, the regulation referred to above tends to establish measures that minimize risks, deal with uncertainty and maximize positive results. In addition, the benefits occur not only in the individual (personal) sphere but also at the collective level[4]. Evidence-based influence serves to make the advantages of minimizing risk knowable.

[4] It is precisely at this point that we find substantial differences in effects: while individualized performance is based on the benefits and the losses that it may cause in the personal sphere, the performance indicated by the state will also allow us to arrive at optimized situations, at least in terms of Pareto's second best.

The maximization of results depends mainly on the ability of a given action to result in global benefits or avoid global losses that were not taken into account in the decision. It would then be sufficient for those subject to the regulatory behavioural standards to comply with them.

It has been confirmed that breaches of the rules typically occur for two reasons: the impossibility of compliance and deliberate noncompliance. In the first case, classified as a 'myopic economics agent', entities are prevented, for various reasons, from knowing the real effects of their actions. The second case includes situations in which, knowing the rules, despite the sanctioning and economic effects of a non-compliant approach, the entity chooses not to conform to the rules.

Within these two forms of action, there are also different forms of attempting to impose compliance *(enforcement)* through policies that, while minimizing costs, lead to voluntary compliance with the purpose of the norms. In such policies, the state or government plays the role of a good giant that maximizes the collective welfare, which is compatible with non-compliant conduct if the established purpose is fulfilled, albeit in a different way[5]. Occasionally, this possibility of (non-)compliance results from the use of elusive or even fraudulent mechanisms, leading to corruption and rewarding acts that should be repudiated. Although such measures are highly efficient from the collective point of view, in areas such as environmental law, allowing the *maximum benefit at minimum overall cost* should be avoided[6].

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[5] The first type of action is adopted in countries with more open political regimes, while the second is usually used in countries with totalitarian political regimes or in situations in which it is necessary to achieve almost immediate adherence to the norms.

[6] It is expected that in these cases, the agents will be able to obtain some economic benefits as well as non-economic advantages that may be useful to them in future situations, such as the support of a certain po-

In contrast, standards may be established that invite management models that maximize the economic benefits of compliance. These norms, which are naturally complex in their *formulae* or in the conduct to be adopted, may, however, generate an excessive expenditure of resources. The adoption of a stance of strict compliance with standards in an attempt to maximize the gains from this fulfilment — budget-maximizing behaviour — implies an expenditure of resources that is excessive from not only the individual but also the collective point of view.

Finally, the option of imposing norms of maximization of benefits in compliance with the standards remains. This maximization occurs not by increasing the yield generated by compliance with the standards but rather by imposing very high pecuniary penalties for non-compliance. In this case, only a few — very few — will be in a position to fail. The sanction for non-compliance is assumed here to be a sort of compulsory pecuniary sanction.

These considerations are fully valid for the implementation of audit policies that can be used both in the public sector and in the private sector. The state should assume a leading role in the design of the rules for public expenditure control and the behaviour of public managers *(lato sensu).* Among these measures, those that stand out are internal control and audit mechanisms and other procedures that not only allow the control of the legality and cost-effectiveness of expenditure but can also be used for the early detection and denunciation of management risks and irregularities.

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litical party or entities that we can generically designate as influencers or creators of public opinion. However, the community is not necessarily impaired, and in some situations, the objective that is not fulfilled is compensated for, even in economic terms, by another with the same economic weight (higher pollution index, more jobs).

However, the definition of rules and procedures is not sufficient; it is also necessary to enforce them. It is therefore imperative to detect and define the risks of non-compliance and to create ways to respond to nonconformities and to avoid the so-called non-compliance costs[7], thus creating conditions for compliance[8].

Precisely because of the need for more effective control, compliance systems were designed to avoid or at least reduce the occurrences of misconduct or white-collar crime[9].

In Portugal, even though there still a long way to go in terms of compliance in the public sector, much has been done. The role played by the auditing bodies for management acts should be highlighted, as these bodies having enabled an increased number of identified budget implementation flaws. However, we must also mention the lack of regulation: the current system is based on the personal responsibility of managers, although in some cases with a right of return from the agent. This condition is seen as an incentive either for the internal adoption of compliance measures and increased surveillance in response to slight or early signs of inappropriate behaviour or for the adoption of risk prevention plans, including plans addressing the risk of corruption[10].

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[7] Damage resulting from non-compliance or inadequate compliance may jeopardize efficient resource allocation.

[8] Compliance allows for a better relationship with the controllers (auditors) and the recipients of the activity, reducing inconsistencies and increasing productivity.

[9] We can also consider to be included in this type of rules those intended to reduce the actions of employees or agents that are contrary to the guidelines of the entities or to the public interest, leading to the violation of rules of budget execution.

[10] It should be noted, however, that according to an OECD study, we have witnessed the increasing implementation of measures to eliminate or reduce corruption in the public sector. However, it is also possible to

Once again, it becomes important to choose the appropriate design of the internal compliance policy. In addition, the suitable model of control will be founded on the definition of the duties of supervision and control, on the establishment of mechanisms that allow the verification of (non-)compliance and on the stratification of who is involved in each procedure. What is required is that everything be controlled, but since it is very difficult to concentrate control in only one person, it is also important to stratify this task in such a way that it does not allow someone to use another person as an excuse for non-compliance.

It should be pointed out that in Portugal, in the public administration, compliance systems were created long ago in anticipation of international developments. This *desideratum* contributed greatly to the creation of the Council for Prevention of Corruption on September 4, 2008, of which the main purpose is, precisely, "prevention of corruption and related offenses."[11] The implementation of a system of control based on high standards of integrity within the public administration can serve as an example for practices to be implemented not only within the sector but also outside it, generating a kind of contagious effect.

It should be noted that these two trajectories have proven to be essential to prevent situations of corruption in public expenditure, either at the stage of choosing the expenditure or the private contractor or at later stages of the procedure, such as liquidation and payment.

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verify that the application of sanctions in cases of non-compliance is relatively low. Cfr. OECD, *Foreign bribery enforcement: What happens to the public officials on the receiving end?,* (2018), OECD Publishing. The same organization estimates that, for example, between 10% and 30% of public expenditure on works are costs attributable to mismanagement or corruption. OECD, *OECD Recommendation of the Council on Public Integrity*, OECD Publishers, available at <http://www.oecd.org/gov/ethics/ OECD-Recommendation-Public-Integrity.pdf>.

[11] Article nr. 1, Regulation nr. 54/2008, September 4th.

The OECD Council on Integrity in Public Administration Recommendation of January 26, 2017,[12] emphasizes the need for an integrated strategy for public management, based on the idea of public integrity, within the public sector. Such a strategy requires a connection with many other areas, with particular emphasis on a culture of integrity, an effective control system and an accountability system, as well as many other areas.

Figure 1 Source: OECD

[12] Available at <http://www.oecd.org/gov/ethics/recommendation-public-integrity/>. The Council for the Prevention of Corruption published a note on this recommendation on May 2, 2018, explaining its "manifest adherence" to the content of the mentioned recommendation. <http://www.cpc.tcontas.pt/documentos/recomendacoes_int/nota_recomendacao_OECD.PDF>. This OECD recommendation is the first to refer specifically and exclusively to public integrity, although some references to these matters can be found in earlier recommendations by the same entity: (a) Recommendation of the Council to improve the quality of State Regulation [C (95) 21 / FINAL], (b) Council Recommendation on OECD Guidelines for the Management of Conflicts of Interest in the Public Sector [C (2003) 107], (c) Council Recommendation on Principles for the Participation of the Infrastructure [C (2003) 23 / FINAL], (d) Council Recommendation on Combating Bribery of Foreign Public Officials in International Business Transactions [C (2009) 159 / REVI / FINAL], Principles of Transparency and Integrity in Lobbying [C (2019) 16], (f) Council Recommendation on Regulatory Policy and Governance [C (2012) 37], (g) Council Recommendation on Governance (C / MIN (2004) 8 / FINAL), available at <http://www.oecd.org/>.

In the European Union countries, there is no uniformity of compliance rules for the public administration, but the compliance audit is carried out by the same entities that audit the public accounts — the so-called Supreme Audit Institutions (SAI), which, in addition to financial audits and performance audits, can perform a compliance audit[13]. Even in cases where there is no independent audit area for compliance, it will eventually be considered to be covered by other forms of audit.

The Portuguese regulation does not provide legal autonomy of this function, but it does not mean that an audit cannot be performed. In addition, the Council for Prevention of Corruption, through Recommendation No. 1/2009 of July 1, 2009[14], recommended to all "maximum governing bodies of the entities managing public money, assets or properties, whatsoever their nature", the adoption, until December 31, 2009, of a risk management plan for corruption and related offenses and, by 2015, the adoption of plans for the prevention of corruption and related offenses, making clear the need to implement management entities. The Law on Organization and Procedure at the Court of Auditors (LOPTC) does not eliminate but rather reinforces the possibility of verifying compliance with legal regulations, not only those of a formal and/or materially financial nature[15].

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[13] Although Supreme Audit Entities are independent bodies, this does not mean that there is no relationship with the representative bodies (Parliaments). On the diversity of audit bodies in the European Union and the diversity of their functions, *see* EUROPEAN COURTS OF AUDITORS, *Public Audit in the European Union — The Handbook on Supreme Audit Institutions in the EU and its Member States*, 2019 Edition, EU Publications Office; and Milagros GARCIA CRESPO, ed., *Public Expenditure Control in Europe: coordinating Audit Function in the European Union*, Edward Elgar Publishing, 2005.

[14] <http://www.cpc.tcontas.pt/documentos/recomendacoes/recomendacao_cpc_20090701.pdf>. The initial deadline was 90 days.

[15] As an example, see the norms of the articles 40th and ff. from LOPTC approved by Regulation nr. 98/97, August 26, in its current draft.

4. **Conclusion**

Public accounts auditing plays an important role in assisting compliance with standards in Portugal and in other European Union countries. In combination with other mechanisms to support risk prevention and management of public money, assets and properties, management entities are an essential tool for the implementation of compliance practices in the public financial area. Notwithstanding the changes that may occur in the way the audits are carried out, and even if the auditors are replaced by mathematical formulae, the adoption of compliance rules in the management of public money will always be of undeniable utility — and in cases of non-compliance even more so.

PUBLIC COMPLIANCE AS AN INSTRUMENT FOR PROMOTING SOCIAL AND ENVIRONMENTAL SUSTAINABILITY

MÔNICA FARIA BAPTISTA FARIA

Abstract: Recently, the Brazilian public administration has been adopting some tools employed by private companies to improve their own corporate governance. The Brazilian public administration has chosen to follow that path, aiming to raise its efficiency standards and address goal deviations, illegal activities and corruption. Among these tools, the application of compliance protocols stands out, involving the establishment of both direct and indirect standards of conduct for the internal politics of public administration. The intent of this article is to investigate how the adoption of compliance by the National Agency of Mining (Agência Nacional de Mineração (ANM)) might affect the social and environmental sustainability of mineral extraction activities in Brazil. Although the compliance programme has not yet been completely implemented by the ANM, the presence of more efficient structural and internal control mechanisms can already be noted, overcoming — at least in part — the deficiencies inherited from the National Department of Mineral Production (Departamento Nacional de Produção Mineral (DNPM)). Therefore, even though it has been only partially implemented, the compliance programme has enabled

advancement towards the more proactive management of monitoring and inspection to achieve social and environmental sustainability.

Keywords: Public administration, public compliance, sustainability, mining.

Introduction

Focusing on efficiency and on avoiding goal deviations and corruption, the Brazilian state has been editing norms for the implementation of integrity politics, among them Law 12.846/2013, which deals with the administrative and civil accountability of juridical persons for actions that undermine the public patrimony (national or foreign), principles of public administration, or international commitments made by Brazil[1].

A similar orientation has been determined for the structuring of indirect public administration under Law 13.303/2016, which, in accordance with the content of the first paragraph of Article 173 of the Constitution of the Federative Republic of Brazil (CFRB/88), establishes mandatory programmes for integrity and corporative governance in public companies, joint stock companies and their subsidiaries under the scope of the Union, the states, the Federal District or the municipalities[2]. The

[1] Such as the oecd Convention on Combating Bribery of Foreign Public Officials in International Business Transactions (1997), the OAS Inter-American Convention Against Corruption (1996) and the United Nations Convention against Corruption (2003).

[2] In the article entitled "Corrupção e compliance nas empresas públicas e sociedades de economia mista: racionalidade das disposições da Lei de Empresas Estatais (Lei 13.303/2016)", Clóvis Alberto Bertolini de Pinho *et al.* claim that the inspiration for Law 13.303/2016 is the establishment of control mechanisms for conflicts of agency to avoid the occurrence of acts of corruption or of malpractice of state companies or misuse of resources. One way to contain those conflicts that has been adopted by the aforementioned law is the imposition of practices of com-

mandate was extended recently by Decree 9.203/2017 to include the federal public administration, autarkic and foundational, in accordance with Ordinance 57/2019 of the General Counsel of the Union (Controladoria Geral da União (CGU)).

These integrity programmes of — which comprise a "set of rules, standards and procedures that shall guide an institution in the market in which it operates, as well as its staff, controlling their activities and warning them about the legal risks of certain actions"[3] — are associated with the concept of compliance adopted in this article. Integrity programmes constitute an extension of typical compliance programmes because, in addition to establishing systematic guidelines for the fulfilment of internal and external rules, they have clear norms dealing with combating corruption (in addition to other irregularities). Therefore, integrity programmes meet the specificities of public administration, which allows them to be labelled *public compliance*.

The goal of this article is to conduct an analysis on the use of the tool of compliance by the public administration of Brazil and to examine what the adoption of this tool by the National Agency of Mining (ANM) — a federal government agency linked to the Ministry of Mines and Energy — entails for the agency concerning the improvement of its capacity to promote social and environmental sustainability. From this perspective, one can assume that the full implementation of compliance consists of a tool of promotion and realization of more efficient and

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pliance and corporative governance as a way to assure that state companies are properly inspected by internal agents and by agents external to the administration of the state society. In: *Revista de Direito Administrativo,* Rio de Janeiro: FGV, 277/1 (jan./abr. 2018) 255.

[3] Ana Clara Viana SOARES / Kamila Vieira da SILVA. "A aplicação da Constituição Federal ao estudo do compliance: contextualização, aspectos relevantes e corrupção". *Revista Fórum Administrativo. Direito Público.* Belo Horizonte: Fórum, 18/2012 (out. 2018) 12.

honest management, befitting the interests of the collectivity.

This article contains two parts. The first part addresses the policy of integrity applied to public administration and the role of the CGU. The second part deals with the federal government's integrity programme applied by the ANM. Regarding the methodology adopted, this article consults legal doctrines and Brazilian norms and laws on the topic of compliance.

PART I — The Policy of Integrity Applied to Public Administration: The Role of the General Counsel of the Union (Controladoria Geral da União (CGU))

Access to information on cases of corruption involving Brazilian public administration in all Federation units (Union, states and municipalities) — including joint stock companies, public enterprises, government agencies and foundations — has given rise to a strong sentiment of indignation within Brazilian society and a yearning for the restoration of the republican principles laid down in CFRB/88 (legality, impersonality, morality, publicity and efficiency). For this purpose, it became essential to invest in "the formation of a process of dis-corruption, in order to ensure the integrity of public resources used to address the needs of the collecctivity"[4]. From that emerged, *public compliance*[5], which is broader and

[4] Grace Maria Fernandes MENDONÇA. "Protocolos de compliance na administração pública e a necessária descorrupção". *Boletim de Notícias Conjur.* Available in: <https://www.conjur.com.br/2019-fev-20/grace-mendonca-protocolos-compliance-administracao-publica>. Last accessed in: June 24, 2019.

[5] Term used by Cláudio C. B. Pinto Coelho in an article entitled "Compliance na administração pública: uma necessidade para o Brasil", in which he claims that in spite of the fact that the 1988 Constitution already expresses the principles that govern public administration in the caput of Article 37, there are other principles (such as ethics, transparency and integrity) that — directly or indirectly — influence the government to bring the "integrity programme"

more specific than traditional compliance.

Through Decree 9.203/2017 and under the conditions of CGU Ordinance 57/2019, the mandatory implementation of integrity programmes has been expanded to encompass all agencies and entities of direct federal public administration, both autarkic and foundational, to comply with the Constitution regarding obedience to administrative principles.

Consonant with the stipulations in Article 19 of the aforementioned decree, the agencies and entities of public administration shall institute integrity programmes to promote the adoption of measures and institutional actions aimed at the prevention, detection, punishment[6] and remedy of frauds and acts of corruption. Each integrity programme shall be organized based on the following guidelines: the commitment and support of the high-level administration; the existence of a department responsible for the programme implementation within the public agency or entity; analysis, evaluation and management of the risks related to the theme of integrity; and the continuous monitoring of the integrity programme attributes. For the latter guideline, it is up to the CGU to establish the necessary procedures for structuring, executing and monitoring the integrity programme.

It should be noted that the CGU is an internal agency of control of the federal government, responsible for activities related to the defence of public property and to increasing

closer to the "system of management of compliance". In: *RDFG: Revista de Direito da Faculdade de Guanambi* 3/1 (julho - dezembro 2016) 77.

[6] It should be highlighted that, in view of compliance's preventive nature, its application is also regarded as an expression of "legal risk" in which the company can suffer as a result of the failure or non-fulfillment of ethical guidelines (Ana Clara Viana Soares / Kamila Vieira da Silva. "A aplicação da Constituição Federal ao estudo do compliance", 12). In this sense, Law 12.846/2013 addresses the administrative accountability of juridical persons for the practice of actions against public administration, national or foreign.

management transparency (through public audits; corruption correction, prevention and combating; and an ombudsman). In addition to those functions, the CGU also practises the technical supervision of agencies that integrate the internal system of control, the correction system, and the system of auditor units of the federal executive branch, providing the necessary legal orientation[7].

The CGU's plan of integrity is a tool of governance so that all actions can be aligned with the agency strategy and a sustainable culture of institutional integrity can be maintained. Its purpose is to further measures of prevention, detection and punishment of corruption and misconduct that might hinder the public body from providing its services to society efficiently and effectively[8].

To allow access to information about the organization, execution and monitoring of integrity programmes within agencies and entities of the federal government (ministries, autarchies and public foundations), the CGU has created the panel "Integridade Pública" (Public Integrity), which allows its users (any people) to filter and compare the development indexes about the Government's actions and goals[9].

It can thus be confirmed that the integrity programmes[10] established by the federal government of Brazil to rule its public

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[7] CGU. Institucional. Available at: <https://www.cgu.gov.br/sobre/institucional>. Last accessed in: June 25, 2019.

[8] CGU. Programa de integridade da cgu. Objetivos, estrutura e fundamentos. Available at: <https://www.cgu.gov.br/sobre/governanca/programa-de-integridade-da-cgu>. Last accessed in: June 24, 2019.

[9] CGU. Painel Integridade Pública. Available at: <http://paineis.cgu.gov.br/integridadepublica/index.htm>. Last accessed in: June 24, 2019.

[10] CGU. CGU concede novo prazo para criação de programas anticorrupção nos órgãos federais. Available in: <https://www.cgu.gov.br/noticias/2019/01/cgu-concede-novo-prazo-para-criacao-de-programas-anticorrupcao-nos-orgaos-federais>. Last accessed in: June 25, 2019.

administration (direct and indirect) are an extension of typical compliance programmes that, owing to their specificities and broadness, are designated *public compliance*.

PART II — Applying the Federal Government's Integrity Programme within the National Agency of Mining (Agência Nacional de Mineração (ANM))

This second part is dedicated to examining what the federal government integrity programme should apply within the National Agency of Mining inner structure as well as how that application might benefit the sustainability of mining activities.

The ANM is a government agency tied to the Ministry of Mines and Energy (MME) within the indirect section of Brazil's federal public administration[11]. Among its attributes, the ANM is assigned the responsibility of observing and executing the orientations and guidelines set by Decree-law 227/1967 (Mining Code) and policies set by the MME. Additional purposes of the ANM are to promote the management of the Union's mineral resources and to regulate and inspect the mining activities of such Union resources in the country.

It is worth mentioning that the ANM was created only in 2017 (by Law 13.575/2017), which resulted in the dissolution of the older National Department of Mineral Production[12] (created in 1934). For that reason, the *modus operandi* of how the neoliberal model of the 1990s guided Brazil's economic

[11] Agência Nacional de Mineração. Institucional (ANM). Disponível em: <http://www.dnpm.gov.br/acesso-a-informacao/institucional>, acessado em 03 jun 2019.

[12] The National Department of Mineral Production (dnpm) had been created in 1934, but the Law 8876/94 elevated it to the condition of federal autarchy in 1994.

development has been criticized, especially in relation to activities of mineral extraction and production. Although the Vale do Rio Doce Company (the major Brazilian state-owned mining company) had been privatized in 1997, such mining activities were being performed without proper planning, without following a regulation that enabled them to adapt to the constitutional framework of environmental protection, and without the operation of a regulatory agency capable of controlling and inspecting the mining activities taking place.

This situation, in addition to the fact that the Mining Code of 1967— a code that had as its most important goal the achievement of economic growth with little concern about the environment — was in force meant that more than enough elements existed to hamper the sustainable development of mining activities in Brazil.

Moreover, the TCU pointed to the ANM as the second most vulnerable federal agency in the country, exposed to fraud and corruption due to its great regulatory powers and its few internal mechanisms of control aimed at combating irregularities. In short, there is a series of factors that can partially explain the unfolding of many social and environmental tragedies related to mining activities in Brazil.

However, according to research coordinator Renata Normando, TCU's external control federal auditor, the ANM's poor audit results do not necessarily mean that the ANM is involved in irregularities. In her view, what the study reveals is the ANM's lack of internal control mechanisms capable of preventing and discovering cases of fraud and corruption, yet this means not that corruption exists within the ANM but rather that it is more exposed to the risk of such problems[13].

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[13] BBC NEWS. *Fiscalização de barragens: órgão federal de controle é o 2º mais exposto a fraudes e corrupção, diz TCU*. Disponível em: <https://www.bbc.com/portuguese/brasil-47211131>.

Incidentally, in a decision delivered by a court proceeding on the survey of risks inherent to Financial Compensation for Mineral Exploitation (Process TC 017.199/2018-2, tried February 20, 2019), the TCU addressed many questions related to the ANM and issued a series of caveats regarding ANM functions[14]. On the issue of risk management, the TCU believed that the National Department of Mineral Production (DNPM) did not have a policy of identification, evaluation, reduction and control of risks but that the installation of the agency could lead to a change in this reality. The TCU claimed that despite its creation, the ANM had not yet been fully implemented, and the transition from the DNPM to the ANM had negatively interfered in the evaluation of aspects intrinsic to accountability, mainly owing to the absence of an internal statute and a collegial board of properly nominated directors. In his vote[15], the rapporteur of the case (Minister Aroldo Cedraz) pointed out that in spite of all inspections, for at least 10 years, the TCU had repeatedly issued warnings to the appropriate public agencies regarding serious problems, weaknesses, nonconformities and difficulties faced by the old DNPM (succeeded by the ANM) in many of its performance areas. Such problems are owing to a shortage of qualified human resources and information technology resources, to problems related to the grant of mining rights, to the inspection of the collection of Financial Compensation for Mineral Exploitation (CFEM), and to the inspection of tailing

[14] TCU. Processo tc 017.199/2018-2. Relatório de levantamento de riscos cfem. 2019, p.46-47. Available in: <https://portal.tcu.gov.br/data/files/0d/e3/b3/54/c2b29610dcee6196f18818a8/017.199-2018-2-ac%20-%20levantamento%20cfem_anm.pdf>. Last accessed in June 10, 2019.

[15] TCU. Processo tc 017.199/2018-2. Voto. 2019, p.5. Available in: <https://portal.tcu.gov.br/data/files/0d/e3/b3/54/c2b29610dcee-6196f18818a8/017.199-2018-2-ac%20-%20levantamento%20cfem_anm.pdf>. Last accessed in June 10, 2019.

dams. One should remember the tragedies triggered by the disruption of mining tailing dams in the municipalities of Mariana and Brumadinho (both in the state of Minas Gerais) — tragedies that compelled public agencies and their government supervisors to recognize the necessity for change in their operations.

In the latter regard, the opinion issued by the Senate's Parliamentary Commission of Inquiry (CPI) — held to investigate the causes and those responsible for the disruption of the tailing dam "Mina Córrego do Feijão" in Brumadinho (MG) — also warned that the ANM needed to create a new inspection pattern to prevent any direct economic ties between the auditing company and the mining company being inspected. Similar to what the TCU said in its decision, the Senate CPI opinion also recommended that the ANM should have a capacitation plan to "quickly raise the quantity and quality of its technical body"[16].

Thereby, the application of compliance protocols is indispensable to the ANM so that it can have an adequate structure and, consequently, more efficient performance in inspecting and monitoring economic activities as well as combating irregularities, goal deviations, illegalities and corruption.

The online portal of the CGU Integrity Programme[17] compiles 8 mandatory goals to be achieved by the members of the overall federal public administration, including (1) the appointment of a unit of integrity management; (2) the definition of an internal flow to identify any case of nepotism; (3) the establishment of

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[16] G1. Minas Gerais. *CPI de Brumadinho propõe indiciamento de 14 funcionários da Vale e da tüv süd.* Available in: <https://g1.globo.com/mg/minas-gerais/noticia/2019/07/02/relator-da-cpi-de-brumadinho-pede-indiciamento-de-12-funcionarios-da-vale-e-da-tuv-sud.ghtml>. Last accessed in July 2, 2019.

[17] CGU. Painel de Integridade. ANM. Available in: <http://paineis.cgu.gov.br/integridadepublica/index.htm>. Last accessed in June 24, 2019.

a commission of ethics; (4) the definition of an internal flow to analyse consultations concerning conflicts of interest; (5) the definition of an internal flow to deal with complaints or accusations; (6) the designation of a sector responsible for conducting disciplinary proceedings; (7) the performance of surveys about risks to integrity; and (8) the approval of a plan of integrity. Of those eight goals, as of the date of this article's completion, the ANM had fulfilled only the first, the third, the fourth and the sixth goals.

Therefore, the ANM must seek the effective and practical implementation of compliance protocols in accordance with CGU Ordinance 57/2019 so that the ANM can establish new conditions for its own internal administrative structure and for its managers, staff and collaborators to abide by. Unfortunately, one can receive the impression that some compliance programmes enacted by private companies are but a facade, as one could conclude after witnessing the recent social and environmental tragedies that took place in the counties of Mariana and Brumadinho in Minas Gerais[18].

[18] The disruption of the mining tailing dams in Mariana (2015) and in Brumadinho (2019) in the state of Minas Gerais caused widespread territorial devastation. Due to the violent impact of the wave of mining waste that came from the collapse of the Fundão Dam — controlled by Samarco Mineração S.A. in partnership with Vale s.a. and the Anglo-Australian company bhp Billiton — the district of Bento Rodrigues (within the municipality of Mariana) simply vanished in November 5, 2015. The mud of the mining waste killed 19 people, and all survivors were left homeless. After the tragedy in Brumadinho, 246 corpses were identified, 23 people are still missing, and the environmental damage was unprecedented, devastating native woodlands and contaminating the waters of the river Paraopeba, rendering it unusable for human or animal consumption. About this topic, read: Luciano M. N. Lopes. "O rompimento da barragem de Mariana e seus impactos socioambientais". *Periódicos PUC Minas.* Sinapse Múltipla, 5/1 (jun 1-14, 2016); E. Gonçalves / T. Vespa / N. Fusco, "Tragédia Evitável". *Revista Veja.* Minas Gerais, Edição 2.452, 48/46 (2015) 70-71; G1. *Brumadinho: bombeiros encontram mais um corpo em área atingida por lama.* Disponível em: <https://g1.globo.com/mg/minas-

These two tragedies involved multinational companies of worldwide renown in the mining sector. The companies involved had compliance programmes, as required by law, but the programmes did not demonstrate the desirable efficacy in practical terms. The same inefficacy is not expected of a federal government agency such as the ANM.

Conclusion

In light of the problems that have been exposed, in spite of notable efforts currently underway to improve the ANM's internal structure, the current state of the National Agency of Mining is still fragile in terms of the necessary efficacy of its policies. The ANM seeks to enforce the sustainability of all the economic activities under its regulatory jurisdiction. For that reason, it is important that structural mechanisms be installed as soon as possible. The ANM must also be endowed with a larger amount of specialized professionals so that the government agency can at least work at the reasonable capacity required for the proper execution of its duties.

It is expected that once the setting, implementation and execution of the integrity programme (public compliance) are complete — including the management of risks in each public administration entity —, the ANM will obtain the capacity to fully exercise its powers. More specifically (but not only), it is expected that the ANM will enhance its power to inspect mines and mining waste dams, monitoring them appropriately to avoid or at least substantially mitigate the risks of new social and environmental tragedies.

Of course, this article does not presume to go beyond a succinct approach to the subject. It seeks only to call attention

-gerais/noticia/2019/07/04/brumadinho-bombeiros-encontram-maisum--corpo-em-area-atingida-por-lama.ghtml>. Last accessed in July 4, 2019.

to the need for Brazil's public administration to uninterruptedly seek to improve its compliance procedures, both in practical terms (through the performance of companies and regulatory agencies) and through incentives for academic research on the topic of compliance.

Bibliography

ANM. Agência Nacional de Mineração. *Institucional.* Disponível em: <http://www.dnpm.gov.br/acesso-a-informacao/institucional>, acessado em 03 jun 2019.

BBC NEWS. *Fiscalização de barragens: órgão federal de controle é o 2º mais exposto a fraudes e corrupção,* diz TCU. Disponível em: <*https://www.bbc.com/portuguese/brasil-47211131*>.

BRASIL. *Constituição da República Federativa do Brasil.* Disponível em: <*http://www.planalto.gov.br/ccivil_03/constituicao/constituicaocompilado.htm*>.

— *Decreto 9.203/2017 dispõe sobre a política de governança da administração pública federal direta, autárquica e fundacional.* Disponível em: <*http://www.planalto.gov.br/ccivil_03/_Ato2015-2018/2017/Decreto/D9203.htm*>.

— *Decreto-lei 227/1967 dá nova redação ao Decreto-Lei nº 1.985 (Código de Minas) de 29 de janeiro de 1940.* Disponível em: <https://www2.camara.leg.br/legin/fed/declei/1960-1969/decreto-lei-227-28-fevereiro-1967-376017-normaatualizada-pe.html>.

— *Lei 12.846/2013 sobre responsabilização administrativa e civil de pessoas jurídicas pela prática de atos contra a administração pública, nacional ou estrangeira.* Disponível em: <http://www.planalto.gov.br/ccivil_03/_ato2011-2014/2013/lei/l12846.htm>.

BRASIL. *Lei 13.303/2016 sobre o estatuto jurídico da empresa pública, da sociedade de economia mista e de suas subsidiárias, no âmbito da União, dos Estados, do Distrito Federal e dos Municípios.* Disponível: <http://www.planalto.gov.br/ccivil_03/_ato2015-2018/2016/lei/l13303.htm>.

BRASIL. *Lei 13.575/2017 cria a Agência Nacional de Mineração (ANM); extingue o Departamento Nacional de Produção Mineral (DNPM).* Disponível em: <http://www.planalto.gov.br/ccivil_03/_Ato2015-2018/2017/Lei/L13575.htm>.

— *Portaria 57/2019 altera a Portaria CGU* nº 1.089/ 2018, que estabelece orientações para órgãos e entidades da administração pública federal direta, autárquica e fundacional na adoção de procedimentos para a estruturação, a execução e o monitoramento de seus programas de integridade. Disponível em: <http://www.in.gov.br/materia/-/asset_publisher/Kujrw0TZC2Mb/content/id/58029864/do1-2019-01-07-portaria-n-57-de-4-de-janeiro-de-2019-58029797>.

CGU. *CGU concede novo prazo para criação de programas anticorrupção nos órgãos federais.* Disponível em: <https://www.cgu.gov.br/noticias/2019/01/cgu-concede-novo-prazo-para-criacao-de-programas-anticorrupcao-nos-orgaos-federais>.

— *Institucional.* Disponível em: <*https://www.cgu.gov.br/sobre/institucional*>.

CGU. *Painel de Integridade.* ANM. Disponível em: <*http://paineis.cgu.gov.br/integridadepublica/index.htm*>.

— *Painel Integridade Pública.* Disponível em: <http://paineis.cgu.gov.br/integridadepublica/index.htm>.

— Programa de integridade da CGU. *Objetivos, estrutura e fundamentos.* Disponível em: <*https://www.cgu.gov.br/sobre/governanca/programa-de-integridade-da-cgu*>.

COELHO, Cláudio C. B. Pinto. "*Compliance* na administração pública: uma necessidade para o Brasil". *RDFG: Revista de Direito da Faculdade de Guanambi* 3/1 (julho — dezembro 2016).

G1. *Brumadinho: bombeiros encontram mais um corpo em área atingida por lama.* Disponível em: <https://g1.globo.com/mg/minas-gerais/noticia/2019/07/04/brumadinho-bombeiros-encontram-maisum-corpo-em-area-atingida-por-lama.ghtml>.

— Minas Gerais**.** *CPI de Brumadinho propõe indiciamento de 14 funcionários da Vale e da TÜV SÜD.* Disponível em: <https://g1.globo.com/mg/minas-gerais/noticia/2019/07/02/relator-da-cpi-de-brumadinho-pede-indiciamento-de-12-funcionarios-da-vale-e-da-tuv-sud.ghtml>.

GONÇALVES, E. / VESPA, T. / FUSCO, N. *Tragédia Evitável. Revista Veja.* Minas Gerais, Edição 2.452, 48/46 (2015) 70-71.

Lopes, Luciano M. N. "O rompimento da barragem de Mariana e seus impactos socioambientais". *Periódicos PUC Minas.* Sinapse Múltipla, 5/1 (jun 1-14, 2016).

Mendonça, *Grace Maria Fernandes*. "Protocolos de *compliance* na administração pública e a necessária descorrupção", *Boletim de Notícias Conjur* (2019). Disponível em: <*https://www.conjur.com.br/2019-fev-20/grace-mendonca-protocolos-compliance-administracao-publica*>.

Pinho, Clóvis Alberto Bertolini de *et al*. "Corrupção e *compliance* nas empresas públicas e sociedades de economia mista: racionalidade das disposições da Lei das Empresas Estatais (Lei nº 13.303/2016)". *Revista de Direito Administrativo*, Rio de Janeiro: FGV, 277/1 (jan./abr. 2018) 1-442.

Soares, Ana Clara Viana / Silva, Kamila Vieira da. "A aplicação da Constituição Federal ao estudo do *compliance*: contextualização, aspectos relevantes e corrupção". *Revista Fórum Administrativo. Direito Público*. Belo Horizonte: editora Fórum, 18 (2012), out 2018.

TCU. Processo TC 017.199/2018-2. *Relatório de levantamento de riscos CFEM*, 2019. Disponível em: <https://portal.tcu.gov.br/data/files/0D/E3/B3/54/C2B29610DCEE6196F18818A8/017.199-2018-2-AC%20-%20LEVANTAMENTO%20CFEM_ANM.pdf>.

3.

THE SUSTAINABILITY TAXONOMY OF THE EUROPEAN UNION

ON THE WAY TO THE OASIS OF RESPONSIBLE INVESTMENT

MARIA JOÃO PAIXÃO

Abstract: The environmental issue is now, perhaps more than ever, at the heart of the international legal and political debate. In the new century, governments around the world have made efforts to follow a more sustainable path for the planet, by adhering to international instruments such as the Paris Agreement and the United Nations 2030 Agenda for Sustainable Development. In this context, the European Union has been deepening its involvement in the environmental field. Recognising the absolute need for investment in the field of sustainability, without which the targets set are unlikely to be achieved, the European Commission presented, in 2018, an Action Plan for Sustainable Finance. The implementation of the Plan involves, first of all, the creation of a taxonomy for sustainable activities. The establishment of this taxonomy will provide the certainty and security essential for the successful implementation of other actions and European policies, thus assuming itself as a core element of the process of converting the current financial system into a stable and sustainable system.

Keywords: sustainability; taxonomy; responsible investment.

1. **Financial system and sustainability**

1.1. ***Climate change: the ignored threat to the financial sector***

Climate change is currently a *hot topic* internationally. Concerns about climate change have been growing exponentially, accompanying the increase in technical and scientific knowledge about the matter and the worsening of anthropogenic environmental consequences, which are currently more notorious than ever. In this context, a global movement supporting environmental, economic and social sustainability has grown, above all through the impulses of the "*millennial* generation".

More recently, the environmental issue has begun to receive attention in the financial sector. Studies and analyses on the subject have shown that the environment and the financial sector are related in a circular process: environmental sustainability can be achieved only with the contribution and commitment of the financial sector, and financial stability can be only achieved in the context of environmentally sustainable growth. On the one hand, the direction of capital for environmentally sustainable activities will be central to the process of climate change mitigation and the protection of biodiversity and ecosystems. On the other hand, environmental risks have strong macroeconomic and financial impacts, so the resolution or mitigation of major climate problems will be indispensable for economic and financial stability. It is therefore understandable why the High-Level Expert Group on Sustainable Finance nominated by the European Union established, in its Final Report, two urgent imperatives: to improve the contribution of finance to sustainable and inclusive growth and to enhance financial stability by incorporating environmental, social and governance factors into the investment decision-making process — the symbiosis is evident.

The reach of the climatic and energetic targets set at the international level depends on a strong investment, which, by its size, cannot come from, even for the most part, the states' budgets or from international or supranational organizations. In the European Union area alone, there is an estimated annual investment gap of almost 180 billion euros — without the investment deficit being close, the European Union will not be able to meet the objectives it has set until 2030. It should be noted that the non-achievement of the targets defined will mean a considerable increase in the probability of revision of the targets, with unpredictable and potentially catastrophic consequences, or in the probability of the occurrence of an abrupt transition to a sustainable and low-carbon economy, with serious losses, particularly economic and financial, for the actors involved[1]. In fact, the International Energy Agency estimates that the "carbon budget" (amount of greenhouse gases present in the atmosphere compatible with the objective of maintaining global warming below 2° C) will be exhausted around 2040, so after that date, the emissions would have to be below zero.[2]

In the exposed terms, environmental and climatic risks, although not properly considered until now, have had increasingly profound impacts on the financial sector. First, the upsurge in natural disasters implies increased costs for insurance companies. In addition, banks will also be exposed to greater losses due to the lower profitability of companies dependent on fossil fuels or scarce resources or exposed to abnormal meteorological events. Investors, in turn, see the predictability and security of the markets affected by the

[1] EUROPEAN SISTEMIC RISK BOARD, "Too late, too sudden: Transition to a low-carbon economy and systemic risk", *Reports of the Advisory Scientific Committee* 6 (2016).

[2] EUROPEAN SISTEMIC RISK BOARD, "Too late, too sudden".

vulnerability of business models to environmental issues and by the uncertain impact of regulatory policies on economic activities. It should be noted that close to half of the risk exposure of euro-area banks is directly or indirectly linked to environmental risks[3]. Among the top ten global risks, environmental risks are predominant, therefore assuming the position of the greatest threats to the real macroeconomic context[4]. In another perspective, sustainable investment can constitute, by itself, a smart investment since the association of assets with positive environmental factors can mean value creation. In fact, a positive correlation between the consideration of environmental, social and governance factors and the financial performance of companies has been proven, with the correlative valuation of the respective assets — and the growth of this trend is predictable[5].

1.2. ***Responsible investment and financial sustainability***

Considering the framework presented, the urgency of a greater (effective) interconnection between the financial sector and the environmental, governance and social factors is clear. It is exactly this affinity that underlies the concept of "*sustainable (or responsible) investment*": a process whereby environmental, social and governance considerations[6] are integrated into the

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[3] Stefano Battinson *et al.,* "A climate stress-test of the financial system". *Nature Climate Change* 7/4 (2017) 283—288.

[4] world economic forum, *The Global Risks Report 2018*, Génova.

[5] Gunnar Friede / Timo Busch / Alexander Bassen, "esg and financial performance: aggregated evidence from more than 2000 empirical studies, *Journal of Sustainable Finance & Investment* 5/4 (2015) 210-233.

[6] More information on environmental, social and governance factors ("ESG factors") can be found on the institutional website of the "Responsible Investment Principles", a joint initiative of a group of investors and the UN Environmental Programme: <https://www.unpri.org/>.

decision-making of investment, leading to greater investment in sustainable and long-term activities. Sustainable investment will be absolutely cardinal for achieving the desired economic objectives, social inclusion and environmental regeneration. Only by including environmental, social and governance dimensions in market practices, investment decisions, production processes and regulatory frameworks will it be possible, on the one hand, to close the funding gap in sustainable development (indispensable for an effective and timely approach to the environmental issue) and, on the other hand, to protect the financial system from the impacts of climate change and the forced regulatory changes implemented to address this phenomenon. Moreover, this is the path that will make it possible to build a strong and solid financial system in the long term, so it is imperative to deconstruct the (wrong) idea that responsible investment is less profitable.

Considering the urgency and desirability of the transition to a low-carbon, circular and efficient economy, the European Union has been engaged in the construction of the "*most* sustainable financial system in the world"[7].

2. **European Union Action Plan: Financing Sustainable Growth**

2.1. ***Framing***

The centrality of environmental concerns in the current international debate is illustrated by the adoption, between 2015 and 2016, of the Paris Agreement on Climate Change and the United Nations (UN) Agenda 2030 for Sustainable Development, articulated around 17 sustainable development

[7] EUROPEAN COMMISSION, *Final Report 2018 by the High-Level Expert Group on Sustainable Finance*.

goals. Through these instruments, governments from all over the world have committed themselves to sustainable practices for the planet and the economy, binding themselves to the implementation of the necessary efforts to create a new global model.

In the community area, sustainability has long played a preponderant role in the European Union project, being recognized by the Treaties in its economic, social and environmental aspects[8]. In the framework of international obligations on the matter, especially the limitation of global warming to a value below 2° C, the transition to a circular, low-carbon and efficient economy has become an imperative for the Community. Recognizing the key role to be played by the financial system in this area, at the end of 2016, the Commission appointed a High-Level Expert Group on Sustainable Finance that is responsible for drafting the intervention plan in the financial system with the objective of (re)targeting the system for sustainability. On 31 January 2018, the Expert Group published its Final Report[9], which stipulates the two guiding purposes of the strategy: 1) to increase the contribution of finance to sustainable and inclusive growth and 2) to strengthen financial stability by incorporating environmental, social and governance factors into the investment decision-making process. Based on the recommendations made in the report, the European Commission drafted and presented an Action Plan for sustainable finance in March 2018.

2.2. ***Guidelines and Actions***

The European Commission established the following cardinal objectives of its Action Plan:

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[8] *Vide*, in particular, the arts. 3º/3 and 5 and 21º/2/D) and F) of the Treaty on European Union

[9] EUROPEAN COMMISION — *Final Report 2018 by the High-Level Expert Group on Sustainable Finance*.

- Reorient capital flows towards sustainable investment;
- Manage financial risks stemming from climate change, resource depletion, environmental degradation and social issues;
- Foster transparency and long-termism in financial and economic activity.

First, the Action Plan is intended as an instrument to assist in addressing the annual investment deficit that is necessary for the transition to a circular, low-carbon and resilient economy. It is recognized that the value of 180 billion euros required for the achievement of the European Union's climatic and energetic objectives by 2030[10] cannot be provided, exclusively or in the majority, by the public sector. The EU has pledged to apply at least 20% of its budget to measures directly relevant to the climate, and most of the states are equally committed to building a more environmentally friendly system. However, the (un)success of the restructuring of the system will depend on the private investment obtained in this context — hence the need for measures to achieve capital redirection.

Second, the Commission intends to ensure, along with environmental protection, the stability of the financial system. Today, it is recognized that climate-related phenomena are *also* risks for the economy and for the financial system — investigations and research on the issue are increasingly incisive. Thus, the post-financial crisis reform of the system must integrate environmental, social and governance factors into the processes and market dynamics.

Third, the Action Plan also has a governance dimension. It is understood that the activity of participants in the market should be transparent and based on a long-term vision under

[10] Among which we highlight the significant reduction of greenhouse gas emissions with the aim of limiting global warming to below 2° C (preferably 1.5 º C).

penalty of making the environmental and social objectives unfeasible. Sustainability and long-term vision are inseparable, and it is vital to reduce unjustified pressure to obtain short-term returns and to provide transparent information about the environmental risks of activities.

To achieve the stated purposes, the Commission proposes a set of actions to be carried out in a phased and articulated way:

- Objective of *reorienting capital flows* towards a sustainable economy:
  - Action 1: Establish an EU classification system (taxonomy) for activities in the realm of sustainability;
  - Action 2: Create standards and labels for "green" financial products;
  - Action 3: Foster investment in sustainable projects;
  - Action 4: Incorporate sustainability when providing financial advice; and
  - Action 5: Develop sustainability benchmarks.
- Objective of *mainstreaming sustainability into risk management*:
  - Action 6: Integrate sustainability into credit ratings and market research;
  - Action 7: Clarify institutional investors' and asset managers' duties in terms of sustainability; and
  - Action 8: Integrate sustainability into prudential requirements.
- Objective of *fostering transparency and long-term vision*:
  - Action 9: Strengthen sustainability disclosure and accounting rule-making; and
  - Action 10: Promote sustainable corporate governance and mitigate the short-term vision in capital markets.

3. European Union sustainability taxonomy: the "kick-off"

3.1. *Required antecedence of Action 1*

Action 1 is, to a certain extent, the heart of the Action Plan. The transition to a sustainable economy depends primarily on a relative consensus on what is meant by "sustainable". The financial sector supports the economy by financing economic activities, and the aim of the European Union Action Plan is to direct this financing towards *sustainable* economic activities in order to restructure the system, making it more consistent with the environmental objectives. As is easily understood, clarity about what activities can be considered "sustainable" is a prerequisite for this strategy.

In these terms, Action 1, designed to establish a classification system of sustainable activities, is considered basilar and a condition, direct or indirect, of the implementation of the other actions. It is easy to conclude that the remaining nine actions all presuppose the precise definition of what economic activities, and, inherently, what investments, are considered sustainable.

In addition to this dependency, which runs through the various actions of the Plan, the relevance of creating a taxonomy for sustainable activities stems from various studies and reports on responsible investment, which have in common exactly the prioritisation of the development of a classification system. This taxonomy has, for experts in the field, a wide range of potential uses, such as identifying eligible assets for funding under "green" or "sustainable" Community funds; allowing investors to understand the degree of sustainability of their portfolios; providing economic agents and investors with decisive information so that they can design their investment decisions based on long-term sustainability;

combating "greenwashing"[11]; and enabling the consideration of sustainability for asset value setting.

Within the European single market, the relevance of the sustainability taxonomy is further strengthened. In fact, given the international commitments of the states, it would be expected that at the national level, authorities would begin to explore the creation of labels for sustainable financial products and eventually create taxonomies of their own. This scenario would generate unquestionable challenges. First, it would exacerbate national barriers to the functioning of the single market. Furthermore, it would mean the fragmentation of the market because various competition problems would arise, hampering investors and economic operators in particular. The barriers and fragmentation of the market would discourage cross-border investments, as they would entail increased information costs for investors who want to invest in foreign legal systems. Moreover, this scenario would be harmful for economic operators, as it would become more difficult to attract capital for sustainable activities, either because investors would be less receptive to investing due to the asymmetry of information or because the operators would incur increased costs to present the same activity as sustainable in various legal systems. Finally, the absence of a Community taxonomy would entail deeper regulatory divergences, which would discourage economic operators from expanding their businesses across borders. All these factors would result in the reduction of investor confidence and the obstruction of the functioning of the market, damaging the goal of the growth of sustainable finance.

[11] "Greenwashing" means the promotion or presentation of a product or activity as "green", "ecological", "sustainable" or "eco-friendly" when, however, such product or activity has negative environmental impacts. Paraphrasing the definition established on the Action Plan (page 7, footnote 26), it means "the use of marketing to portray an organisation's products, activities or policies as environmentally friendly when they are not".

3.2. ***Chronology***

Recognizing the necessary precedence of the creation of a European taxonomy in relation to the implementation of the other actions, the Commission intends to execute the Action Plan exactly through the creation of this taxonomy. However, by stressing the complexity and the highly technical nature of the process, the EU 'executive arm' recognizes the necessity of an extended period of time to establish a solid system of classification, encompassing environmental and social factors. Therefore, the Commission proposes a staged approach. In the first phase, a taxonomy will be created on mitigation and adaptation to climate change activities, including some environmental activities. Subsequently, the taxonomy of the Union will cover other activities with positive environmental impact and social activities.

For the concrete implementation of Action 1, the following event chain is predicted:

1. Presentation of a *legislative proposal* aiming to establish the legal basis of the taxonomy, whereby tools to develop the classification system will be created;
2. Establishment of a *technical group of experts* in sustainable finance;
3. Publication of the *report of the expert group* with a first version of the taxonomy based on an enlarged consultation with stakeholders; and
4. Development and regular updating of the taxonomy through *delegated acts*.

To date, the outlined steps have been carefully followed: as of the second quarter of 2018, a proposal for a regulation on the matter had been submitted, and the expert group, whose report was to be made available by the end of June 2019, had been appointed.

3.3. ***Proposal for a regulation***

The proposal for a regulation establishes uniform criteria for determining whether an economic activity is environmentally

sustainable and defines the process of creating a multilateral platform to operationalize the classification system and to monitor its practical application.

Article 3 of the proposal is the nuclear precept in the identification of environmentally sustainable activities — it catalogues the four cumulative criteria that must be verified to classify a given economic activity as sustainable:

1. The economic activity contributes substantially to one or more of the environmental objectives;
2. The economic activity does not significantly harm any of the environmental objectives;
3. The economic activity is exercised in compliance with the minimum safeguards; and
4. The economic activity complies with the applicable technical screening criteria.

Each of the criteria presupposes the proper densification, which implies articulation between the various precepts of the proposal, which should operate on the following terms:

1. The economic activity *contributes substantially* to one or more of the *environmental objectives*:
   - *Environmental objectives* — listed in article 5
   - *Substantial contribution* — concept developed in articles 6 to 11
2. The economic activity *does not significantly harm* any of the *environmental objectives*:
   - *Environmental objectives* — listed in article 5
   - *Absence of significant harm* — concept developed in article 12
3. The economic activity is exercised in compliance with the *minimum safeguards*:
   - *Minimum safeguards* — expression defined in article 13

4. The economic activity complies with the applicable *technical screening criteria*:
   – *Technical screening criteria* — expression explained in articles 6(2), 7(2), 8(2), 9(2), 10(2) and 11(2) and in article 14.

As has been shown, article 5 of the proposal lists the six "environmental objectives" for the purposes of the community taxonomy. They are 1) climate change mitigation; 2) climate change adaptation; 3) sustainable use and protection of water and marine resources; 4) transition to a circular economy, waste prevention and recycling; 5) pollution prevention and control; and 6) protection of healthy ecosystems. For a particular economic activity to qualify as "environmentally sustainable", it will have to contribute substantially to one of these objectives and not significantly harm any of them[12]. The proposal densifies the indeterminate concepts contained therein — "contributing substantially" and "not significantly harming" — in the subsequent provisions. Articles 6 to 11 contain illustrative catalogues of substantial contributions to each of the environmental objectives, treating them autonomously by disposition. Article 12 clarifies what is considered to be significant harm for each of the environmental objectives, which are also autonomously considered by paragraph. There is, therefore, an intersection between each of the environmental objectives and the requirements of "substantial contribution" and "absence of significant harm" that is absolutely fundamental in the structure of the proposal for a regulation. The autonomous treatment of each objective by reference to both requirements denotes the highly technical

[12] With the cumulative requirement of the two prerequisites, the proposal hinders the consideration of an activity as environmentally sustainable when, although contributing to an environmental objective, it produces other, negative environmental effects.

and complex nature of the matter, evidencing the impropriety of abstract and generic criteria.

The following precept — article 13 — clarifies the meaning of the term "minimum safeguards" by considering the scope of the third requirement mentioned above. The provision explains that what is concerned is the work procedures implemented by companies in compliance with the principles and rights deriving from the eight fundamental conventions identified in the declaration of the International Labour Organisation.

After considering the first two requirements in articles 5 to 12 and the third requirement in article 13, article 14 refers to the fourth and last requirement of classification of an activity as sustainable from the environmental point of view. This precept must be articulated with paragraphs 2 of articles 6 to 11, as there is (also here) a need to consider each of the environmental objectives individually. The "screening criteria" in question constitute parameters or measures of a quantitative or qualitative nature that will enable the concrete discernment of what *real* economic activities contribute substantially to or significantly harm each environmental objective. At its core, this fourth requirement implies the passage of an abstract perspective to a concrete one through the application of limits, quantities, values, etc. These criteria will be designed by the Commission through delegated acts to be adopted in a phased manner — the proposal stipulates a deadline for drafting each delegated act[13]. Regarding the volatility that characterizes this matter, constant monitoring of the application of the criteria and its periodic review are foreseen.

Regarding the classification criteria, it is important to question whether the formulations presented in articles 6 to 12 on what are considered "substantial contributions" and

[13] *Vide* articles 6(4), 7(4), 8(4), 9(4), 10(4) and 11(4). The process will be closed at the end of 2022.

"significant harm" are sufficiently clear and accurate to ensure the necessary legal certainty in the matter. The Regulatory Scrutiny Board commented on the topic and required the improvement of the precepts. In fact, the innocuousness and repeatability of the definitions presented are notorious, indicating that additional work is still necessary for the proposal to become legislation with the adoption of the definitive Regulation.

The proposal also regulates the creation and functioning of a "Platform on Sustainable Finance" (article 15). This platform will accompany the entire process of elaboration and implementation of the taxonomy and its subsequent application, assuming the role of a meeting centre for the actors interested and directly involved.

4. **Conclusion**

The development of the European Union taxonomy for classifying sustainable activities is, as mentioned, the "kick-off" of the implementation of the Action Plan on Sustainable Finance. From this categorization, we will be able to identify sustainable investments — investments that finance one or more economic activities considered sustainable (article 2(1), paragraph (a) of the Proposal for a Regulation) — and their degree of sustainability. In this way, the taxonomy, when operational, will provide clarity and safety on what is "green", thereby increasing confidence in the market and levelling the competition, which will promote investment in sustainable projects and assets. This factor, when allied to others, most importantly the implementation of the other actions foreseen in the Commission's Plan, will contribute to (re)directing important capital flows to sustainable sectors, thus assisting the transition to a circular, low-carbon and efficient economy that is more stable and compatible with international environmental protection targets.

References

Battinson, Stefano *et al.,* "A climate stress-test of the financial system". *Nature Climate Change* 7/4 (2017) 283—288.

comissão europeia, *Final Report 2018 by the High-Level Expert Group on Sustainable Finance*.

— *Plano de Ação: Financiar um crescimento sustentável*. Bruxelas, 2018.

— *Proposta de Regulamento do Parlamento Europeu e do Conselho relativo ao estabelecimento de um enquadramento para promover o investimento sustentável*. Bruxelas, 2018.

— *Resumo da avaliação de impacto sobre Financiamento Sustentável*, 2018.

european sistemic risk board, "Too late, too sudden: Transition to a low-carbon economy and systemic risk", *Reports of the Advisory Scientific Committee* 6 (2016).

fórum económico mundial, *The Global Risks Report 2018*, Génova.

Friede, Gunnar / Busch, Timo / Bassen, Alexander, "esg and financial performance: aggregated evidence from more than 2000 empirical studies, *Journal of Sustainable Finance & Investment* 5/4 (2015) 210-233.

investment leaders group, *The value of responsible investment: the moral, financial and economic case for action*, University of Cambridge Institute for Sustainability Leadership, 2014.

Principles for Responsible Investment. The European Commission Action Plan: financing sustainable grow — Assessment of the reform áreas for pri signatories, 2018.

regulatory scrutiny board opinion, *Impact Assessment / Sustainable Finance Initiative*, Bruxelas, 2018.

4.

ENVIRONMENTAL COMPLIANCE AND TAXATION

THE CASE OF AIR QUALITY IN CITIES

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Abstract: Economic taxation is an important tool in implementing environmental and climate policies, but their discrimination effects should be neutralized. The regulation of city air quality from the reduction of polluting emissions caused by urban mobility is just one of this examples and have already several experiences in different European cities

Keywords: taxes; urban mobility; air quality in cities

1. **Environmental compliance and air quality policy**

The replacement of repressive, prohibitive and sanctioning measures by instruments to promote voluntary compliance with legal and regulatory guidelines or even by *soft regulation* (codes of ethics, good practices, etc.) — we refer to what are today referred to as *steering* instruments (direction or

orientation)[1]- is essential in areas where harms arising from breaches of the rules are difficult or impossible to repair, or the causal link is not easy to establish — if we look at the public policy perspective — as well as in situations where sanctions are particularly costly for offenders — if we look at the issue in terms of the reasons for the accession of economic agents to these instruments. The environmental and climate domain is therefore, alongside tax law, an area especially suited to the development of this type of regulation, especially if this regulation can be mobilized by the courts, even if only as an interpretative criterion[2].

Essentially, compliance has shown that the creation of instruments for *internalising the obligation* to adhere to certain values, as well as the adoption of effective measures to achieve compliance and to fulfil the desired objectives, is more effective than the adoption of legal standards for the achievement of targets in certain public policies, even when associated with the repression of infringing conduct. The success of compliance is

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[1] The main aim is to promote the use of alternative or complementary instruments, rather than traditional coercive legal rules, which, instead of coming from an external regulatory authority (in principle legitimized on a democratic basis), are essentially developed internally by institutions (public and private) through the so-called *responsive (self-)regulation* and from the interconnection between organizational and procedural aspects with material dimensions in order to ensure compliance with legal rules and/or public policy objectives. This "regulation mode", which emerges in the context of the expansion of economic privatization, accompanied by deregulation and public (re-)regulation, has proven especially effective, mainly when accompanied by means of *enforcing* the regulatory measures adopted. About the topic *v.*, by all, Ian Ayres / John Braithwaite, *Responsive Regulation. Transcending the Deregulation Debate,* Oxford University Press, 1992, 101 s.

[2] In this sense see Michael Mehling, "Enforcing compliance in an evolving climate regime", in Jutta Brunnée / Meinhard Doelle / Lavanya Rajamani, *Promoting Compliance in an Evolving Climate Regime,* Cambridge University Press, 2012, 194 s.

largely due to the fact that the measures are drafted by the addressees, thus providing greater efficiency and effectiveness because they are more feasible and more easily implemented than those that are "designed" outside the democratic power.

Regarding the environment and climate, where a significant part of the legal rules are international law and, therefore, are more difficult to implement using traditional legal canons of coercivity, it is understandable that compliance finds fertile ground for its implantation. This is also the case in the field of *air quality regulation in cities* and the *decarbonization of urban mobility*, a topic we have selected for this brief communication.

Scientists have long warned of the harmful effects of pollutant emissions on human health[3], and these warnings gave rise to the first international normative documents specifically designed to reduce such emissions: we refer to the various commitments made under the United Nations Framework Convention on Climate Change[4] of 1992 (including the Kyoto Protocol[5], 1997) and the Convention on Long-Range Transboundary Air Pollution (CLRTAP), adopted in 1979 by countries in Europe and North America[6], notably the Göteborg Protocol adopted in 1999 on the Reduction of Acidification, Eutrophication and Ground-level Ozone.

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[3] On the impact of air pollution on human health see the European Court of Auditors report 23/2018: "Air pollution: our health is not yet sufficiently protected", available at <https://www.eca.europa.eu/Lists/ECADocuments/SR18_23/SR_AIR_QUALITY_PT.pdf> (last accessed on 29 June 2019).

[4] Portugal is a party to the United Nations Framework Convention on Climate Change, which was approved for ratification by Decree No. 20/93 of 21 June (as amended by Decree No. 14/2003, of 4 April) and the instrument of ratification was deposited on December 21, 1993, pursuant to Notice No. 129/94 of March 23.

[5] Protocol to the United Nations Framework Convention on Climate Change adopted at the 3rd Conference of the Parties.

[6] Portugal ratified this Convention in 1980 — see Decree 45/80 of 12 July.

European law, under the instruments relating to environmental policy, also addresses the air quality problem by adopting multiple normative instruments, among which we highlight Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe.

This directive was transposed into national law by Decree-Law no. 102/2010 of 23 September[7], which created an air-quality evaluation and management system. This legal regime includes the national strategy for the air (ENAR 2020)[8], air-quality improvement plans[9] and the measures set out in the Strategic Activity Tables for 2020[10] (at the level of implementation of public policy instruments).

All these instruments aim to reduce the level of particles that pollute the air, especially air in urban spaces, which is believed to be — as said before — a threat to the health of the inhabitants. The topic for reflection in this brief text is to see how this objective can be achieved in the field of urban mobility.

2. **Taxation oriented towards decarbonising mobility**

The use of taxation to promote extra-fiscal purposes is not new. In Portugal, the so-called green tax reform, approved in

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[7] In the meantime this diploma was updated by Decree-Law no. 43/2015, of 27 March.

[8] Approved by Resolution of the Council of Ministers no. 46/2016, of August 26.

[9] According to the site of the Portuguese Environment Agency, plans to improve air quality in the northern region are being implemented <http://www.ccdr-n.pt/servicos/ambiente/qualidade-ar> and Lisbon and Tagus Valley <http://www.ccdr-lvt.pt/content/index.php?action=detail-fo&rec=1265&t=QUALIDADE-DO-AR> (last accessed on June 29, 2019).

[10] Cf. <https://www.apambiente.pt/_zdata/DAR/Ar/ENAR_04_Linhas-Estrategicas_vf.pdf> (last accessed on June 29, 2019).

2014[11], had already been preceded by other tax measures with a similar purpose.

This is the case, for example, of the measures adopted under the so-called 2007 car tax reform[12] and, more specifically, of the normative change approved in 2011, which establishes an annual environmental coefficient update (emissions table) in the vehicle tax that is applied to the CO_2 emitted per km[13]. This measure was deepened in 2014 with the consecration of financial incentives for the acquisition of 100% electric vehicles and hybrid *plug-in* vehicles by the aforementioned law that approved the reform of the green tax[14]. This was a first step, although generic, in the context of the policy of car

[11] We refer to the approval of Law no. 82-D/2014, of December 31 (Green Tax Reform Law), prepared by the Commission for the Reform of Green Taxation — 2014 (Order no. 1962/2014), which was entrusted by the government with the task of carrying out a review of environmental and energy taxation in accordance with the said European and international guidelines.

[12] The reform of automobile taxation began with Law no. 22-A/2007, of June 29, which approved the Vehicle Tax Code and the Single Traffic Tax Code, abolishing, at the same time, the car tax, the municipal tax on vehicles, the circulation tax and the trucking tax.

[13] Cf. article 113 of Law no. 55-A/2010, of December 31, which amended article 7 of the Code of the Tax on Vehicles approved by Law no. 22-A/2007. This coefficient was subsequently compounded in several individual modifications with the aim of burdening diesel and higher-emissions gasoline vehicles — *cf.* Suzana Tavares da Silva / Marta Costa Santos, "As medidas tributárias portuguesas orientadas para o cumprimento das metas europeias da política de eficiência energética" (in press). This measure was also introduced in the United Kingdom in 2017, differentiating between diesel vehicles that comply with at least RDE2, other diesel vehicles (on which taxation is heavier) and vehicles using alternative fuels (electricity, biofuels and gas).

[14] We refer to reductions in tax on vehicle rates and autonomous tax rates, as well as financial incentives for buying these vehicles, awarded by the Environmental Fund. These incentives have been updated annually by the law approving the state budgets.

purchase and use to decarbonise mobility and reduce pollutant emissions, which also covered urban mobility.

In 2014, some incentives were also established for so-called *soft mobility*, essentially centred on the use of the bicycle for daily commuting — we refer to the fiscal benefits of *bike sharing* and the acquisition of bicycle fleets by companies — which would be extended in 2019 with the creation of a financial stimulus for the acquisition of electric bicycles[15].

As far as fuel taxation is concerned[16], the extra-fiscal effect of modifying personal behaviour in urban mobility seems less clear, and, consequently, so does the intended decarbonization and reduction of pollutant emissions[17]. Considering that the alternative to fuel consumption requires modification of vehicles (which are durable consumer goods and not easily replaceable), we believe that the only effective stimulus in this regard is that which can be given at the time of purchase of a vehicle or the conclusion of a contract for the use of a vehicle[18]. We also do not share the idea that fuel taxation can act as a stimulus for the use of urban public transport (as an alternative to personal car transport) for two reasons. First, it presupposes the existence of a public urban transport network that constitutes a real transportation alternative (considering price, convenience and journey time), which is not a reality across the country. Thus, this measure is reduced to having

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[15] *See* articles 247 and 248 of the Law of the State Budget for 2019 (Law no. 71/2018, of 31 December).

[16] We refer to "the adding on CO_2 emissions" (the so-called carbon tax) added to the Excise Tax Code (92-A article) by Law 82-D/2014.

[17] In the same vein, see Endre Tvinnereim / Michael Mehling, "Carbon pricing and deep decarbonisation", *Energy Policy* 121 (2018) 185-189.

[18] In this regard, we note as a positive example the measures announced by Uber to promote the use of electric vehicles (UberGreen) by drivers registered on the platform.

purely tax purposes (raising revenue from those who cannot avoid the incidence of the tax). Second, it also reaches people with different economic and financial capacities in a very disparate way, resulting in a discriminatory measure.

More recently, other tax measures have been implemented with the aim of reducing pollutant emissions in cities that aim to overcome some of the criticisms of previous measures. This is the case, for example, for the so-called *congestion charges* (or entrance fees in cities), which aim to remove vehicles from urban centres by encouraging citizens to rethink the use of their individual vehicles in commuting to the city centre and especially within the city[19]. Several cities have already implemented such taxes[20].

The pioneer was Singapore. In 1975, that city installed an *Area Licensing Scheme* that restricted entry in a particular area *(restricted zone)* to drivers who possessed a license for that purpose (the drivers had to put the proof of the license on the vehicle's windshield). This license could be unlimited, allowing the driver access to the restricted zone at any time without limiting the times, or partial, allowing access to the zone only during the morning and afternoon rush hours[21]. The verification of the licenses was performed by controlling agents located at points of access to the restricted zone. This system, with the passage of time and the evolution of technology, became obsolete and was replaced in 1998 by an *electronic road pricing* system. The new system, which is

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[19] Marta Rebelo, "Behavior-orienting rates: the extension of Article 19 of the Local Finance Act and the case of the "*Central London Congestion Charging Scheme*", *Juridical Magazine of Urbanism and Environment*, Nos. 21 / 22 (2004), p. 154.

[20] For example, we find these rates in Singapore, London, Milan, Stockholm and Gothenburg.

[21] Georgina Santos, "Urban congestion charging: a comparison between London and Singapore", *Transport Reviews* 5 (2005) 517.

currently still in effect, operates through an electronic device (called an *in-vehicle unit (IU))* that is placed on the vehicle and has a slot for inserting a credit card. When the vehicle passes through the portals placed at the access points to the restricted zone, the *IU* is detected, and the fee is automatically charged. This value varies depending on the type of vehicle and the time when and access point where the driver intends to enter the restricted zone[22]. If, through a photographic record, a vehicle passes without the driver having properly inserted a credit card or without sufficient credit to pay the amount due, the driver will have to pay the fee plus an administrative fee of 10 Singapore dollars[23].

The other paradigmatic example of the implementation of entrance fees in the city is the *Central London Congestion Charging Scheme*[24]. This model was implemented in 2003 and since then has undergone numerous changes. A person wishing to drive in London may have to pay three fees[25]: the *Congestion Charge*, the *Ultra Low Emissions Zone (ULEZ)* fee and the *Low Emissions Zone (LEZ)* fee.

To drive within the *"Congestion Charge"* zone from Monday to Friday in the period between 7:00 and 18:00, the driver

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[22] See *V.* Gopinath Menon / Sarath Guttikunda, "Electronic Road Pricing: experience & Lessons from Singapore", 2010. Documento disponível em <http://www.environmentportal.in/files/erp-Singapore-Lessons.pdf> (last accessed on 29 June 2019).

[23] It is important to remember that Singapore occupies the first place in the world ranking of urban mobility published by the European Observatory of Urban Mobility — Eltis <https://www.eltis.org/discover/news/urban-mobility-index -ranks-100-global-cities> (last accessed June 29, 2019).

[24] Cf. <*https://tfl.gov.uk/modes/driving/pay-to-drive-in-london*>.

[25] On the controversial legal nature of "congestion charges", with regard to the " *Central London Congestion Charging Scheme"*, *see* Mark Bowler Smith, "Towards a classification of the Central London congestion charge", *British Tax Review* 4 (2011) 487-508.

must pay £11.50[26]. The *Congestion Charge* is not applied between 18:00 and 7:00 during the week and weekends or on holidays and in the days between Christmas and New Year.

The fee for the *Ultra Low Emissions Zone*[27] must also be paid if the vehicle does not meet the standards required for this area. The daily "rate" for most vehicles is £12.50. The *Ultra Low Emissions Zone* operates 24 hours a day, 7 days a week and throughout the year.

The *Low Emissions Zone* has a larger geographical coverage than the two other zones, covering most of Greater London. Using European emissions standards as a reference, vehicles travelling in this area and not complying with the Euro emissions standards for that zone are subject to payment of another fee. The *Low Emissions Zone* also operates 24 hours a day, 7 days a week and throughout the year.

However, the "congestion charges" raise doubts regarding their legal nature — are they environmental prices? Are they moderator fees? Are they extra-fiscal taxes? — and regarding their discriminatory effect, as well as for the fact that they can be, after all, a public financing instrument with the excuse of the environment without actually achieving the goals for which they were created.

Indeed, if their purpose is to prevent cars from entering cities in order to improve air quality, then it is important to assess whether their application actually leads to a reduction in the number of vehicles and whether these are the vehicles with the highest pollutant emissions (*test of effectiveness of the measure in the pursuit of the public policy for the improvement of urban air quality*).

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[26] If the driver does not pay in time, he or she will be notified to pay a fine of £160 (however, if he or she pays within 14 days of receipt of the notice, the fine is £80)

[27] This area — which replaced the *T-Charge* — has been in effect since 8 December 2018 and has the same geographical coverage as the *Congestion Charge* zone.

In addition, it is important to assess the social impact of the measure, i.e., whether everyone is affected by the measure in equal proportion (or at least respecting equality) or whether it affects only those who do not have the economic and financial capacity to pay the price of pollution (in that case, it is discriminatory) and to what extent this difference in treatment should be tolerated as an aspect of a democratic state respecting the rule of law. Even though it can be argued that the revenues arising from this taxation allow for the upgrading of the network of urban public transport, it is essential that the measure not constitute an instrument (another one!) of "balkanization in the city"[28].

For this reason, there is currently a tendency (which could be said to be a preferential criterion) to regulate urban mobility and congestion through informal instruments of *soft regulation*, environmental education[29] or regulatory instruments of an administrative nature, such as bans on access and movement in various areas of the city: the so-called reduced emissions areas.

3. **Restrictions on road traffic in cities**

When we analyse the policies adopted by many European cities with regard to plans for the regulation of air quality, we find a common purpose among them: imposing the reduction of the presence of automobiles in the heart of cities[30]. In fact, the

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[28] This is not the right place, nor the opportunity, to address the theme of city regulation for inclusiveness, notwithstanding the relevance that the subject currently represents for scholars of the subject (*see*, for example, Richard Sennett, *Building and Dwelling: Ethics for the City*, Allen Lane, 2018) and for public safety and citizenship. The building of a sociable, open and tolerant city also depends on the regulation of mobility.

[29] This is the case, for example, of institutional advertising to promote *car sharing*, the use of public transport and smooth mobility.

[30] It should be noted that urban transport accounts for 25% of greenhouse gas emissions, mainly due to road traffic, and is estimated to be

individual car, at least as a means of mobility within the city, is now "old-fashioned". Contributing to this transformation, we find, especially, restriction policies on car circulation in cities and the promotion of policies supporting new, environmentally sustainable mobility alternatives: bicycles, scooters, etc. These two policies have a complementary relationship and must be integrated in an articulated way. Let us look at some examples of policies that the states have developed to prevent or restrict the circulation of automobiles in some urban areas.

1. *Reduced Emissions Zones*. The *Reduced Emissions Zones* (ZER) aim to restrict the entry and movement of the most polluting vehicles in certain protected areas or city centres and have already been applied in European cities such as Amsterdam, Stockholm, Berlin, Cologne and London. Additionally, some Reduced Emissions Zones have been implemented in Lisbon since 2011[31] [32].

50% by 2030. *See* INTERNATIONAL ENERGY AGENCY, *Transport, Energy and CO_2: Moving Toward Sustainability*, 2009, <https://www.iea.org/publications/freepublications/publication/transport2009.pdf>, <https://www.iea.org/publications/freepublications/publication/transport2009.pdf> (last accessed June 22, 2019). In view of this, and for the European Union to meet its emissions targets (in particular, to reduce the level of carbon emissions from transport by 60% by 2050), it is crucial to act in the transport sector — *especially* mobility. An example is the Strategic Vector AP13 of the aforementioned National Strategy for the Air 2020.

[31] It should be recalled that in 2011, the city of Lisbon had concentrations of inhalable particulate matter (PM10) exceeding the limits set by national and Community legislation, especially in higher-traffic areas, which prompted the European Commission to bring suit against the Portuguese state at the Court of Justice of the European Union.

[32] In Lisbon, a *first phase* of the ZER entered into force in July 2011 and prohibited the circulation of vehicles that did not comply with the Euro 1 emissions standards (vehicles built before July 1992) along Avenida da Liberdade/Baixa. Subsequently, in a *second phase*, which entered into force in April 2012, the area covered by the ZER was expanded to comprise two areas: (a) Zone 1: only vehicles respecting the Euro 2 emission

The creation of such zones has been considered a truly effective measure to reduce problems of urban air quality, especially problems related to high levels of particulate matter, nitrogen dioxide and ozone, which, when present in high concentrations, are considered harmful to human health[33]. However, it has been found that, by itself, the prohibition of the entry of polluting vehicles into protected areas also contributes to the emergence of alternative routes with a greater distance to the destination and, therefore, higher emissions. Thus, a good solution should be based on a comprehensive preliminary analysis that incorporates alternative responses (either in terms of public transport or encouraging the use of soft mobility alternatives, such as cycling, for which optimal conditions should be immediately created).

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standard (1996 and later vehicles) can circulate on the Av. da Liberdade/Baixa axis and b) Zone 2: a limited area south of Av. de Ceuta /North-South Axis/Av. of the Armed Forces/Av. of the United States of America/Av. Marechal António Spínola/Av. Infante Dom Henrique in which only vehicles complying with the Euro 1 emission standard (vehicles of 1992 and later and heavy vehicles after October 1996) can circulate. In a *third stage*, which has been in force since 15 January 2005, there were stronger environmental requirements in the following terms: a) Zone 1 (Axle Av Liberdade/Baixa) — only vehicles complying with the Euro 3 emission standards (in general, light vehicles manufactured after January 2000 and heavy vehicles manufactured after October 2000) and b) Zone 2 (limit to the south of the Avenida de Ceuta/Eixo Norte-Sul/Avenida das Forças Armadas/Avenida EUA/Avenida Marechal António Spínola/Avenida Infante Dom Henrique) — only vehicles of 1996 and later, that is, vehicles that respect the norms of emissions of Euro 2 (in general, light vehicles manufactured after January 1996 and heavy vehicles manufactured after October 1996). These restrictions apply only on weekdays from 7:00 a.m. to 9:00 p.m. Cf. <http: //www.cm-lisboa.pt/frequentes/en/environment/zer-zona-de-emissoes-reducidas> (last accessed on May 17, 2019).

[33] Helena BRÁS, *Avaliação dos benefícios da implementação de Zonas de Emissões Reduzidas em Lisboa*, Faculdade de Ciências e Tecnologia da Universidade Nova de Lisboa, 2012, 20.

In Lisbon, although there are currently two Reduced Emissions Zones (Zone 1 and Zone 2), there is general non-compliance by drivers who continue to move within these two areas using cars that do not meet the required standards. Therefore, for the restrictions and purposes to be truly fulfilled, it is essential to introduce a surveillance system — ideally, this inspection would be done through an automatic and immediate identifier.

2. A *Low Emissions Zone* called *"Central Madrid"*[34]. Under the air-quality and sustainable economy legislation and with the aim of protecting people's health from air pollution, the Madrid government approved the Air Quality Plan of the City of Madrid and Climate Change (Plan A) on 21 September 2017. This plan envisaged the creation of an area in the city centre where, in response to a low-emissions urban mobility model, measures could be taken to reduce the circulation of more polluting vehicles, to reduce congestion and to encourage and promote the use of collective public transport and smooth mobility alternative means of transport. It was in this context that the Plenum of the Madrid City Council approved a Sustainable Mobility Ordinance creating a designated *"Central Madrid" Zone* (ZBE) in October 2018.

The *Central Madrid Zone* corresponds to an area covering 472 hectares that groups and extends the four previously existing "Areas of Residential Priority". The access criteria and operation of the ZBE depend on the environmental category of vehicles in view of their pollution potential as well as their function and need for access. In a very general way, the regime

[34] Cf. <https://www.madrid.es/portales/munimadrid/es/Inicio/Movilidad-y-transportes/Madrid-Central-Zone-de-Downs Emissions /? Vgnextfmt = default & vgnextchannel = 508d96d2742f6610Vgnvcm1000001d4a900aRCRD & vgnextoid = 508d96d2742f6610Vgnvcm1000001d4a900aRCRD>.

of the *Low Emissions "Central Madrid" Zone* is characterized by residents, people with reduced mobility and security and emergency services being able to access and move their vehicles in *Central Madrid*; in all other cases, access depends on the environmental classification assigned to the vehicle concerned[35].

The *Low Emissions "Central Madrid" Zone* entered into force on 30 November 2018, with the stipulation that until 15 March 2019, there would be a demonstration and testing period for the computer system that generates the fines. During this period, no sanctions were applied, and in case of breach, drivers were only warned through a communication[36]. The sanctioning regime is now in operation, and anyone found in breach by the video surveillance cameras installed at each entrance to *Central Madrid* is subject to a fine of €90.

Conclusion

The purpose of this writing is not very ambitious. With it, we aim only to warn of the risks of regulation (in particular of the regulation by tax) of air quality in the cities through measures of restrictive use of the car, which can easily have discriminatory and regressive effects because they ultimately disproportionately burden individuals with lower contributing capacity. We are aware that the times ahead will bring great

[35] According to this qualification, *i)* vehicles with a "0 emissions" environmental label may move freely and park in a "Regulated Parking Service (SER)"; *ii)* vehicles with an "ECO" environmental label may enter Central Madrid to park — for a maximum of two hours — in a "Regulated Parking Service"; and *iii)* vehicles with "C and B" environmental labels can enter Central Madrid only to access a public parking or a private garage. It should also be noted that each resident (in the area covered by Central Madrid) is entitled to twenty "tickets" per month for guests.

[36] During the "test period", more than 15,000 people were warned for non-compliance with the rules.

technological and social changes that will necessitate regulatory changes. In the meantime, administrative measures, with gradual implementation (from which we infer an intention to instigate compliance solutions), seem to be the best compromise.

5.

CORPORATE SOCIAL RESPONSIBILITY
CAN CONSUMERS AND INVESTORS BE PARTNERS FOR THIS PURPOSE?

INÊS PENA BARROS

Abstract: In a world in which there is more concern about the environmental and social issues and the necessity of a sustainable development, the consumers and the investors have also become more aware in this matter. Is this change of attitude in the consumers and the investor the key to motivate companies to implement practices of Corporate Social Responsibility?

This article wishes to be an abstract of the state of the art in the matter of Corporate Social Responsibility and of the compliance in the World, in Europe and in Portugal. Therefore, this study will begin by clarifying some essential considerations to the understanding of the article's focus; it follows the analysis of the methods used by the international community to encourage companies to implement practices of Corporate Social Responsibility, as well as some briefs parallels with the situation of the subject in Portugal. The article will conclude, at last, with a synthesis of the, eventual, consequences of the approaches taken until now, at an international and national level.

Keywords: corporate social responsibility; corporate companies; consumer; investor; Greenwashing; non-financial reports; sustainability

1. **Initial Considerations**

The present article analyses the approaches taken by the international community to encourage companies to voluntarily implement practices of corporate social responsibility through international organizations, national organizations or societal legislation, as well as the current paradigm in Portugal.

However, it is necessary to begin by clarifying certain considerations that are essential to the understanding of the subject of corporate social responsibility.

Based on the definition of Gro Harlem Broutland, to achieve truly sustainable development — that is, development that will not jeopardize the possibility of future generations themselves developing[1] — it is necessary to harmonize three dimensions: economic, social and environmental.

In the business context, this means that to contribute to the achievement of sustainable development, a company will have to consider not only the economic aspects but also the social and environmental aspects. If the notion of "corporate social responsibility" established by the European Union in the Communication (2011) 681 final as "actions by companies over and above their legal obligations towards society and the environment"[2] is taken into account, then the implementation of practices of corporate social responsibility is a way for companies to contribute to sustainable development.

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[1] Gro Harlem Brundtland *et al., Our Common Future: Report of the World Commission on Environmental and Development.* Disponível na internet: <http://www.un-documents.net/ocf-02.htm#I>.

[2] communication from the commission to the european parliament, the council, the european economic and social committee and the committee of the regions — *A renewed EU strategy 2011-14 for Corporate Social Responsibility,* 4.

In a utopian world, a company would incorporate corporate social responsibility practices without any form of obligation and incentive, as only in this way would they contribute to sustainable development, which would always be the ultimate goal of the company.

It happens, however, that societal law, in most jurisdictions, has dispositions that encourage directors to try to obtain the greatest possible profits in a short period, thus protecting the shareholders of the company[3]. In the Portuguese legal system, leaning on the notion of "partnership" established in article 980º of the Portuguese civil code (CC)[4], the purpose of the company is to obtain profit, which means that many companies' directors main focus is the economic dimension alone, and they ignore the other dimensions (social and environmental).

In addition to the argument of the notion of "partnership" — and, consequently, the notion of corporation — is the issue of the legal duties of the directors. In most international jurisdictions[5], as well as in Portugal, the director has a legal duty of care that translates to a duty of applying the time, effort and knowledge that are required by the nature of the director position, the competences and the circumstances[6]; it is important to note that this duty has a strong economicconnotation[7]. From the perspective of some authors,

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[3] Stephen J. Turner, *Corporate Practice: Addressing the Balance between Commercial Success and Environmental and Social Responsibility,* 3; and Hanne Birkmose / Mette Neville / Karsten Engsis Sørense, ed., *Boards of Directors in European Companies: Reshaping and Harmonising Their Organisation and Duties.* The Netherlands: Kluwer Law International, 2013, 158.

[4] This notion is the basis for the notion of the corporate company, established in article 1º, nº 2 of the CSC.

[5] Stephen J. Turner, *Corporate Practice,* 3.

[6] Jorge Manuel Coutinho de Abreu, *Responsabilidade Civil dos Administradores de Sociedades.* Coimbra: Almedina, 2010, 18.

[7] Hanne Birkmose / Mette Neville / Karsten Engsis Sørense, ed.,

this duty means that during decision-making, the director must prioritize the economic dimension over the social and environmental dimensions[8].

However, is it possible to pursuit profits and maintain the company's economic viability, even while implementing corporate social responsibility practices?

Many studies have confirmed that a cultural shift has been occurring in the market[9]. Today, most consumers claim that they prefer to acquire a product designed by a sustainable company (that is, by a company that incorporates corporate social responsibility policies in the conception of the product and management of the company) than one made by a company that does not respect its workers, human rights and/or the environment, even if the sustainable product costs more. This means that in principle, being sustainable may be a competitive value for the company.

2. The role of the consumer and of investment in corporate social responsibility

The subject to be analysed in the present article is the one that was introduced in the previous section — the consumer, the investor and theory of the greater long-term profits associated with corporate social responsibility.

As mentioned before, studies have claimed that the consumer prefers a product designed in a sustainable way and

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Boards of Directors in European Companies, 158.

[8] Stephen J. Turner, *Corporate Practice,* 3

[9] *Livro Verde — Promover um quadro europeu para a responsabilidade social das empresas,* Bruxelas, 18/7/2001 [com (2001) 366 final], 8; Nick Feinstein, "Learning from Past Mistakes: Future Regulation to Prevent Greenwashing". *Boston College Environmental Affairs Law Review* 40/1 (2013) 231-232; and Timothy C. Bradley, "Likelihood of Eco-Friendly Confusion: Greenwashing and the ftc Green Guides". *Landslide* 4/1 (2011) 39.

that sustainability has become a competitive value. Therefore, on the basis of the aforementioned economic and financial logic that a company's directors follow and that they must obey to as their legal duty, a director could integrate practices related to social and environmental concerns in the management of the company since in this way, they can increase the profits obtained, which is the purpose of the company.

Based on this premise, international organizations such as the UN Global Compact[10], the World Business Council for Sustainable Development[11], the Organisation for Economic Co-operation and Development[12] and, in a strictly national scope, the Associação Portuguesa de Ética Empresarial[13] have attempted to ensure that companies and groups of companies adhere voluntarily to their organizational goals. Although the company chooses to become part of the organization, from the moment that it does, it must comply with the requirements of the association in order to enjoy the perks that the organization offers. For example, if a company is part of the UN Global Compact, it must produce an annual report, which the Global Compact calls a Communication on Progress (COP), in which it discloses basic non-financial information; if the company fails to report, it may not be able to enjoy the benefits of membership, such as the use of the Global Compact logo[14].

This is how international organizations encourage companies to implement voluntary practices of corporate social responsibility when the jurisdictions themselves do

[10] Available at: <https://www.unglobalcompact.org/>.

[11] Available at: <https://www.wbcsd.org/>.

[12] Available at: <http://www.oecd.org/>.

[13] Available at: <http://www.apee.pt/>.

[14] Available at: <https://www.unglobalcompact.org/participation/report/cop>.

not do so. Even though most of the main jurisdictions do not mention social responsibility, there are some exceptions, such as the English legal system[15] and, according to Coutinho de Abreu[16], the Portuguese legal system. According to this Portuguese author, under the legal duty of loyalty[17] established by item b) of number 1 of article 64º of the corporate code (CSC), the directors must consider, in their decision-making, actors such as clients, providers, and workers who together may constitute the ratio of corporate social responsibility. Says the author that, by exemplifying, the Portuguese legislation covers all dimensions that corporate social responsibility is intended to protect — which means that it is unnecessary to speak of corporate social responsibility in Portugal[18].

Beyond these exceptions, it is worth mentioning that in the remaining jurisdictions, in which corporate social responsibility is not mentioned, some authors — such as Beate Sjåfjell[19] —

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[15] Companies Act 2006, section 172 (1), particularly (b), (c) e (d). Available at: <https://www.legislation.gov.uk/ukpga/2006/46/section/172>.

[16] Jorge Manuel Coutinho de Abreu, *Responsabilidade Civil dos Administradores de Sociedades*, 7-8 (in press).

[17] The duty of loyalty is the second general legal duty that a director is obliged to observe. This is the duty of directors to have the interest of the company exclusively in mind and to find ways to satisfying that obligation, abstaining from promoting their own interests or the interests of a third party. Jorge Manuel Coutinho de Abreu, *Responsabilidade Civil dos Administradores de Sociedades*, Coimbra: Edições Almedina, 2010, 25.

[18] The author criticizes the lack of legal instruments at the disposal of these actors to hold responsible the directors who do not comply with the duty of loyalty. Jorge Manuel Coutinho de Abreu, *CSR: "responsabilità" senza responsabilità (giuridica)? Giurisprudenza Comerciale* (in press), 7-8.

[19] Beate Sjåfjell / Anja Wiesbrock, ed., *The Greening of European Business Under EU Law: Taking Article 11 TFEU Seriously.* London / New York: Routledge, 2015, 97-117; and Hanne Birkmose / Mette Neville / Karsten Engsis Sørense, ed., *Boards of Directors in European Companies*,153-178.

question this purely economic mentality and find legal ways through which the directors not only may implement corporate social responsibility practices but also must do so.

In the international panorama, it is necessary to speak of corporate social responsibility as well as the ways through which it is possible to implement such practices in the business environment with greater frequency. In this context, claims Miriam A. Cherry[20], consumers and investors may be determining factors.

In a way, consumers may strongly influence companies to implement corporate social responsibility practices for the reasons mentioned before — if, between two products, the consumer chooses the one designed by a sustainable company, then for a profit reason, any company will have a competitive advantage in being perceived[21] as sustainable. Therefore, a company will gain economic and financial benefits from observing social and environmental concerns, and the directors will be in compliance with their legal duty of care in considering those concerns.

If this motivation for creating sustainable products did not exist through a purely economic and financial logic implemented by company's directors, there would be no benefit in investing in corporate social responsibility. Moreover, the directors could even risk being accountable for the losses of the company owing to not complying with their legal duties[22].

Because consumers want and demand sustainable products (designed in a sustainable way and by sustainable companies), this demand ultimately encourages companies to invest

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[20] Miriam A. Cherry, "The Law and Economics of Corporate Social Responsibility and Greenwashing". *UC Davis Business Law Journal* 14/2 (2014) 283.

[21] The expression "being perceived" is used rather than "being" because of an issue that has being raised and will be explored in the next section: greenwashing.

[22] Except for some cases, such as the Companies Act of 2006.

in a shift of practices to take into consideration social and environmental issues since, in principle, the company will obtain more future profits for being socially responsible.

Another actor mentioned by Stephen Turner who can make a difference in encouraging companies is the investor[23].

Today, many investors have a policy of investing only in companies that are considered sustainable, which means that being perceived as sustainable or not sustainable could be the difference between obtaining an investment or not. For this reason, there are many ways of distinguishing between sustainable and unsustainable companies, either by the creation of different ranking lists[24] or by the creation of indices such as the Dow Jones Sustainability Indices (DJSI)[25].

Regardless of the form used, the result is the same, and the companies are divided into two large groups: sustainable and unsustainable. Through this division, the investor decides whether to invest; therefore, companies must be aware of this classification.

Basically, through the perception of either consumers or of investors, what the company truly needs to manage is its image because through this, it can be perceived as sustainable and thus obtain more future profits.

3. *Greenwashing*

The preceding sections have developed a logic by which it can be concluded that even if a director has a legal duty to prioritize the economic sustainability of the company, a

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[23] Stephen J. Turner, *Corporate Practice,* 9.

[24] Available at: <https://www.ft.com/content/74c1e548-9ccd-11e9-b8ce-8b459ed04726>.

[25] Available at: <*https://www.robecosam.com/csa/indices/?r*>.

company can obtain competitive benefits in implementing corporate social responsibility because consumers and investors are demanding it at this moment. Briefly, being perceived as sustainable results in profits for the company.

The question that arises from this logic is exactly that of "being perceived". Basically, the problem that arises with the theory of greater long-term profits is that companies, instead of implementing practices of corporate social responsibility, implement practices of greenwashing. That is, they develop practices that allow them to create an (untrue) image that they respond to social and environmental concerns so that they can obtain an image that is more appealing to consumers and investors to obtain more profits[26].

As mentioned before, the shift in a company's behaviour implies an early investment in order to consider social and environmental concerns; the company hopes to gain a return on that investment in the future by obtaining more profits for being sustainable, as consumers prefer their sustainable product, or when investors favour their company for investment. What if the company can have "the best of both worlds"?

The truth is that this issue is simply a matter of image management. A company only has to be perceived as sustainable for consumers and investors to prefer it, even if in reality, the company is not truly sustainable. BP and Volkswagen are two known examples that prove that a company needs only good image management. For years, environmentalists recommended that consumers fuel their cars at BP stations because BP was considered a sustainable company; in turn, consumers would go out of their way to fuel at a BP station for

[26] Michelle E. Diffenderfer / Keri-Ann C. Baker, "Greenwashing: What Your Clients Should Avoid". *GPSolo* 28/6 (2011) 2; Nick Feinstein, "Learning from Past Mistakes", 233; e Miriam A. Cherry, "The Law and Economics of Corporate Social Responsibility and Greenwashing", 284.

this reason[27]. However, with the Deepwater Horizon disaster, it became known to the public that BP's practices before and during the disaster not only were not sustainable but also put the lives of workers at risk[28]. In the same way, Volkswagen won sustainability awards for years until 2016, when the public learned that the company had adulterated the results of its car emissions testing in order to comply with the legal requirements, creating what is called the Dieselgate scandal[29].

In this context, it is perceived that this approach to win over consumers and investors, that is, the image of the company, can be beneficial but also harmful. Owing to scandals such as those mentioned above, consumers and investors will become sceptical in believing a company's allegations that is sustainable[30]; in becoming sceptical, they will stop acquiring sustainable products and invest specifically in this type of company, which will eventually lead to the loss of the competitive benefit that the international organizations claim exists[31].

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[27] Miriam A. Cherry / Judd F. Sneirson, "Beyond Profit: Rethinking Corporate Social Responsibility and Greenwashing after the BP Oil Disaster". *Tulane Law Review* 85/4 (2011) 1003.

[28] For more information on the BP scandal, see Miriam A. Cherry / Judd F. Sneirson, "Beyond Profit"; e Brittan J. Bush, "Addressing the Regulatory Collapse behind the Deepwater Horizon Oil Spill: Implementing a Best Available Technology Regulatory Regime for Deepwater Oil Exploration Safety and Clean-up Technology". *Journal of Environmental Law and Litigation* 26/2 (2011).

[29] For more development on the sustainability awards won by Volkswagen, see its sustainability report (specially pages 74 ss.), available at: <https://www.volkswagenag.com/presence/nachhaltigkeit/documents/vw_Sustainability-Report_2016_en.pdf>.

[30] Michelle E. Diffenderfer / Keri-Ann C. Baker, "Greenwashing: What Your Clients Should Avoid". 32.

[31] Miriam A. Cherry / Judd F. Sneirson, "Beyond Profit", 986; Nick Feinstein, "Learning from Past Mistakes", 235 e 250; e Miriam A. Cherry, "The Law and Economics of Corporate Social Responsibility and Greenwashing", 283.

For this reason, watchdogs such as Terrachoice and reports of sustainability (or the availability of non-financial information) have become important. These are ways to oblige companies to disclose information that can confirm that they actually implement practices of corporate social responsibility, that is, that they are truly sustainable.

Terrachoice is an example of a frequently cited watchdog[32]; in 2007, it created a report in which it not only analysed the percentage of "sustainable" companies that use Greenwashing but also managed to educate consumers regarding how to realize whether a company is using greenwashing. In this report, the organization created a list of "sins" — with a brief explanation and practical examples — through which a consumer can understand whether a company is truly sustainable or just trying to be perceived as such; in this way, Terrachoice managed to simplify the complex concept of greenwashing and educate consumers to become watchdogs themselves. In addition to this educational aspect, the report provides statistical dada regarding the amount of products that are actually sustainable. In 2007, when the report was first produced, the organization concluded that only one in 1,018 "sustainable" products analysed was not associated with at least one of the sins, that is, did not resort to greenwashing[33]; in 2010, the last year that the report was produced, 4.5% of the products were sin-free[34].

Despite the good work that these watchdogs are doing to

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[32] Michelle E. Diffenderfer / Keri-Ann C. Baker, "Greenwashing: What Your Clients Should Avoid". 46; Nick Feinstein, "Learning from Past Mistakes", 233-234; e Miriam A. Cherry, "The Law and Economics of Corporate Social Responsibility and Greenwashing", 285.

[33] Available at: <http://sinsofgreenwashing.com/findings/greenwashing-report-2007/index.html>.

[34] Available at: <http://sinsofgreenwashing.com/findings/greenwashing-report-2010/index.html>.

combat greenwashing[35], the truth is that it is not always easy to do so, especially when the information that they need is in the hands of the companies that are being "inspected". It is necessary, therefore, to make companies disclose non-financial information[36] and, in this context, to produce reports containing non-financial information or information about integration or sustainability. Whatever name is given to the report, they all have the same ratio of public information about social and environmental issues as well as the normal financial information[37].

The subject of non-financial reports is particularly relevant, and such reports have been well studied since, despite being initially voluntary, they later emerged in contexts in which they are mandatory for the companies.

Initially, the integrated report emerged in South Africa with the- King III Code, which demanded that the companies listed in the Johannesburg stock exchange produce this report[38]. More recently, in the scope of the European Union, Directive 2014/95/EU[39] — required[40] approximately 6,000

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[35] For this opinion, see Nick Feinstein, "Learning from Past Mistakes", 235.

[36] Miriam A. Cherry, "The Law and Economics of Corporate Social Responsibility and Greenwashing", 292.

[37] Beate Sjåfjell / Anja Wiesbrock, ed., *The Greening of European Business,* 118.

[38] Beate Sjåfjell / Anja Wiesbrock, ed., *The Greening of European Business,* 126-127.

[39] directive 2014/95/eu of the european parliament and of the council of 22 October 2014, amending Directive 2013/34/eu regarding the disclosure of non-financial and diversity information by certain large undertakings and groups. Official Journal of the European Union (15.11.2014).

[40] It is relevant to note that this is a slightly different obligation because it applies the comply-or-explain principle, which means that the

large European companies[41] to produce a report that contains non-financial information.

Even in scenarios (such as those ones mentioned before) in which it is mandatory to report, integrated reports do not always emerge in these contexts. Sometimes, companies wishing to improve their image and show how sustainable they are voluntarily produce this kind of report[42]. When such reporting happens, however, from the initiative of the company, it is also the company that decides what criteria to use and what information is relevant. Therefore, the innumerable reports that result are ultimately useless because it is impossible to compare them[43]; in addition, they show only what the company wants to share with the public and do not disclose information that is relevant to consumers and investors[44]. In this context, a set of international organizations — of which Global Reporting Initiative[45] and International

company can not produce this report but then must justify why it did not do so. See article 19º-A of the DIRECTIVE 2014/95/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 22 October 2014, amending Directive 2013/34/EU regarding the disclosure of non-financial and diversity information by certain large undertakings and groups. Official Journal of the European Union (15.11.2014).

41 Beate SJÅFJELL / Anja WIESBROCK, ed., *The Greening of European Business,* 141; Stephen J. TURNER, *Corporate Practice*, 8; and Martha C. WILSON, "A Critical Review of Environmental Sustainability", 5.

42 Martha C. WILSON, "A Critical Review of Environmental Sustainability Reporting in the Consumer Goods Industry: Greenwashing or Good Business". *Journal of Management and Sustainability* 3/4 (2013) 1.

43 Beate SJÅFJELL / Anja WIESBROCK, ed., *The Greening of European Business,* 141; Stephen J. TURNER, *Corporate Practice*, 8; e Martha C. WILSON, "A Critical Review of Environmental Sustainability", 5.

44 About the potential manipulation, see Martha C. WILSON, "A Critical Review of Environmental Sustainability", 8.

45 Available at: <https://www.globalreporting.org/Pages/default.aspx>.

Integrated Reporting Council[46] are examples — has emerged of which the only goal is to create criteria for this kind of report in order to make it universal and thus comparable.

Despite these attempts to create universal criteria for non-financial reports, the truth is that these attempts have not been truly productive. On the one hand, these criteria must be abstract enough to be applied to any company and to different industry sectors; on the other hand, they cannot be ambiguous to the point of not giving the necessary information to enable consumers and investors to form an opinion about the company in terms of social and environmental issues. According to some critics, this balance has not yet been found, but the existence (and, in some cases, the obligation) of these reports is nonetheless an important step towards the goal of sustainable development.

4. **Conclusion**

It can be concluded from this analysis that in the current paradigm, the course of corporate social responsibility has been mainly voluntary.

Basically, a company is encouraged to concern itself with social and environmental issues since, in principle, such efforts will be recognized by consumers and investors, who will prefer this sustainable company to others that have not made the same investment.

Although this approach has many benefits, the truth is that it may also be harmful to the goal. Through this approach, the encouragement to implement practices of corporate social responsibility ultimately improves the companies' image for consumers and investors, but what if the company implements practices that only give the appearance that it is sustainable?

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[46] Available at: <https://integratedreporting.org/the-iirc-2/>.

This is a great risk, and to overcome it, even in part, it is mandatory that the companies be more transparent and disclose information that can confirm this appearance. Currently, this "inspection" of companies — in hopes of overcoming the problem of greenwashing — is being performed mostly by watchdogs and through reports of non-financial information.

Even as these matters develop and potentially contribute more assertively to the achievement of sustainable development, the truth is that it can be more productive to explore other approaches in order to achieve this global goal as soon as possible.

III

SPECIAL PART

SECTOR COMPLIANCE: ENERGY, AGRICULTURE, TOURISM AND MINING

1.

SOCIO-ENVIRONMENTAL COMPLIANCE AND ENFORCEMENT IN THE BRAZILIAN ELECTRICAL SECTOR

AN APPROACH TO REGULATION IN THE ELECTRICITY SECTOR AND SOCIO--ENVIRONMENTAL COMPLIANCE THROUGH THE STUDY OF LEGISLATION AND OTHER LEGAL ASPECTS REGARDING ENVIRONMENTAL LICENSING RESTRICTIONS TO MITIGATE THE SOCIO-ENVIRONMENTAL AND ECONOMIC RISKS OF THE GENERATION AND DISTRIBUTION OF THE ELECTRIC POWER INDUSTRY

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Abstract: This legal article is divided into four sections. In the first, a brief history about the Brazilian scenario for the construction of the idea of Environmental Compliance to reinforcing the basic principles and guidelines in the treatment of social and environmental issues, delineating the contours and scope of this action by the Companies of the Electric Sector. In the second, the text addresses the management of

environmental risk in electricity distribution and the need to establish urgent schedules for PCBs *(Polychlorinated Biphenyls)* to be eliminated from the environment and properly discarded until 2028, according to the Stockholm Convention (2001). In the third, the social component will be analyzed as condition of the environmental licensing correlated with the financial compensation and payment of royalties collected by the company responsible for the activities of exploration and production of hydroelectric generation in Brazil. In the fourth, the land issue as environmental condition of the respective licence.

Keywords: electrical sector; environmental licensing; compensation; environmental conditioners; social component; hydropower plant; risks; socio-environmental; royalties; PCBs

1. **Introduction**

In Brazil, in November 1986, the Master Plan for the Conservation and Recovery of the Environment in the Works and Services of the Electricity Sector (I PDMA) was revised to mark the sector reorientation in socio-environmental issues through a joint effort of the Consultative Committee Eletrobrás and the World Bank. This plan contemplated the treatment of socio-environmental issues and the results achieved in this process of sectoral training.

The second stage of the Environmental Sector Master Plan — II PDMA (1991/1993) resulted from a process of improving the previous one and was marked by great political, legal and institutional transformations in Brazil, among which the Federal Constitution of 1988 and a significant modification of the structure of the federal agencies that deal with environmental issues stand out.

At that moment, in the Brazilian electricity sector, there was a convergence of efforts regarding the need to implement corporate governance and environmental compliance or environmental enforcement and assurance aspects in energy companies in accordance with the basic principles and guidelines for dealing with socio-environmental issues and

actions taken by governmental agencies in co-operation with other stakeholders to plan, implement and operate such enterprises, compatible with the guidelines and instruments of the National Environmental Policy (Law 6.938/81).

The PDMAs had the following objectives: *(i)* the consolidation, systematization and improvement of knowledge in the sector of how to treat socio-environmental issues; *(ii)* the monitoring of the most relevant socio-environmental actions related to the projects being planned, implemented and operated; *(iii)* the characterization of the socio-environmental costs and benefits of the sector's performance; *(iv)* the adequate allocation of financial resources, depending on multiple uses, by other sectors related to activity, works and services executed under the leadership of the electricity sector or with its participation; and *(v)* the clarification and involvement of public opinion necessary for defining the projects and programmes that best respond to social concerns.

In response to the need to observe the environmental laws and the harmful effects of non-compliance owing to multiple civil, criminal and administrative sanctions, and not exclusively as a requirement for environmental licensing, electricity sector companies had to develop an environmental compliance programme and socio-environmental risk management with a direct interface with sustainability policies aimed at mitigating these inherent risks in the sector's ventures.

Federal Law 13.303/16 recognizes the social function of public companies and a mixed-capital society, and Paragraph 2 of Article 27 states that these companies must "adopt practices of environmental sustainability and corporate social responsibility compatible with the market in which they act".

Since the advent of Federal Law 12.846/13, which provided for the civil and administrative liability of legal persons that perform acts against the public, national or foreign government, compliance policies had to be implemented through internal mechanisms, integrity procedures, auditing and encouraging the reporting of irregularities.

In fact, electricity sector companies had to be concerned with risk management within the process of socio-environmental diligence that is directly linked to their activities; they had to adopt good practices of governance, sustainability and integrity, relating, for the purposes elaborated in this article, to the adoption of socio-environmental practices that are in full harmony with environmental legislation, under penalty of acts that are confusing to the public administration, thus mitigating the civil, criminal and administrative liability risks of natural and legal persons and serving as an important and necessary instrument in business crisis management.

2. Electric energy distribution networks and the 2028 deadline for the elimination of equipment and materials contaminated with polychlorinated biphenyls (PCBs) above 50 mg/kg

The business units of the electricity sector associated with the distribution of electric energy in Brazil have encountered severe difficulties in meeting the deadlines of adequate management of PCBs in terms of their final destination and residues through regular industrial processing via incineration or decontamination because the regulatory and operational risks increase each year.

Persistent organic pollutants (POPs) pose significant and growing threats to human health and the environment. In May 1995, the Governing Council of the United Nations Environment Programme (UNEP) requested, in Decision 18/32, that an international process be initiated to evaluate a list of 12 POPs, namely, aldrin, chlordane, DDT, dieldrin, dioxins, endrin, furans, hexachlorobenzene, heptachlor, mirex, PCBs and toxaphene.

The list of POPs includes PCBs, which are man-made chlorinated organic aromatic compounds (biphenyls). In

industrialized countries, PCBs were manufactured between the mid-1920s and 1970, and for decades, their characteristics, such as high stability and low flammability and conductivity, made them the most widely used liquid dielectric insulators in transformers and other electrical equipment.

PCBs were never manufactured in Brazil but arrived by import under different commercial names, such as *ascarel* and *aroclor*, which represent environmental threats to birds and other wildlife as well as to human health because they produce a liver-damaging toxin and an acute danger of skin disorders. However, management still hoped that PCBs would prove not to be a human carcinogen.

Within the old conception of the abstract or uncertain risks described by Raffaele De Giorgi[1], after events, tests and data, PCBs[2] were classified as a concrete risk under the Stockholm Convention (2001) given the demonstrated causality and predictions based on statistics and the probability of actual damage to human health and to the environment.

The need to manage the environmental risk and establish urgent schedules and an adequate methodology for PCBs to be removed from circulation and properly disposed of by 2028

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[1] Apud Domingos Sávio de Barros ARRUDA. "A categoria acautelatória da responsabilidade ambiental". *Revista de Direito Ambiental* 11/42 (2006) 25, citing Raffale De GIORGI. "O risco na sociedade contemporânea". *Revista de Direito Sanitário.* São Paulo. 9/1 (mar/jun. 2008) 37-49.

[2] "Evidence of the toxic effects of PCBs dates back to the 1930s, but only with research conducted between the 1960s and 1970s by scientists from a Swedish research institute, researchers of the biological effects of DDT, were high levels of PCBs found in the blood, hair and fatty tissues of wild animals. Research during the 1960s and 1970s revealed that PCBs and other organochlorine and aromatic compounds were powerful carcinogens, and also related them to a wide range of reproductive, developmental and immune system disorders". In Letícia ALBUQUERQUE. *Poluentes Orgânicos Persistentes — Uma análise da Convenção de Estocolmo.* Curitiba: Juruá, 2008 72-73.

is a major concern for electricity power distributors around the world due to the operational and technical difficulty of performing such a procedure without compromising their core activity of supplying power to millions of users.

The first normative attempt to address the subject in Brazil was Interministerial Ordinance MINTER/MIC/MME 19, of 01.29.1981, stating that "the implementation of processes that have as their main purpose the production of polychlorinated biphenyls — PCBs" as well as "the use and commercialization of polychlorinated biphenyls — PCBs, in all the state, pure or in mixture, in any concentration or physical state are prohibited in the whole National Territory".

According to item III of the ordinance, the equipment of the electricity system in operation that used PCBs as dielectric fluid could continue to be used until it was necessary to empty it, after which it could be filled only with fluids that did not contain PCBs.

In fact, the electricity power distributors should consider, in the specifications of new power capacitors, the acquisition of equipment that did not use PCBs.

Normative Instruction SEMA/STC/CRS 1, of 06.10.1983, specified the constraints that should be observed in the handling, storage and transport of polychlorinated biphenyls and/or contaminated residues.

In 1988, CONAMA Resolution 6 established in article 4 and annex I the obligation for electric energy concessionaires to present to the competent environmental control organ, within sixty days of the publication of the resolution, their inventory of stock containing materials and/or equipment contaminated with PCBs.

Federal Decree 875 of July 19, 1993, enacted the Convention on the Control of Transboundary Movements of Wastes and Their Disposal (Basel Convention), which established international mechanisms to control the transportation of such contents, seeking to curb illicit trafficking and intensify

international cooperation regarding the proper management of wastes.

In this regard, CONAMA Resolution 452, of 07.02.2012, provides " procedures for controlling the import of waste, according to the standards adopted by the Basel Convention", replicated in IBAMA Normative Instruction 12, of 07.16.2013.

The Stockholm Convention on Persistent Organic Pollutants has the legal nature of a federal law and the status of a supralegal norm. It is a general rule that falls under the concept of article 24, paragraph 1, of the Federal Constitution.

As a signatory to the Stockholm Convention, which was enacted by Federal Decree 5472/2005, Brazil must require electricity distributors that hold the largest equipment parks containing this insulating mineral oil to meet the requirements set forth in Part II of the Convention:

> Part II - Polychlorinated biphenyls:
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> Each Party shall:
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> (a) with reference to the elimination of the use of polychlorinated biphenyls in equipment (e.g. transformers, capacitors or other receptacles containing stored liquids) by 2025, subject to review by the Conference of the Parties, act in accordance with the following priorities:
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> (i) endeavour to identify, label and withdraw from use equipment containing more than 10% polychlorinated biphenyls and volumes greater than 5 litres;
>
> (ii) make efforts to identify, label and withdraw from use equipment containing more than 0.05% polychlorinated biphenyls and volumes greater than 5 litres;
>
> (iii) endeavour to identify and withdraw from use equipment containing more than 0.005% polychlorinated biphenyls and volumes greater than 0,05 litres.

The Brazilian state, therefore, was obliged, within the scope of the international relations between states, to implement, in its sovereign field, an internal norm whose commandment — for the handling of liquids that contain PCBs — confers term that do not extend beyond 2028.

In the state of São Paulo, state legislation has determined

that the maximum term for the final destination of materials and devices contaminated with PCBs will end in December 2020 (article 6). Those who do not comply will be subject to penalties described in articles 19 to 24 of Law 12.288/2006. Examples of non-compliance are as follows:

> Article 21 - They constitute serious offences:
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> I - Delivery of the inventory and elimination schedule with incorrect or false information;
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> II - Emission of incorrect or false chemical analyses;
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> III - Issuance of invoices with incorrect or false information;
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> IV - Non-compliance with the elimination schedule;
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> V - Final destination in disagreement with the provisions of this law;
>
> VI - Commercialization of PCBs and their residues, transformers, capacitors and other electric equipment containing PCBs, as well as the regeneration of insulating oils in disagreement with what is established in this law.

If the deadline is not met, the sanctions of embargo of activity and suspension or cancellation of environmental licensing, among others, as well as the specific pecuniary sanctions established by Law 12.288/2006, may be applied to individuals or legal entities that have been charged with such administrative illegality.

In addition, inattention to the legal command to eliminate the electricity energy distribution and disposal of PCBs can lead to consequences in the criminal sphere, owing to the global interest in the control of PCB destinations and the notorious carcinogenic potential of PCBs, as typified in the criminal conduct established by article 68 of Law nº 9.605/98 due to the simple non-fulfilment of the obligation imposed by the law. Depending on the interpretation given to a case, it will also be possible to invoke the typification of the crime foreseen in article 56 of Law 9.605/98 — having in deposit a substance harmful to human health or to the environment — or even, finally, the crime foreseen in article 54 of the same law — the crime of pollution.

The verification of the occurrence of the crime will cause electricity power distribution concessionaires, as well as the individual or individuals responsible for the act of inattention, to be subject to the applicable sanctions, such as those established in article 22 of Law 9.605/98, with respect to the legal entity, and the sanctions restricting freedom, with respect to the individual, as established for each of the criminal types of action indicated above.

In this scenario, regardless of the perspectives of federal regulation in coming years and the adequacy of Brazilian efforts to establish a methodology for collecting samples, labelling insulating oil samples for analysis of PCBs, and PCB screening tests and laboratories using identification chromatography of transformers with dielectric fluid, the theme should be monitored and the risks evaluated on the basis of the terms and deadlines effectively established in the legislation.

3. The problematic established by the social component in the fulfilment of the environmental licensing constraints of projects related to hydroelectric reservoirs in Brazil

The environmental constraints make compatible the constitutional principles of the economic order and the protection of the environment with the primary purpose of mitigating or compensating for the verified negative environmental impacts of infrastructure projects — and, in this article, the approach is focused completely on hydroelectric power plants (UHEs) in light of the objectives and instruments of legal protection provided in Law 6.938 of August 21, 1981, which established the National Environmental Policy (PNMA) in Brazil.

In addition to establishing the PNMA, Law 6.938/81 created the National Environmental Council (CONAMA) and the National Environmental System (SISNAMA) to regulate the state's inspection of the environment by presenting the

necessary instruments for both the environmental licensing and the evaluation of the environmental impacts of projects aiming to reconcile socio-environmental and economic interests and, at the same time, preserve the quality of the environment.

As provided in CONAMA Resolution n. 237/1997, environmental licensing is the administrative process by which the competent environmental agency permits the location, installation, expansion and operation of enterprises and activities that use environmental resources considered effective and potentially polluting or those that in any way may cause degradation during the design, installation, operation and so-called demobilization phases.

The experience of hydroelectric exploitation of the Brazilian energy grid has shown over the years that the socioeconomic liabilities that pre-date the implementation of such enterprises represent the distortion of the proper function of the environmental constraints, which is to mitigate or compensate for the environmental impacts and the dynamicity of their fulfilment in reasonable periods, in instances of flagrant abuse of power or misuse of the state's purpose.

From this perspective, it is worth mentioning the conclusion of the World Bank in pointing out the indicators of the incidence of costs associated with the environmental licensing process of hydroelectric plants in Brazil, emphasizing the need to regulate the social component:

> Most of the problems associated with environmental licensing in Brazil occur in the first phase (Previous License (LP)) of a process that comprises three stages. These problems include lack of adequate government planning, lack of clarity about which governmental (federal or state) sphere has legal authority to issue environmental permits, delays in issuing terms of reference (ToRs) for the environmental impact study (EIA) required by legislation, poor quality of EIAs prepared by project proponents, inconsistent evaluation of EIAs, lack of an adequate system for conflict resolution, lack of clear rules for social compensation.

The analysis presented in this study focuses on the social component of environmental licensing, which is a prominent issue that is directly related to the pre-existing socioeconomic liabilities associated with the installation of hydroelectric power generation projects. Such projects are often implemented in an abusive manner by operators who take advantage of the economic entrepreneurial potential and the state's omissions because the plants are installed in less developed municipalities.

The fact is that the environmental licensing body must identify the best way to promote economically viable alternatives to such enterprises and, at the same time, minimize the environmental impacts. Eduardo Bim points out the following:

> In terms of environmental decision making, this means that it is not enough to choose the environment with the least environmental impact, if the other values in play are promoted with the same intensity.

The preliminary phase of the enterprise, which includes environmental impact assessments (EIAs)[3] and environmental impact reports (RIMAs), represents the moment when the licensing body becomes aware of the economic activities that will be initiated and the potential local development and should evaluate the cumulative and synergistic impacts of the issuance of the term of reference that defines the scope of the studies that should be developed and delivered by the entrepreneur and that will serve as a basis for the EIA.

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[3] CONAMA Resolution no. 01/1986 states that the EIA shall contemplate all technological alternatives and project location, identify and systematically evaluate the environmental impacts generated in the phases of implementation and operation, define the limits of the geographic area to be directly or indirectly affected by the impacts and consider the government plans and programs in the project's area of influence and their compatibility with the project.

The digression on the theme is intended to draw attention to the conflict of interest with the actors in the licensing process and the importance of the so-called "direct environmental impact" and sufficient legal and regulatory frameworks to define the "socioeconomic liabilities" generated by the impact of the projects, as the UHEs are presented in Brazil, considering the forecast of financial compensation[4] and payment of royalties collected by the company responsible for the activities of exploration and production of hydroelectric generation in a particular place.

The value to be applied in three major UHE projects in Brazil, namely, Santo Antônio (RO)[5], Jirau (RO) and Belo Monte (PA), is approximately 50 billion reais; thus, the totally improper delegation of the enforcement of public policies to

[4] Financial compensation, established by the Federal Constitution of 1988, in Article 20, paragraph 1, and regulated by Law 7,990/1989, corresponds to the indemnification to the states, the Federal District and municipalitiesas well as Union direct administration agencies, of the results of the exploitation of water resources for the purpose of generating electric energy. Based on Law 9,648/1998, the monthly amount collected as financial compensation corresponds to 7% of the value of energy produced, to be paid by the electric energy service concessionaires to the states, Federal District and the counties. A proportion of 0.75% is transferred to the MMA for application in the implementation of the National Water Resources Policy and the National Water Resources Management System. Of the percentage of 6.25%, as established in Law No. 8,001, dated March 13, 1990, with changes made by Laws 9,433/97, 9,984/00, 9,993/00, 13,360/16 and 13,661/18, exactly 65% is destined for the municipalities affected by the reservoirs of hydroelectric plants, while the states are entitled to another 25%. The Union holds the remaining 10%, divided between the Ministry of the Environment (3%); the Ministry of Mines and Energy (3%) and the National Fund for Scientific and Technological Development (4%), administered by the Ministry of Science, Technology and Innovation. Hydroelectric projects classified as small hydropower plants are exempt from the collection of financial compensation, pursuant to Law No. 9,427, of December 26, 1996.

[5] IBAMA Operation License 1,044/2011, IBAMA Operation License 1,097/2011 and IBAMA Operation License 795/2011, respectively.

the entrepreneurs may make it impossible for them to comply with constraints on the operation of the power plant for electric power generation.

The constraints that go beyond the limits of local liability compatibility with the direct impact of the enterprise itself are directly linked to the economic aspects of the areas of influence of the enterprise, according to the following indicators: gross domestic product; trade balance; companies installed; primary sector (agriculture, breeding and extractivism); employment and income; and municipal public finances.

A perfunctory analysis of the social component shows that the GDP of three economic sectors (agriculture, industry, and services) is highlighted to determine the constraints after the analysis of agricultural activities; forestry and logging; livestock; fishing; the mineral extractive industry; the transformation industry; construction; the production and distribution of electricity and gas, water, sewage and urban cleaning; maintenance and repair services; accommodation and food services; transport, storage and mail; information services; and financial intermediation, insurance and supplementary pension, among others.

In comparison with the EIA-RIMA, the social component of environmental licensing should be the object of constant study owing to its contours with a view to restrictive regulation, considering that it is directly related to the pre-existing socioeconomic liabilities associated with the installation of the hydroelectric project; such licensing is often improperly implemented, as it takes advantage of the entrepreneur's economic potential to overcome the state's omissions because the plants are installed in less developed municipalities.

The hydroelectric power plants in Brazil are great generators of public revenues, providing financial compensation for the use of water resources and the operation of Itaipu Binacional to the public coffers of 6 states and 331 municipalities in the amount of more than 5 billion reais.

In Brazil, in May 2018, the percentages of the distribution of royalties were changed: 65% to municipalities, 25% to states and 10% to federal agencies under Law 13.661/2018, which amended Law 8.001/90.

In practice, in the system of collection of financial compensation for the use of water resources (CFURH), the hydroelectric plants that benefit from reservoirs by the amount of the increase of energy provided by them will be considered to be generation associated with these regularizing reservoirs, competing with the ANEEL (Brazilian National Agency of Electric Energy) to make the corresponding assessment to determine the proportion of financial compensation due to the states, Federal District and municipalities affected.

According to ANEEL, in 2015, the state of Rondônia and the municipality of Porto Velho received the amount of R$56,953,942.16 from the Santo Antônio Hydroelectric Plant, of which 45% was destined for these controversial social components.

Through ANEEL statistical data and surveys of the collection and distribution of resources among beneficiaries, the social component has been used as a means of implementing public policies by the entrepreneur as a substitute for the state with the seal of the licensing body, although the restrictive interpretation of the CONAMA resolution clarifies that it must "consider the governmental plans and programs proposed and implemented in the area of influence of the project and its compatibility".

In Brazil, this deficiency of local public power has been passed on to the entrepreneur through environmental constraints in an attempt to use licensing as an instrument to equate local problems that do not have a causal link with environmental impacts for compensation purposes of the CONAMA Resolution 01/1986 and CONAMA 237 — which may inevitably lead to the nullification of the constraint.

4. Environmental Licensing and Land Regularization: Administrative servitude by the entrepreneur of the Permanent Preservation Areas (APPs) created in the surroundings of hydroelectric reservoirs

Currently, APPs are defined and regulated by Law 12.651/2012. APPs are defined as regions that are protected, whether or not they are covered by native vegetation, with the environmental function of preserving water resources, the landscape, geological stability and biodiversity; facilitating the gene flow of fauna and flora; protecting the soil; and ensuring the well-being of human populations[6].

Notably, the permanent preservation areas do not depend on a specific administrative act for their creation since they are legally imposed administrative limitations. Thus, a general and public order is imposed that conditions the exercise of rights or private activities.

Native vegetation in APPs must be maintained by the owner or occupant of the area in any capacity, who is also be obliged to promote the restoration of vegetation in the event of its suppression or degradation.

In general, the concept of the permanent preservation area, as it is known today (preserving the area and not only the vegetation), was introduced only in Provisional Measure 2.166-67 of August 24, 2001, which amended the 1965 Forest Code.

Until that moment, the legislation was clear about the obligation to preserve only the forests and natural vegetation

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[6] "Art. 3 - For the purposes of this Law, is defined as:
[...]
II - Permanent Preservation Area — APP: protected area, covered or not by native vegetation, with the environmental function of preserving water resources, landscape, geological stability and biodiversity, facilitating the gene flow of fauna and flora, protecting the soil and ensuring the well-being of human populations;"

existing in these protected environments, and not the area itself, if vegetation was discovered.

Specifically, in relation to the surroundings of artificial reservoirs, the obligation to preserve the forests and other forms of vegetation located there, aiming at the protection of this hydric body, was established by means of paragraph b of article 2 of the Forest Code of 1965[7].

As such, CONAMA edited Resolution 302, of March 20, 2002, requiring, in article 3, that the permanent preservation areas should be 30 (thirty) metres around artificial reservoirs located in consolidated urban areas and 100 (one hundred) metres for those located in rural areas. The same device provided that permanent preservation areas around artificial reservoirs are measured in horizontal projection from the normal maximum level.

More recently, Federal Law 12,651 came into force on May 25, 2012, and became known as the new Forest Code. This law provides for the protection of native vegetation and, in article 62, establishes new limits for the definition of the APP from artificial reservoirs in 'old' hydroelectric plants, *in verbis:*

Art. 62 For artificial water reservoirs destined to power generation or public supply that were registered or had their concession or authorization contracts signed prior to Provisional Measure No. 2.166-67, of August 24, 2001, the range of the Permanent Preservation Area shall be the distance between the maximum normal operating level and the maximum quota maximorum.

Thus, the application to the case of article 62 of the new Forest Code does not mean an environmental regression; on the contrary, this provision finally allows for the implementation

[7] "Art. 2 The forests and other forms of natural vegetation located are considered of permanent preservation, by the sole effect of this Law: (...) b) around natural or artificial lagoons, lakes or water reservoirs".

of a permanent preservation area consistent with the reality that has been verified in the area surrounding the reservoir since the time of its implementation.

Furthermore, it is necessary to mention that the eventual uses of permanent preservation areas in the surroundings of artificial reservoirs are allowed only according to the Environmental Plan for Conservation and Use of the Surroundings of the Artificial Reservoir (PACUERA) and within the limit of 10% of the total area[8].

From that point of view, the topographic demarcation of the areas corresponding to the flood area and the safety quota in relation to the normal floods that occur in the backwater region of the reservoir are a determining factor because, after the formation of the lake, the range between the safety quota of the normal floods and the safety quota of the exceptional floods should be demarcated. The Forest Code incorporated the institute of administrative servitude in article 5:

> Art. 5 - In the implementation of artificial water reservoirs for power generation or public supply, it is mandatory the acquisition, expropriation or institution of administrative servitude by the entrepreneur of the Permanent Preservation Areas created in its surroundings, as established in the environmental licensing, observing the minimum range of 30 (thirty) meters and maximum of 100 (one hundred) meters in rural area, and the minimum range of 15 (fifteen) meters and maximum of 30 (thirty) meters in urban area.
>
> § 1 In the implementation of artificial water reservoirs referred to in the caput, the entrepreneur, within the scope of environmental licensing, shall prepare an Environmental Plan for Conservation and Use of the Surroundings of the Reservoir,

[8] 1o§Article 5(1) of the new Forest Code, in verbis: "Art. 5 (...) § 1 In the implementation of artificial water reservoirs dealt with in the caput, the entrepreneur, within the scope of environmental licensing, shall prepare an Environmental Plan for Conservation and Use of the Surroundings of the Reservoir, in accordance with the term of reference issued by the competent body of the National Environmental System — Sisnama, the use of which may not exceed 10% (ten percent) of the total Permanent Preservation Area".

> in accordance with a term of reference issued by the competent body of the National Environmental System (Sisnama), and the use may not exceed 10% (ten percent) of the total Permanent Preservation Area.

The new Forest Code established that the permanent preservation area of the artificial water reservoir must be implemented through the acquisition, expropriation or institution of administrative servitude.

The current provision, allowing the institution of administrative servitude, is adherent to what has long been established by Federal Law 9,074 of 07.07.1995, which deals with granting and extending concessions and permits for public services; the National Agency of Electric Energy (ANEEL) is responsible for the declaration of public utility:

> Art. 10 It is incumbent upon the National Agency of Electric Energy — ANEEL, to declare the public utility, for purposes of expropriation or institution of administrative servitude, of the areas necessary for the implementation of facilities of concessionaires, permissionaires and authorized electric power.

In the same sense, it is the text of Federal Decree No. 2,003 of September 10, 1996, that, in article 30, provides as follows:

> Art. 30 - At the justified request of the interested party, the grantor power may declare the public utility, for purposes of expropriation or institution of administrative servitude, of land and improvements, in order to enable the performance of works and services for the implementation of hydraulic use or thermoelectric power plant, being the independent producer or self-producer interested to promote, amicably or judicially, in the form of specific legislation, the implementation of the measure and payment of the compensation due.

ANEEL Resolution 740, of 11.10.2016, establishes the general procedures for requesting the Declaration of Public Utility (DUP) that justifies the intervention in the property, allowing the institution of administrative servitude or

expropriation in private properties[9] (article 1º, §2º).

The institution of administrative servitude is applicable when it does not denote the need for the transfer of property — an unavoidable effect of expropriation — and can be as much for permanent preservation areas as for the security zone of the reservoir. In other words, it does not give rise to loss of property, as is the case of expropriation; however, the socio-environmental impact should be analysed with the economic impact. In this sense, the decision of the Federal Regional Court of the 3rd Region (São Paulo)[10] is cited to prevent the claim of the concessionaire of institution of administrative servitude insofar as it was evidenced the annihilation of the use of property.

In conclusion, in consideration of the characteristic of administrative servitude, compensation should be considered only if there was a reduction in the potential for economic exploitation of real estate; the cases of hydroelectric plants are specifically based on the judgements of the Federal Regional Courts.

In this case, therefore, the rule is that administrative servitude does not give rise to compensation if the use by the government does not cause damage to the owner and the right in rem of use does not cause damage to dominus; in the latter case, compensation should be paid in an amount equivalent to the damage because the burden of proof is on the owner.

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[9] Regarding public goods, the DUP denotes the specific allocation for purposes of electricity, and it is up to the interested party to postulate instruments that allow the intended use (article 1, paragraph 3).

[10] EXPROPRIATION - CONSTRUCTION OF HYDROELECTRIC POWER PLANT - RESERVED LAND - MID-POINT FIXATION - SERVITUDE AREA - LAND VALUE FIXATION - IMPROVEMENTS.1. The fact that the party, in an investigation and trial hearing, expresses its confidence in the magistrate does not mean that it will be subject to the amount of the fixed fees, if this does not correspond to its expectations. 2. In expropriations, the attorney's fees, set at 5% of the difference between the offer and the indemnity and plus the legal consecrated persons, under the provisions of article 20, paragraph 4, of the CPC.

5. **Conclusion**

Based on the facts and legal aspects described above, it is concluded that environmental legislation and governance environmental compliance policies observance in electricity sector companies aims to achieve the ideal model of socio-environmental risk management in which developing enterprises, without allowing the diversion of environmental licensing purposes, guarantee the legal certainty and costs predictability involved in the monitoring of, mitigation of and environmental compensation for the impacts that will be generated during the implementation and operational stages, especially in the country that has the greatest renewable energy source in the world.

References

Albuquerque, Letícia. *Poluentes Orgânicos Persistentes — Uma análise da Convenção de Estocolmo.* Curitiba: Juruá, 2008, 72-73.

Alves, Ronaldo David. "Conceitos de sustentabilidade energética". *Fórum de Direito Urbano e Ambiental*. Belo Horizonte. 9/53 (set./out. 2010) 73-76.

Antunes, Paulo de Bessa, *Direito Ambiental.* 19.ª ed., São Paulo: Atlas, 2017.

Arruda, Domingos Sávio de Barros. "A categoria acautelatória da responsabilidade ambiental". *Revista de Direito Ambiental* 11/42 (2006) 25-62.

Bechara, E. *Uma Contribuição ao Aprimoramento do Instituto da Compensação Ambiental previsto na lei 9.985/2000.* 2007.

banco mundial. *Licenciamento Ambiental de empreendimentos hidrelétricos no Brasil.* vol. 1. Brasília: Banco Mundial, 2008.

Bim, Eduardo Fortunato. *Licenciamento Ambiental.* 2.ª ed. Rio de Janeiro: Lumen Juris, 2015.

Farias, T. *Licenciamento Ambiental: Aspectos teóricos e práticos.* 5.ª ed. Belo Horizonte, 2015.

Ferreira, Lúcia Penna Franco. "Reassentamento dos atingidos por barragens: limites da competência regulatória da aneel". *Fórum de Direito Urbano e Ambiental.* Belo Horizonte. 8/46 (jul./ago. 2009) 45-59.

Milaré, Edis. *Direito do Ambiente.* 8.ª ed. São Paulo: Revista dos Tribunais, 2013.

Mirra, A.L.V. *O controle judicial do conteúdo dos Estudos de Impacto Ambiental.* Curitiba: Juruá, 2011.

Pimentel, Geraldo / Lima, Silvia H.P.N. "A incorporação da dimensão ambiental no plano de longo prazo do setor elétrico: aspectos estratégicos". *Revista de Administração Publica.* Rio de Janeiro. 25/4 (out./dez. 1991) 43-52.

Silveira, Rodrigo Mato da. "Análise do setor elétrico brasileiro à luz de princípios regulatórios desenvolvimentistas". *Fórum Administrativo.* Belo Horizonte. 3/28 (jun. 2003) 2385-99.

Souto, Marcos Juruna Villela. "Breve apresentação do novo marco regulatório do setor elétrico brasileiro". *Revista de Direito da Procuradoria Geral do Estado do Rio de Janeiro*. Rio de Janeiro. 60 (2006) 180-203.

COMPLIANCE AND SUSTAINABILITY

ENVIRONMENTAL IMPACTS AND RISK MANAGEMENT ASSOCIATED WITH WIND FARMS IN BRAZIL

RACHEL STARLING ALBUQUERQUE PENIDO SILVA

Abstract: This article aims to present the relevant aspects of environmental permitting in Brazil related to the implementation and operation of wind projects, especially regarding compliance with international standards of good practices. Biodiversity surveys, cumulative assessment data gaps, and stakeholder management are identified as key challenges.

Keywords: wind power; sustainability; environmental impact assessment; performance standards.

Contextualization of wind power in the power market in Brazil

Since 2004, the Brazilian Energy Policy has been implemented by the Energy Research Company (EPE), which is associated with the Ministry of Mines and Energy (MME). Created by Law 10,847 and regulated by Decree 5.184/04, the purpose of the EPE is to develop studies that support the formulation, planning and implementation of MME actions within the scope of the national energy policy (art. 4, single paragraph, of Law 10,847/04)

In this way, energy planning in Brazil is a responsibility of the national government and is led by the EPE. Periodically, the EPE publishes a Ten-Year Energy Expansion Plan (PDE), which presents the planned expansion of the energy sector over the ten-year period, considering all economic sectors and power generation sources. The PDE 2027 goals are to increase the reliability of the national integrated power grid, reduce generation costs and reduce environmental impacts.

The expansion of electricity supply sources in Brazil is planned according to demand forecast studies. The EPE organizes periodic energy auctions to contract new supply sources. Even during economic crises, Brazil has been an international reference in terms of the availability and generation of renewable energy.

According to the EPE, the ongoing challenge for Brazil is to promote the expansion of the energy matrix while guaranteeing security, following internationally agreed sustainable development objectives and assuring tariff justice. The strategic vision presented in PDE 2027 envisions Brazil investing in a greater diversification of clean sources and promoting the greater participation of the private sector.

According to PDE 2027, in 2017, 84.7% of all sources

in the Brazilian energy matrix were renewable sources, with 62.9% large hydropower plants and 21.7% other renewable sources (wind, solar, small hydropower and biomass). By 2027, although large hydro participation is expected to decrease to 49.4% of all sources, renewable sources other than large hydro power are expected to increase to 29.0% of all sources (Figure 1).

Installed capacity by generation source	2017		2027	
	GW	%	GW	%
Renewable Sources	125.9	84.7	164.2	78.4
Large hydro	93.6	62.9	103.4	49.4
Wind	12.3	8.3	26.7	12.7
Solar	0.5	0.3	8.6	4.1
Other (small hydro and biomass)	19.5	13.1	25.5	12.2
Non-renewable	22.6	15.3	32.0	15.3
Thermal Power Open Cycle and Storage	0.0	0.0	13.1	6.3
Total Sources	148.5	100.0	209.3	100.0

Figure 1: Installed capacity by generation source in 2017 and 2027.

Source: EPE, 2018.

For these prospects to materialize, investments of approximately R$1.8 trillion are expected in the period 2018-2027. Wind power is expected to be the source with the largest increase in installed capacity, with 14.4 GW of additional installed capacity. In 2017, the wind power plant represented 8.3% of the total energy sources, and it is expected to rise to 12.7% of the total installed generation capacity in Brazil by 2027. Considering that the Brazilian energy transmission system is integrated, the entire country benefits from the diversity of sources available throughout its territory.

Federal Law No. 10,438, of April 26, 2002, established the Incentive Programme for Alternative Energy Sources

(PROINFA). This programme consolidated the strategy for investment in renewable energies and encouraged the growth of wind power generation in Brazil, which in 2017 was 12.3 GW of installed capacity, distributed among 536 wind farms, all onshore, located in 95 municipalities, mainly in the northeast and in the south of the country (ANEEL, 2018).

According to the Global Wind Report (GWR, 2015), Brazil has one of the best wind resources in the world, mainly in the northeast and south coasts, in the northeast and southeast elevations, and in northern Roraima state The need for an increase in the power transmission network, especially in the northeastern region of Brazil, is considered one of the main obstacles for the implantation of new wind power generating plants.

Brazilian legislation, environmental permitting and power sector

In the mid-1970s, environmental permitting in Brazil was first introduced in some states, and it was then incorporated into federal legislation as one of the instruments of the National Environmental Policy (PNMA).

Modern Brazilian legislation began in the state of Rio de Janeiro with Decree-Law 134 of 1975, which made "prior authorization for the operation and operation of the installation of actual or potentially polluting activities compulsory". Decree 1,633 of 1977 established the Pollution Activities Permitting system, stipulating that the state must issue a preliminary permit, installation permit and operation permit, a model that is still current in Brazilian federal law and in several states.

In 1976, the state of São Paulo promulgated Law 997, which created the System for the Prevention and Control of Environmental Pollution; the system was further detailed in Decree 8,468 of 1976. This decree contemplated two types of permits, one for installation and another for operation (SÁNCHEZ, 2013).

The PNMA was established by Law 6,938 of 1981 and is considered the initial normative framework of Brazilian environmental legislation. The National Environmental System (SISNAMA) covers the entire national territory and is responsible for the protection and improvement of environmental quality. This system is constituted by national, state, and municipal entities.

According to Garbaccio *et al.* (2018), Law 6,938 of 1981 first listed several instruments for use by SISNAMA entities. The environmental impact assessment and environmental permitting are two of these new instruments.

In Brazil, to carry out activities that have the potential to cause environmental degradation or that use environmental resources, governmental authorization must be obtained, and socio-environmental studies are required before this authorization can be issued. This authorization, known as the environmental permit, is one of the most important instruments of public environmental policy.

Article 18 of the Brazilian Constitution establishes that each entity that makes up the Brazilian state (Union, states, municipalities and the Federal District) is autonomous and can establish laws (legislative competence) and its own management structure (administrative competence). Article 24 of the Constitution stipulates that legislative competence in environmental matters is concurrent between the Union and the states, and it is for the federal body to determine the general standards and for the states to supplement the standards to bring the standards in line with each state's reality.

State environmental agencies are the competent entities for the permitting of most wind power projects in Brazil, as established by Federal Complementary Law 140 of 2011 (LC 140/2011). When wind power projects are located in a single state, do not affect marine areas, or do not interfere in federal conservation units or Union lands, states are considered to

have the adequate competence to issue the environmental permit for such an enterprise.[1]

It is worth mentioning that in Brazil, power generation is a public utility activity, and once legal requirements are met, legal permission may be granted for future interference in all premises to be occupied by the enterprise, including interventions in permanent preservation areas and the suppression of vegetation in the Atlantic Forest biome.

According to the aforementioned LC 140/2011,[2] the entity responsible for environmental permitting is also responsible for issuing the ancillary permits. This is the case of authorization for the suppression of vegetation, intervention in areas of permanent preservation and management of wild fauna, as stated in article 16, §1, III, IV and VIII.

Other authorizations not within the scope of the permitting entity may be required and shall be requested from the entities responsible for issues related to indigenous or Quilombola indigenous communities and the management of national, state or municipal conservation units.

In 1996, the National Electric Energy Agency (ANEEL) was established by Law 9,427 of 1996 (articles 2 and 3). ANEEL is responsible for the regulation and supervision of the production, transmission, distribution and sale of electricity. ANEEL's responsibilities and most important procedures are defined in Decree 2,335 of 1997.

In 1997, Law 9,478 established the National Energy Policy and the National Energy Policy Council, and Decree 3,520

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[1] LC 140/2011, article 7º, XIV, article 8º, XV and article 9º, XIV and Federal Decree 8,437/2015.

[2] LC 140/2011, article 13: "The enterprises and activities are permitted or authorized, in an environmentally friendly way, by a single federal entity, in accordance with the attributions established under the terms of this Complementary Law. Paragraph 2. The suppression of vegetation resulting from environmental permitting is authorized by the federal permitting entity".

of 2000 defined the structure and overall procedures of these entities. This law also established the National Electric System Operator (ONS), which is responsible for coordinating and controlling the operation, generation and transmission of electricity in Brazil.

Law 9,488 of 1998 granted ANEEL the power to declare the "public utility" of land for the purposes of the expropriation or institution of administrative easements of the areas necessary for the installation of power projects.

It is important to highlight that the protection of the environment and the promotion and conservation of energy are among the objectives of the Energy Policy.

The power sector represents a significant part of the Brazilian economy. Large infrastructure projects are associated with power generation and are directly related to environmental interventions and subject to permitting and regulation. Therefore, a healthy economy and a healthy environment require an efficient and effective environmental permitting process.

Main environmental impacts and wind projects

The main objective of preparing an assessment of socio-environmental impacts resulting from the implementation of projects is to obtain relevant information for the management of the associated risks. The assessment begins with a survey of the socioeconomic characteristics of the area in which the new enterprise is to be installed. Then, the activities and actions necessary for the enterprise to be installed, operated and maintained must be identified, characterized and distributed in time and space.

By means of a multidisciplinary team, surveys of primary and secondary data, and an established methodology, the initial impact assessment is prepared. There are many methodologies adopted that identify, assess, and prioritize the impacts and thus propose measures and actions that can minimize,

compensate, mitigate or even enhance the impacts resulting from the actions necessary for the implementation, operation and maintenance of the enterprises. Sustainable development requires that the best possible measures be adopted to achieve the desired economic growth within the restrictions determined by national legislation and international guidelines on good practices and socio-environmental management.

The various stakeholders have distinct and complementary roles in the management of the territory and in the decision-making process related to the socio-environmental viability of an enterprise. Stakeholder management poses a challenge if one considers the heterogeneity of those involved, such as government agencies issuing social and environmental permits and state regulatory representatives, investors and entrepreneurs, directly and indirectly affected local communities, the academic community and consultants who prepare and are co-responsible for the content of the required studies.

According to Garbaccio *et al.* (2018), the environmental impact assessment is a management tool that, while not imposing any specific environmental protection, serves as a basis for the decision-making processes of granting or rejecting a project. According to the adopted concept, the environmental impact assessment should be useful, rigorous, practical, relevant, cost-effective, efficient, focused, adaptive, participative, interdisciplinary, credible, integrated, transparent and systematic.

According to the International Finance Corporation — IFC, the environmental impacts associated with the construction, operation and deactivation of wind power projects include impacts on the physical environment (such as visual impact) and biodiversity (affecting birds and bats, for example). Considering that many of the projects are installed in remote areas, the transport of equipment and materials during construction and possible decommissioning may present significant logistical challenges (e.g., the transport of long and

rigid structures such as blades and sections of heavy towers). The construction of access roads for the installation of wind farms in these remote locations can result in risks, including adverse impacts on biodiversity.

Specific environmental issues for the construction, operation and deactivation of wind energy projects include, for example, *(i)* landscape and visual impacts; *(ii)* noise generation; *(iii)* biodiversity change; *(iv)* shading; and *(v)* change in water quality and quantity.

Due to the nature of wind energy installations, the sector may be associated in particular with cumulative environmental and social impacts. Cumulative impact assessments are justified especially when many projects are located in sensitive areas, such as areas with high biodiversity value.

Impact cumulativity studies allow a strategic territorial planning approach and should be developed through public policies. Such studies are scarce in Brazil. Some state agencies require these studies from entrepreneurs, which is not an adequate way to prepare and maintain them.

Manuals of good international practices

The financing of major infrastructure projects in the world and the concept of sustainable development have guided various initiatives. With a view to standardizing and defining good practices and minimum criteria, especially for countries without strict environmental legislation, the International Finance Corporation (IFC), the project finance branch of the World Bank, and a Dutch bank (ABN Amro)) held a meeting in London, and in 2003, the IFC published the Equator Principles (EP) establishing criteria and policies for granting credit.

The EP became a reference in the international financial sector for the identification, evaluation and management of socio-environmental risks and impacts of projects in developing countries, presenting minimum criteria for granting loans in

the categories of project finance and project-related corporate loans. These criteria were structured in ten Equator Principles. In Figure 2, the principles of Ecuador that can be managed by the organization that receives the funding are highlighted in yellow. In blue are those of competence and evaluation of the signatory institutions of the Equator Principles (EPFI) before and during the granting of the credit.

Principle 1: Analysis and Categorization	**Principle 2: Social and Environmental Assessment**	**Principle 3: Applicable Socio-environmental Standards**	**Principle 4: Environmental and Social Management System and Plan of Action of the Equator Principles**	**Principle 5: Engagement of Stakeholders**
Principle 6: Complaint Mechanism	**Principle 7: Independent Review**	**Principle 8: Contractual Obligations**	**Principle 9: Independent Monitoring and Disclosure of Information**	**Principle 10: Information Disclosure and Transparency**

Figure 2: Equator Principles IFC EPIII - 2013.

The Equator Principles publish a list of countries with robust socio-environmental governance, legislative systems and institutional capacity designed to protect their people and the natural environment. Even with its restrictive and extensive legislation, Brazil is not included in this list. However, Equator Principle 3 — Applicable Socio-environmental Standards states that non-designated countries, including Brazil, are in compliance with the Standards of Performance defined by the IFC and the Environmental, Health and Safety Directives of the World Bank Group (EHS Guidelines, IFC, 2015).

In the international context for sustainable development, the International Finance Corporation (IFC) Environmental and Social Performance Standards, since their entry into force in 2006, have been widely praised. These performance

standards and their guides for good practices describe in detail the best practices and policies to be adopted by organizations to manage socio-environmental risk.

According to the IFC, its Sustainability Framework assists it in developing and describing commitments and defining roles and responsibilities. Furthermore, the IFC policy of access to information established its commitment to the transparency and good governance of its operations and described the disclosure obligations with respect to its investment and advisory services.

Performance standards provide guidance on how to identify risks and impacts. They also indicate measures that should be adopted to avoid, minimize and manage risks and impacts.

The mapping, engagement and management of the stakeholders is a structuring aspect of the defined standards, which include transparency in the dissemination of data and prior consultations with the population directly affected by the project.

There are eight established performance standards (PSS):

- PS 1: Assessment and Management of Environmental and Social Risks and Impacts
- PS 2: Labour and Working Conditions
- PS 3: Resource Efficiency and Pollution Prevention
- PS 4: Community Health, Safety and Security
- PS 5: Land Acquisition and Involuntary Resettlement
- PS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources
- PS 7: Indigenous Peoples
- PS 8: Cultural Heritage

International standards are generally treated by various aspects of Brazilian law. However, the methods and the form of approach differ in some respects from those advocated by Brazilian law.

The IFC also provides industry-specific manuals. In 2015, it published the "Environmental, Health and Safety (EHS)

Guidelines for Wind Energy". These guidelines are technical reference documents with general and specific examples for the wind power industry. The EHS Guidelines for Wind Energy include relevant information on the environmental, health and safety aspects of wind power installations.

Considering that the challenge of following these guidelines is associated with the development timeline for a project, the IFC advocates that the guidelines should be applied after the first feasibility assessments, throughout the development of the environmental impact assessment, and during the construction and operation phases.

Main challenges

Legal, regulatory and international good practices face challenges related to risk management. The need for extremely descriptive environmental studies and deficiencies in the management of information databases do not necessarily corroborate the implementation of good international practices. The challenge is to incorporate risk management and the implementation of good practices into the business design.

In Brazil, the main socio-environmental challenges associated specifically with wind projects are the need to deepen the knowledge of fauna, especially birds and bats. The lack of basic information, especially on bats, makes it difficult to establish effective measures. The adoption of new models of monitoring and adaptation technology is necessary.

When multiple wind farms are located in the same geographical area and are close to areas of high biodiversity value, developers of wind projects are encouraged to implement monitoring procedures so that the results can be evaluated cumulatively. As mentioned, there is a challenge related to the elaboration of cumulative evaluations between wind projects in the regions with the highest concentrations of projects. In these regions, in addition to impacts associated

with biodiversity, the relationship with resident populations can be a source of conflict.

The best wind areas in Brazil are territories with a low-income population that experiences socioeconomic disparities, such as income inequality. This scenario makes the socio-environmental management of wind projects more delicate and requires that the entrepreneurs invest in structural social projects in parallel with wind projects. Communication with the population, in particular the most vulnerable, is essential. Social projects must be managed through adequate articulation and governance.

Sustainability, legal compliance, and compliance with performance standards converge across all sectors of the economy. Where government regulation is weaker or less consistent, it is expected that organizations will increasingly position themselves as managers and leaders, especially on issues related to climate change, transparency and human rights.

Companies have been adapting to international ethical standards and have required similar attitudes from suppliers, regardless of regulatory and legal requirements. The promotion of artificial intelligence technologies, transparency and the increasing speed of information has strongly impacted corporate decisions and their relationship of trust with stakeholders. This overexposure sets sustainability as a powerful tool to be incorporated into business design.

Referências

ABEEÓLICA. *Certificação de energia renovável cresce acima das expectativas.* 2017. Disponível em: <http://www.abeeolica.org.br/agencia-abeeolica/>. Acesso em: abril de 2019.

ANEEL (Agência Nacional de Energia Elétrica). Banco de Informações de Geração. Capacidade de Geração do Brasil. 2018. Disponível em: <http://www2.aneel.gov.br/aplicacoes/capacidadebrasil/capacidadebrasil.cfm>. Acesso em: fevereiro de 2018.

BRASIL. Lei n.º 6.938, de 31 de agosto de 1981. Dispõe sobre a Política Nacional do Meio. Ambiente, seus fins e mecanismos de formulação e aplicação, e dá outras providências. Brasília: DOU de 2.9.1981. Disponível em: <http://www.planalto.gov.br/ccivil_03/Leis/L6938. htm>. Acesso em: abril. 2019.

—. Ministério de Minas e Energia, Empresa de Pesquisa Energética. *Plano Decenal de Expansão de Energia 2027* / Ministério de Minas e Energia. Empresa de Pesquisa Energética. Brasília: MME/EPE, 2018.2v.: il. Disponível em: <http://www.epe.gov.br/sites-pt/publicacoes-dados-abertos/publicacoes/Documents/PDE%20 2027_aprovado_OFICIAL.pdf>. Acesso em: 28 mar. 2019.

— Ministério de Minas e Energia, Empresa de Pesquisa. NOTA TÉCNICA EPE 026/2018 Análise socioambiental das fontes energéticas do PDE 2027 EPE-DEA-NT-026/2018-r0 Data: 5 de novembro de 2018. Disponível em: <http://epe.gov.br/sites-pt/publicacoes-dados-abertos/publicacoes/PublicacoesArquivos/publicacao-332/topico-433/NT%20An%C3%A1lise%20Socioambiental%20EPE%20026-2018.pdf>. Acesso em: junho, 2019.

CONAMA - CONSELHO NACIONAL DO MEIO AMBIENTE (Brasil). Resolução n.º 237, de 19 de dezembro de 1997. Disponível em: <http://www2.mma.gov.br/port/conama/res/res97/res23797.html>. Acesso em: mar. 2019.

GARBACCIO, Grace L. / SIQUEIRA, Lyssandro N. / ANTUNES, Paulo de Bessa. *Licenciamento ambiental: necessidade de simplificação*.2018. v. 32, n. 3, p. 562-582, set./dez. 2018 JUSTIÇA DO DIREITO. Recebido em: 14/08/2018 | Aprovado em: 22/10/2018. Disponível em: <http://seer.upf.br/index.php/rjd/article/view/8516/114114459>. Acesso em: mar. 2019.

GWR (Global Wind Report) Annual Market Update. 2015. Disponível em: <http://www.gwec.net/wp-content/uploads/vip/GWEC-Global-Wind-2015-Report_April-2016_22_04.pdf>. Acesso em: maio de 2019.

KAFRUNI, S. *A força dos ventos: energia eólica supera a de outras usinas no Nordeste*. 2017. Disponível em: <http://www.correiobraziliense.com.br/app/noticia/economia/2017/10/08/internas_economia,632184/energia-eolica-no-nordeste.shtml>. Acesso em: abril de 2019.

IFC (INTERNATIONAL FINANCE CORPORATION) (2012a). IFC Performance Standards on Environmental and Social Sustainability. DC: IFC. Disponível em: <http://www1.ifc.org/wps/wcm/connect/c8f524004a73daeca09afdf998895a12/IFC_Performance_Standards.pdf?MOD=AJPERES>.

— (2012b). *International Finance Corporation's Guidance Notes: Performance Standards on Environmental and Social Sustainability*. DC: IFC. Disponível em: <http://www1.ifc.org/wps/wcm/connect/e280ef804a0256609709ffd1a5d13d27/GN_English_2012_Full-Document.pdf?MOD=AJPERES>.

3.

THE SUSTAINABILITY OF BRAZILIAN AGRIBUSINESS IN THE ASPECT OF FOREST PRESERVATION

A COMPARISON OF FOREST DATA FROM BRAZIL AND PORTUGAL

SORAYA SAAB

Abstract: It is a paper presenting technical data about the differences between the forest areas effectively preserved in Brazil and Portugal, as well as the marketing mechanisms implemented in Brazil along the entire production chain and aimed at ensuring sustainability and regularity to the large agricultural commodities it produces.

Keywords: sustainability; agriculture; livestock breeding; forests; deforestation; use and occupation of soil

The Differences in Agricultural and Forestry Soil Use between Portugal and Brazil

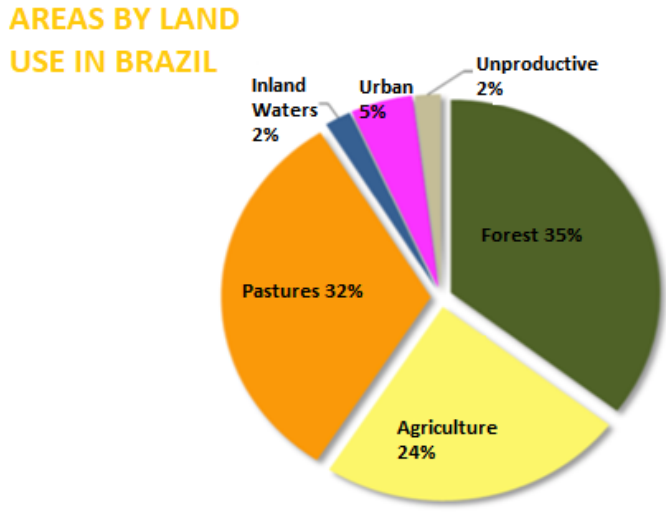
Agriculture is one of the oldest activities developed by humankind. It enabled humans to stop being nomadic and to become sedentary and is therefore directly connected to the emergence of human communities and development of the first great civilizations. Similar to the beginnings of human civilization, agriculture is directly connected to the formation and development of Brazil and Portugal and in the present day is still of great and vital relevance for the construction of the gross domestic product (GDP) of both nations as well as for global trade.

In Portugal in 2018, agriculture was responsible for 1.9% of GDP, employing approximately 6.6% of the economically active population in the country[1], with cereals, fruits, vegetables as the main products. Portugal was also one of the 10 largest world exporters of wine and the largest world exporter of cork.

According to data obtained in the 6th National Forest Inventory of Portugal from 2010, published in February 2013[2], which is the most current study that contains government statistics, agricultural areas constitute 24% of the total Portuguese territory, with bushes and pastures corresponding to 32% and forests 35%, as shown in the chart below for the distribution of soil use in continental Portugal for 2010:

[1] <https://pt.portal.santandertrade.com/analise-os-mercados/portugal/economia>.

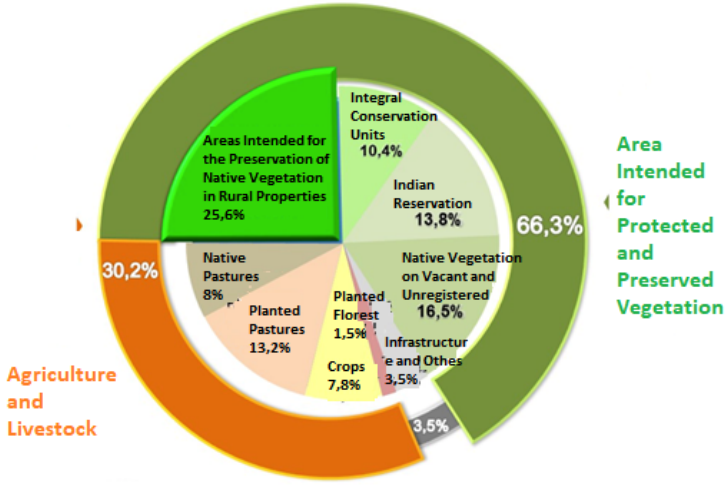
[2] <http://www2.icnf.pt/portal/florestas/ifn/resource/doc/ifn/ifn6-res-prelimv1-1>.



In Brazil, the situation is slightly different. The Brazilian Ministry of Agriculture[3] estimates that in 2017, agribusiness alone represented 21.6% of national GDP and was responsible for one in three jobs in the country. Crops cover approximately 7.8% of the national territory, pastures correspond to 21.2%, native forests 66.3% and planted forests 1.2%, as shown in the chart below produced by *Empresa Brasileira de Pesquisa Agropecuária* [Brazilian Agricultural Research Company] (EMBRAPA)[4]. These data have been confirmed by the National Aeronautics and Space Administration (NASA) through satellite analysis.

[3] <http://www.agricultura.gov.br/assuntos/politica-agricola/agropecuaria-brasileira-em-numeros>.

[4] <https://www.embrapa.br/busca-de-noticias/-/noticia/35967323/area-rural-dedicada-a-vegetacao-nativa-atinge-218-milhoes-de-hectares>.



Brazil is solely responsible for most of the agricultural products marketed in the world and was the largest world exporter of orange juice, sugar, coffee, beef, chicken and soy beans in 2017, according to data from the Ministry of Agriculture.

Brazil's Position in The Word Market		
Main Products	Brazil - Word Ranking	
	Production	Export
Sugar	1º	1º
Coffee	1º	1º
Orange Juice	1º	1º
Beef	2º	1º
Chicken Meat	2º	1º

Brazil's Position in The Word Market		
Main Products	Brazil - Word Ranking	
	Production	Export
Corn	3º	3º
Soy Beans	2º	1º
Soybean Meal	4º	2º
Soybean Oil	4º	2º
Cotton	4º	2º
Pork Meat	4º	4º

While 24% of the territory of Portugal is used for the development of agricultural activity, Brazil uses only 7.8% for the same function.

In comparing Brazilian and Portuguese forest data, we noted that 66.3% of Brazilian forests are native, and only 1.2% are planted forests, while in Portugal, 35% of forests are planted, and of this total, 26% are planted forests of eucalyptus, which is not native and is used to supply the pulp and paper industry. In other words, to obtain a real notion of the area that is in fact forested in Portugal, we should exclude all exotic plant species planted there and consider that they correspond to areas used in agriculture rather than falling into the class of forests.

Currently, eucalyptus plantations are responsible for 86% of large-scale plantations, to the detriment of autochthonous trees, with Portuguese government support.

The expansion of the large-scale eucalyptus plantation is linked to the increase in the country of large forest fires, which have historically been due to the Mediterranean weather during the summer, as in 2017.

Because eucalyptus is a tree that is highly combustible, easily propagated and very flame resistant, it contributes to the destruction of water resources, increases soil erosion, and

foments the disappearance of fauna that cannot feed on its leaves. The rampant expansion of this crop with governmental support, to the detriment of the re-composition of native species, is responsible for one of the great environmental problems that Portugal faces.

Moreover, in Portugal, only 2.2% of areas classified as forests in the forest inventory are in the public domain, 76.6% are in the hands of small producers and 13.4% are in forestry cooperatives, while in Brazil, approximately 40% of forest areas are in the public domain, and 25.6% are in the hands of rural producers.

In Brazil, depending on the biome in which the rural property is located, the owner has the duty to preserve part of the property with native forests as a legal reserve to ensure the economic use of the property in a sustainable way. The area preserved varies from 20% to 80% of the property, and the areas assigned for preserving water resources and protecting the soil, landscape, geological stability, biodiversity and the gene flow of fauna and flora can vary from 30 to 600 metres in the case of riverbanks and watercourses and have a minimum radius of 50 metres in the case of springs; around lakes, lagoons or artificial reservoirs; and on hilltops, hillsides, mountains, slopes, board edges, and sandbanks, among other provisions of the Brazilian Forest Code[5].

If a property is subject to the environmental legislation in force, first, the owner should register the property in the *Cadastro Ambiental Rural* [Rural Environmental Registry] (CAR), an electronic record through which a national database containing all document data of use, preservation and area use is being created. This registration enables the owner to subsequently join the *Programa de Regularização Ambiental*

[5] <http://www.planalto.gov.br/ccivil_03/_Ato2011-2014/2012/Lei/L12651.htm>.

[Environmental Regularization Programme] (PRA), and thus makes feasible the regularization of environmental liability for his or her property to adjust it to the legislation in force.

Through this programme, the Brazilian government is able to perform a more complete and detailed monitoring of rural properties, allowing greater control of the areas that are not complying with the environmental rules and reducing the expansion of unlawful deforestation, in other words, that performed without administrative authorization and outside the legally permitted parameters.

In Portugal, there is no obligation to assign a portion of rural property to environmental preservation nor a mandatory rule limiting the clear cutting of forest vegetation or protecting riparian forests. There is only a manual of integrated protection[6] in which there are general guidelines about the integrated protection of the environment for sustainable agriculture, which contain recommendations for the preservation of the riparian forest at a distance of 10 metres, control of pests, maintenance of the vegetal coverage in the winter, and defence measures against erosion, among others.

In light of the brief notes above, we can conclude that while Brazil aims for the sustainability and balance of agribusiness together with the preservation and maintenance of forest areas through several mandatory rules that in a way establish limitations on the right of property, Portuguese rural property is not subject to similar limitations and prohibitions. Portugal effectively assigns to preservation only 25% of its territory with natural forests and uses approximately 65% of its territory for the development of farming activity, while Brazil keeps more than 66% its territory in natural forests and uses approximately 30% in farming.

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[6] <http://www.isa.utl.pt/files/pub/ISAPRESS/PDF_Livros_ProfPedroAmaro/Proteccao_Integrada.pdf>.

Some Methods of Control of the Productive Chain of the Products of Unlawful Deforestation in Brazil

As a response to the difficulties of controlling unlawful deforestation by Brazilian authorities and to the constant questioning of international environmental groups about the expansion of deforested areas in the Legal Amazon in Brazil, business agreements with large conglomerates have been executed according to which large companies have publicly committed to not irregularly buying products from deforested areas in the Legal Amazon.

Currently, only 87 corporations control all the productive chains of agribusiness in the world, and they are the main producers of seeds, pesticides, and fertilizers and buyers of the commodities produced by Brazil[7]. The market has counterattacked, requiring proof of the environmental regularity of the explored areas from their commercial partners, as in the case of the moratorium on soy and meat.

Therefore, we also have a chance for a strategy to contain irregular deforestation in the country, involving the surveillance and punishment of the entire productive chain to stanch its financing.

Starting from the concept that those who acquire, finance, transport, trade or intermediate products from unlawfully deforested areas, including banks, traders, carriers and processing companies, are also responsible for forest devastation, many banks that promote farming have begun to require proof of environmental regularity from rural producers before they will grant financing for production costs and the entire agribusiness chain. The implementation of social and environmental policies by financial institutions is based on

[7] <https://br.boell.org/sites/default/files/atlas_agro_final_06-09.pdf>.

Resolutions from Brazilian Central Bank No. 3,545/2008[8], 4,327/2014[9] and 4,427/2015[10].

Considering the possibility of holding all the agents of the productive chain responsible for irregular deforestation, the *Instituto Brasileiro de Meio Ambiente e dos Recursos Naturais* [Brazilian Institute of Environment and Natural Resources] (IBAMA) in 2016, during the first stage of the Shoyo Operation, notified Santander Bank about R$ 47.5 million due to finance the planting of grains in an area in the Legal Amazon, in Mato Grosso state, which had already been embargoed by the surveillance agency because it is an area of environmental protection. In 2018, during the second stage of the operation, it issued 62 notices of violation against companies and rural producers who failed to comply with the embargo of unlawfully deforested areas in Maranhão, Tocantins, Piauí and Bahia states, with penalties totalling R$ 105.7 million reais.

The first great movement against irregular deforestation in Amazon was the Soil Moratorium, which with the release in 2006 by Greenpeace of a report called "*Comendo a Amazônia*" ["Eating Amazon"], in which the soybean production chain was accused of being responsible for the expansion of Amazonian deforestation, the large international food companies that almost constitute a monopoly on buying soybeans in the world, started to seek ways to protect their image.

From this pressure, an agreement arose between the soybean buying and exporting companies and Greenpeace to

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[8] <https://www3.bcb.gov.br/normativo/detalharNormativo.do?N=108019002&method=detalharNormativo>.

[9] <https://www.bcb.gov.br/pre/normativos/res/2014/pdf/res_4327_v1_O.pdf>.

[10] <https://www3.bcb.gov.br/normativo/detalharNormativo.do?N=108019002&method=detalharNormativo>.

not buy soybeans from deforested areas in the Legal Amazon after 2006.

These terms changed after the new Brazilian Forest Code of June 22, 2008, which included in the restrictions farmers notified of slave labour, resulting in the voluntary agreement of the Soy Moratorium represented by *Associação Brasileira das Indústrias de* Óleos *Vegetais* [Brazilian Association of Vegetable Oils Industries] (ABIOVE) and by *Associação Brasileira dos Exportadores de Cereais* [Brazilian Association of Cereal Exporters] (ANEC).

It should be noted that the above restriction imposed by ABIOVE included areas that were deforested with governmental authorization and that are in full compliance with environmental regulations, provided that the opening of the area occurred after July 22, 2008.

Currently, the companies associated with ABIOVE are responsible for buying 90% of all soy produced in the country.

On the same line of the agreement executed regarding soy, the federal prosecution office of Mato Grosso, Pará, Rondônia and Amazônia states made a Conduct Adjustment Commitment with large cold stores, such as JBS, Mafrigg, Bertin and Friboi, regarding the purchase of meat from the Amazon biome.

In this document, companies committed to not acquire, transport or market products of animal origin from areas of environmental embargo and notification of slave labour or

from vacant public lands in the Amazon, highlighting that these restrictions cover only the exact embargoed area and do not cover other farms where the producers were later notified. The agreement was improved on 06.12.2019 to bring greater legal security to the signatories of the *Carne Legal* [Legal Meat] programme[11].

A recent commercial agreement executed between Mercosul and the European Union after negotiations lasted for more than 20 years, released on 07.01.2019, included an item about trade and sustainable development. Brazil was committed to defending initiatives in the area of sustainable agriculture, such as the adoption of concepts for zero deforestation in the supply chain, and to honouring the agreements of the soy and meat moratorium, as mentioned above, including the commitment of the parties to honour the environmental agreements already signed and to implement the Paris Agreement.

Conclusions

Considering all mechanisms created for the control of the productive chain of the main Brazilian commodities, it is evident that these mechanisms are also effective means to reduce the deforestation of the Amazon.

It should be noted that, regardless of the advertisements propagated, Brazil has preserved native forest over more than 66% of its total territory, and rural producers are liable for the maintenance of more than 25% of all forestry coverage of the country due to the restrictions on soil use provided in environmental legislation.

Based on the data presented here, we can also conclude that regular agribusiness is not responsible for the expansion of irregular deforestation in the Amazon because producers who

[11] <https://www.cnabrasil.org.br/noticias/cna-abiec-e-abrafrigo-assinam-memorando-sobre-o-cumprimento-dos-tacs-do-programa-carne-legal>.

operate illegally suffer heavy restrictions and market control, either in financing, in the purchase of seeds and fertilizers, or in the sale of finished products, which makes the development or expansion of activity in these conditions impossible.

References

ASSOCIAÇÃO BRASILEIRA DAS INDÚSTRIAS DE ÓLEOS VEGETAIS. Disponivel em: <http://abiove.org.br/sustentabilidade/>. Acesso em: 17 de julho de 2019.

MINISTÉRIO DA AGRICULTURA, PECUÁRIA E ABASTECIMENTO DO BRASIL, Disponível em: <http://www.agricultura.gov.br/assuntos/politica-agricola/ agropecuaria-brasileira-em-numeros>. Acesso em: 17 de julho de 2019.

BANCO CENTRAL DO BRASIL, Disponível em: <https://www3.bcb.gov.br/normativo/detalharNormativo.do?N=108019002&method=dealharNormativo>. *Acesso em: 17 de julho de 2019.*

— Disponível em: <https://www.bcb.gov.br /pre/normativos/res/2014/pdf/res_4327_v1_O.pdf>. Acesso em: 17 de julho de 2019.

— Disponível em: <https://www.bcb.gov.br/pre/ normativos/res/2015/pdf/res_4427_v1_O.pdf>. Acesso em: 17 de julho de 2019.

CONFEDERAÇÃO NACIONAL DA AGRICULTURA. Disponível em: <https://www.cnabrasil.org.br/cna/panorama-do-agro>. Acesso em: 17 de julho de 2019.

— Disponível em: <https://www.cnabrasil.org.br/noticias/cna-abiec-e-abrafrigo-assinam-memorando-sobre-o-cumprimento-dos-tacs-do-programa-carne-legal>. Acesso em 17 de julho de 2019.

DIREÇÃO GERAL DE AGRICULTURA E DESENVOLVIMENTO RURAL DE PORTUGAL. Disponível em: <https://www.dgadr.gov.pt/>. Acesso em: 17 de julho de 2019.

EMPRESA BRASILEIRA DE PESQUISA AGROPECUÁRIA. Disponível em:

<https://www.embrapa.br/busca-de-noticias/-/noticia/35967323/area-rural-dedicada-a-vegetacao-nativa-atinge-218-milhoes-de-hectares>. Acesso em: 17 de julho de 2019.

FEBRABAN; FGVces, Federação Brasileira de Bancos e Centro de Estudos em Sustentabilidade da Fundação Getúlio Vargas, Instituições Brasileiras e a Gestão do Risco de Desmatamento. Disponível em: <http://www.lowcarbonbrazil.com.br/docs/pdf/FINAL_instituicoes_financ.pdf>. Acesso em: 17 de julho de 2019:

Folha de Estado de São Paulo. Jornal. Disponível em: <https://www1.folha.uol .com.br/mercado/2019/07/acordo-mercosul-ue-inclui-restricao-a-soja-e-carne-em-area-desmatada.shtml>. Acesso em: 17 de julho de 2019.

GREENPEACE. *Comendo a Amazônia.* Disponível em: <https://www.greenpeace.org/ archive-brasil/Global/brasil/report/2007/7/comendo-a-amaz-nia.pdf>. Acesso em: 17 de julho de 2019.

INSTITUTO DE CONSERVAÇÃO DA NATUREZA E DAS FLORESTAS DE PORTUGAL. 6º Inventário Florestal Nacional. Disponível em: <http://www2.icnf.pt/ portal/florestas/ifn/resource/ficheiros/ifn/ifn-6-res-prelimv1-1>. Acesso em: 17 de julho de 2019.

— Nota de Comunicação da Conclusão do 6º Inventário Florestal Português. Disponível em: <https://www.portugal. gov.pt/download-ficheiros/ficheiro.aspx?v=daa225b8-4f5e-4f0e-a4e-c-6abe8eba9a9c>. Acesso em: 17 de julho de 2019.

INSTITUTO NACIONAL DE ESTATÍSTICA DE PORTUGAL. Disponível em: <https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine_publicacoes&PUBLICACOESpub_boui=369846105&PUBLICACOESmodo=2>. Acesso em: 17 de julho de 2019.

INSTITUTO SOCIOAMBIENTAL. Disponível em: <https://www.socioambiental.org/ banco_imagens/pdfs/10396.pdf>. Acesso em: 17 de julho de 2019.

— A Proteção Integrada. Disponível em: <http://www.isa.utl.pt/ files/pub/ISAPRESS/PDF_Livros_ProfPedroAmaro/Proteccao_Integrada.pdf>. Acesso em: 17 de julho de 2019.

Jornal de Negócios. Disponível em: <https://www.jornaldenegocios.pt/empresas/ industria/detalhe/governo-assegura-quequer-aumentar-a-producao-do-eucalipto>. Acesso em: 17 de julho de 2019.

Nexo, Jornal Digital. Disponível em: <https://www.nexojornal.com.br/grafico/2017/04/07/P%C3%BAblicas-e-privadas-a-divis%C3%A3o-de-terras-no-territ%C3% B3rio-brasileiro>. Acesso em: 17 de julho de 2019.

PLANALTO, Presidência da República do Brasil. Disponível em: <http://www.planalto. gov.br/ccivil_03/_Ato2011-2014/2012/Lei/L12651.htm>. Acesso em: 17 de julho de 2019.

ROSALUX, Fundação Rosa de Luxemburgo. Atlas do Agronegócio, ISA, Instituto Socioambiental. Disponível em: https://br.boell.org/sites/default/files/atlas_agro_final_ 06-09.pdf>. Acesso em: 17 de julho de 2019.

SANTANDER, Banco Santander, Trade Portal. Disponível em: <https://pt.portal. santandertrade.com/analise-os-mercados/portugal/economia>. Acesso em: 17 de julho de 2019.

TSF, Rádio Notícias. Disponível em: <https://www.tsf.pt/sociedade/ambiente/interior/ eucaliptos-dominam-86-das-plantacoes-de-arvores-em-portugal-9521579.html>. Acesso em: 17 de julho de 2019.

INVESTMENT IN (SUSTAINABLE) TOURISM IN LISBON

ON THE WAY TO A TRAGEDY OF THE COMMONS?

JOÃO NOGUEIRA DE ALMEIDA

Abstract: Tourism activity has been developing at increasing rates in major European cities, because of its history, beauty and monumental wealth. This development brings with it serious problems of resource depletion and sustainability, which can lead to a new "Tragedy of the Commons".

Keywords: sustainable tourism; tragedy of the commons

1. **Introduction**

Tourism activity has been developing at increasing rates all over the world, particularly in Europe. First were the major European cities, such as London, Paris, Vienna, Madrid, Amsterdam, Barcelona, Berlin and Rome. Later, the same happened to smaller cities, such as Venice or Florence, by virtue of their history, beauty and monumental wealth.

In recent years, much of Portugal has been "discovered" by tourists. Certain regions of Portugal, such as the Algarve and Madeira, have been favourite vacation destinations for many Europeans since the 1960s. However, the changes that have been seen in recent years are something new. Lisbon and Porto have experienced an increase in tourist demand far beyond what would have been expected only a few years ago.

In Lisbon, tourist demand has been attracted by, among other factors, the unique climate and environment, the charm of the historic districts, the human dimension, well expressed in the existence of urban huts and their dwellers, their own cultural roots and the safety and kindness of the city residents. All these elements have contributed to the fact that people are increasingly finding reasons to visit Lisbon or even to reside there, temporarily or permanently[1].

However, more tourists in Lisbon implies more pressure on the collective infrastructure, such as the cleanliness of public transport, hospitals, parks, museums or even restaurants and entertainment venues, and the de-characterization of the conditions that make the city unique and attractive. The desire to live in Lisbon has led to a spiralling rise in real estate prices, "expelling" many people from Lisbon. Therefore, the growth of tourism in Lisbon, if it is

[1] *Turismo e Lazer na Região de Lisboa, Report*, <http://www.ccdr-lvt.pt/uploader/index.php?action=download&field=http://www.ccdr-lvt.pt/files/a2f708eed5afa853d751697ba080d12351abd926.pdf&fileDesc=Turismo-e-Lazer-na-Regiao-de-Lisboa>.

initially to be applauded (bear in mind the benefits it provides) also contains the germ of the city's destruction.

2. **The "tragedy of the commons"**

Lisbon's dilemma is a classic case of the "tragedy of the commons", of resource depletion by over-exploitation. According to Hardin[2], when facing access to a good or resource that is free but of a finite dimension, individual rational behaviour (maximizing profits) will quickly lead to its exhaustion. Hardin's pessimistic prediction would later be disproven by Nobel laureate Elinor Ostrom. This author showed that it is possible to manage common resources in a lasting manner and without public intervention, thus avoiding the announced tragedy of the exhaustion of resources.

Commodities[3] are a kind of 'tertius generus', leases between private goods (rivals and excludables) and public goods (non-excludables and non-rivals)[4], which are characterized by being rival goods, on the one hand, as goods of free access and use. The rivalry of the commons implies, on the other hand, that

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[2] Garrett Hardin, "The Tragedy of the Commons", *Science* 162/3859 (13 de dezembro de 1968) 1243-1248.

[3] On the commons, see J. C. Caldas, "A economia dos bens comuns: visões rivais. Bem Comum - Público e/ou Privado", in J. Pato / L. Schmidt / M. E. Gonçalves, Imprensa de Ciências Sociais, 2013, 109-128.

[4] Private goods are rival and excludable goods. They are rival goods because if a person satisfies a need with a particular good, it means that others will not be able to satisfy their needs as well. They are excludable goods because it is possible to exclude from their enjoyment all those who are not willing, for example, to pay a price to obtain it. Public goods are non-rival because the enjoyment of a good by one person does not exclude their enjoyment by another. They are non-excludable because one person cannot exclude others from their enjoyment. On the concept and distinction of private goods and public goods, see J. J. Teixeira Ribeiro, *Lições de Finanças Públicas,* Coimbra: Coimbra Editora, 1997.

an individual's share of the holding is reduced in proportion to the available quantity of that good. Pastures and fishing grounds are good examples of common properties. In these two cases, the pursuit of individual interest in maximizing benefits would lead more or less rapidly to the exhaustion of both pastures and fishing grounds.

In the case of tourism, in which a group of private goods is operated, each owner seeks to maximize his or her profits, from the owner of the restaurant to the owner of the hotel to the travel agencies, ending with taxi drivers and stores that sell "souvenirs". Each of these assets is private (restaurant, hotel, brokerage service, shop or taxi). However, each of these private property owners indirectly exploits common goods, whether the quiet or the hustle and bustle of various Lisbon environments, traditional neighbourhoods teeming with life, the charm of the city, its authenticity, or the collective transportation services of the city. These are precisely the factors that make tourists decide to visit Lisbon.

However, the pursuit of the maximization of benefits in the logic of the use of private goods indirectly causes the exhaustion of the common goods mentioned above and, in the long run, the depletion of the greater common good, Lisbon.

3. **Possible solutions: brief sketch**

It is necessary to regulate the management of common goods. It is important, in the wake of Ostrom's teaching (Ostrom 1990, pp. 90-102), to (1) clearly define the common resources to be preserved and their users or ultimate beneficiaries. Next, (2) appropriate rules (3) should be laid down for the local conditions of use of the common goods. This definition should include the participation (4) of all stakeholders (hence the last users, or beneficiaries). The benefits (5) provided by common management should be commensurate with the costs of use. Community rules (6) must be recognized by external

authorities. Compliance with the agreed-upon rules should also be monitored (7). Finally, penalties should be provided for offenders (8)[5].

In this order of ideas, the solutions advocated by Ostrom[6] are, in abstract terms, of several orders:

1. Regulation by the state
    1.1. Limitation of access and exploitation (prohibitions, quotas, etc.)
    1.2. Privatization
2. Self-management

Some of these solutions have been discussed, and some are even in the process of being implemented.

Certain cities, such as Venice, want to limit the number of visitors owing to the very high proportion of visitors to inhabitants. In a report published in 2015, a group of students from the Worcester Polytechnic Institute[7] proposed some measures. A first step should be to determine the maximum occupancy limit of the city by non-residents. Then, it is necessary to calculate the number of visitors and occupants of the city.

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[5] João Simões / Marta Macedo / Pilar Babo (2011), Elinor Ostrom: "Governar os Comuns", disponível em: <https://www.fep.up.pt/docentes/cchaves/Simoes_Macedo_Babo_2011_Ostrom.pdf>.

[6] For a deeper understanding of Ostrom's thinking, consult Ostrom *et al.*, "Revisiting the Commons: Local Lessons, Global Challenges", *Science* 284/5412 (1999) 278-282; Elinor Ostrom, *Governing the Commons: the evolution of institutions for collective action,* Cambridge: Indiana University / University Press, 1990; Idem, *Design principles and threats to sustainable organizations that manage commons,* Center for the Study of Institutions, Population, and Environmental Change, Workshop in Political Theory and Policy Analysis, Indiana University, 1999.

[7] *Safe and Sustainable Tourism: Managing Venice's Millions of Visitors - An Interdisciplinary Qualifying Project submitted to the faculty of Worcester Polytechnic Institute,* disponível em <https://web.wpi.edu/Pubs/E-project/Available/E-project-121815-095808/unrestricted/2015TourismFinalReport.pdf>.

	 Overnighters	 Daytrippers	 Commuters	 Residents
Daily	17,600	45,580	22,700	55,700
Annual	6,425,000	16,635,000	7,600,000	20,330,000
Percentage	12.6 %	32.6 %	14.9 %	39.9 %

For example, in Venice, with a resident population of 55,700 inhabitants, 17,600 people daily sleep in the city, 45,580 remain a few hours and 22,700 arrive in the city to work and return at the end of the day to their places of residence[8].

Hence, the logical measure is to determine the maximum quantity and optimal quantity of visitors and to act accordingly in limiting their number.

This measure could lead to charges for entering and staying in the city, reducing the influx into certain areas of the city, limiting the construction of hotels, limiting the offer of accommodation, imposing rules of "sustainable" behaviour for visitors (restrictions on access to public transport during peak periods for residents, prohibitions on travel on certain residential streets, etc.).

[8] The referenced data and table can be consulted in the document referred to in the previous note.

Conclusion

Tourism is not an innocuous activity that produces only benefits. The growth of tourist activity in certain cities is motivated by the willingness of visitors to enjoy the common goods there. However, common goods are not free goods. In addition, to a certain point, tourism activity will degrade the common goods on which it depends, so its regulation and limitation must be considered to guarantee its sustainability and the legitimate rights of residents.

5.

MARIANA AND BRUMADINHO
WHY DID COMPLIANCE PRACTICES NOT PREVENT THOSE TRAGEDIES?

GABRIEL LIMA FERNANDES

Abstract: Civically concerned about the environmental and human consequences of the tragedies of Mariana and Brumadinho, both succeeded in the Brazilian state of Minas Gerais, this inquiry intends to foment the necessary discussion about the role of Compliance in protecting the environment and safeguarding the dignity of the human person. In order to do so, some factual aspects about the tragedies in question will be elucidated, the historical and juridical contours of Compliance in Brazil will be briefly discussed, it will be asked — without, however, seeking to answer it — why it [the Compliance] did not prevent the occurrence of those tragedies, and from that inquiry it will be tried to demonstrate why this tool can — or better, should — be important in preserving the environment and in defense of Human Rights.

Keywords: compliance; environment; dignity of human person; human rights

1. **Introduction**

It seems no coincidence that the Seminar "Compliance and Sustainability — Brazilian and Portuguese Perspective", whose speakers' presentations gave rise to the elaboration of this rich collective work, took place at the Faculty of Law of the University of Coimbra just two weeks after the occurrence of the Brumadinho tragedy.

At that time, although dismay over the tragedy was general and still dominated all the participants in the event — including those who, as a result of the tragedy, could not even participate in it — the disastrous extent, from an environmental and especially a human point of view, of this tragedy could not even be imagined. It was known that the implications were immense because the numbers of the dead, the injured, and the homeless were already known as the number of missing persons was reduced daily. What was not yet known — and, to some extent, is still not known — was the amount of biodiversity suppressed, the extent of the infection of the watershed, the number of people indirectly deprived of livelihoods by river contamination and the number of victims poorly assisted — not to mention unassisted — by the state and the responsible company. Nor was it supposed that as of today[1], after more than six months, 22 people would remain missing[2], probably buried under the deadly toxic tailings mud that mining companies still insist on producing.

It was revealed, after the dismay in response to Mariana and the verified repetition in Brumadinho, that a scenario of total environmental and human unsustainability means the

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[1] 12/07/2019.

[2] Avaible in: <http://www.vale.com/brasil/PT/aboutvale/servicos-para-comunidade/minas-gerais/atualizacoes_brumadinho/Paginas/lista-gem-pessoas-sem-contato.aspx>. Access on: 07/12/2019.

non-extinction of deposits of liquid tailings from wet mineral extraction, not only because the conditions of the existence of future generations that will live directly or indirectly in the region where the tragedies occurred have been compromised but also, and mainly, because the living conditions of the present generations that live or lived there have been completely degraded.

It was convenient to ask the other speakers and listeners — and likewise the readers of this communication — what is the place of compliance in preventing tragedies such as those of Mariana and Brumadinho and, consequently, the ecological[3] and human damage witnessed in them.

In a seemingly dissonant voice — although, it should be said, (in)opportunely unsettling — in relation to most other utterances, it was not sought, and still is not sought, to demonize productive activity in general because the voice recognizes the important role of such activity in socioeconomic provision owing to the generation of jobs and income. Nor does it encourage the expiatory movement owing to which mining has been suffering as a result of the social furore observed after the inconceivable chaotic repetition of Mariana in Brumadinho.

It was sought, as it is still sought, to understand why the compliance practices of the mining company directly responsible for monitoring and maintaining the broken tailings dam in Brumadinho and partially responsible for that in Mariana — which is, enlighteningly, one of the Brazilian

[3] Alexandra Aragão. *A renovação ecológica do Direito do Ambiente: Sumários desenvolvidos. Ano lectivo 2017/2018.* Coimbra: FDUC, 2017. 6-7. The author reveals the distinction between environmental damage and ecological damage in linking them to the direct or indirect affect of the human being, while these are linked to the degradation of the environmental elements themselves, not mattering, for verification, in the allocation of human elements.

companies that invests the most in this self-regulatory tool — were unable to prevent these tragedies. This inquiry further endeavours to try to demonstrate that this tool can — and should — in addition to playing an important role in corporate safeguarding, play a fundamental role in environmental preservation and the protection of human rights.

2. Mariana and Brumadinho: ecological damage and human damage

The disruption of the Fundão dam in Mariana was separated by just over three years from the disruption of the B1 dam of the Córrego do Feijão mine in Brumadinho, both located in the Brazilian state of Minas Gerais and established to store liquid tailings from part of the intense mineral exploration carried out in those locations.

On November 5, 2015, Brazil and the world watched, dumbfounded, the largest Brazilian environmental tragedy and one of the largest in the world. One of the three tailings dams that served the iron ore extraction complex operated by Samarco, a binational company owned by Brazilian mining company Vale and Anglo-Australian company BHP Billiton, broke down, releasing more than 60 million cubic metres of impounded material.

The Mariana sub-districts of Bento Rodrigues and Paracatu de Baixo immediately disappeared under the toxic tailings mud that was carried for kilometres along the Doce River and its tributaries until it reached the mouth of the river in the state of Espírito Santo and then entered the sea[4]. The tailings are estimated to have contaminated more than 392 km² of marine areas, impacted approximately 680 km of river

[4] Cristina Serra. *Tragédia em Mariana: a história do maior desastre ambiental do Brasil*. Rio de Janeiro: Editora Record, 2018. 13.

courses, threatened 11 fish species and contaminated 1,200 ha of forests in addition to causing serious damage to a colony of abrolhos[5] located approximately 250 km out to sea from the mouth of the Doce River.

The ecological damage, although very significant, was not the only damage witnessed in Mariana. What also marked that tragedy as a human misfortune was the record of 19 deaths, 207 houses buried and 630 people left homeless, apart from the incalculable and unspeakable damage of the ostensible precarization of much of the Doce River watershed, which supplies subsistence for the populations of more than 200 municipalities of Minas Gerais and Espírito Santo.

With even less certain proportions from an environmental point of view, due to its contemporaneity, the second tragedy, on January 25, 2019, is certainly one of the largest — if not the largest — human drama in Brazilian history. The B1 dam of tailings from the Córrego do Feijão mine, controlled in this case exclusively by the mining company Vale, broke and poured into the lives of the Brumadinho inhabitants, as well as many employees of the mining company, 12 million cubic metres of toxic mud that, reaching a speed of over 80 km/h, destroyed much of that mining town.

On the day after the incident, in addition to 34 deaths and 81 people left homeless, 287 people were recorded as missing. With the progress of the tiresome searches — which endure to this day — the number of missing persons has decreased, but, unfortunately, the number of deaths has increased, reaching a total of 165. In addition, 138 people were left homeless.

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[5] News posted on 11/22/2015, on the G1 news portal, available in: <http://g1.globo.com/espirito-santo/noticia/2015/11/lama-de-barragem-da-samarco-chega-ao-mar-no-es.html>. Access on: 07/05/19. And on the electronic platform of the newspaper *O Globo,* on 02/22/2019, available in: <https://oglobo.globo.com/sociedade/ciencia/rejeitos-de-mariana-atingiram-corais-de-abrolhos-na-bahia-aponta-estudo-da-uerj-23471276>. Access on: 07/05/2019.

If these numbers were not enough to characterize a tremendous degeneration of life, especially from the emotional point of view, for those who inhabit or inhabited that region, the loss of the Paraopeba River was announced in a study carried out by the NGO SOS Mata Atlântica Foundation. This river, which supplied several municipalities of Minas Gerais and provided livelihoods to many riverside communities, was struck by the toxic tailings sludge and became totally unfit and unavailable for human use[6].

In both events, there were serious violations of the environment, notably with regard to the desired balance and quality, but also serious violations of human rights due to the manifest degradation of the dignity of the people directly or indirectly affected. As much as the irreversible loss of biodiversity and the difficult remediation of river contamination, the lives and disappearances of loved ones, and the forced displacement of people from their homes, are materially irreparable damage[7].

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[6] A study carried out by the NGO SOS Mata Atlântica Foundation concluded that "the Paraopeba River has lost its status as an important source of public supply and multiple uses of water due to the transport and disposal of about 14 tons of ore tailings from the disruption of dam B1 of the Córrego do Feijão Complex, owned by Vale, located in the rural area of Brumadinho, in the headland region of the Paraopeba basin, an important formator of the São Francisco River basin. Unparalleled environmental damage in the country and around the world has made the waters of the Paraopeba River unfit and unavailable for use within a 305-kilometer stretch, which has been of terrible and bad quality — thus in violation of the standards set by current legislation". *Observando rios: O retrato da qualidade da água na bacia do rio Paraopeba após o rompimento da barragem Córrego do Feijão — Minas Gerais.* SOS Mata Atlântica, fev. 2019.

[7] Commenting on the role of the European Court of Human Rights in safeguarding the environment, from an extensive interpretation of the right to private and family life and domicile, Alexandra Aragão sees a double dimension in the term domicile. If on the one hand it denotes the physical sense of housing, namely, the house, on the other it denotes

This environmental and human damage cannot be seen, after the moments of public consternation, as a mere "legacy" of productive activity, or as the consummation of acceptable risks of necessary growth. In fact, it is devastating, its legal indemnity consequences cannot be incorporated into production costs and forgotten until there is a new repetition of the same chaos.

3. **Compliance in Brazil**

Apart from any intention of exhausting the aspects that outline compliance in Brazil, in part because there are much more capable voices in this collective work for such an outline, this communication will be restricted to presenting some aspects that are considered relevant for its purpose.

According to the "Guide — Compliance Programs — Guidelines on the structuring and benefits of adopting

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a spiritual sense, notably, the home. In the author's words: "The domicile allows us to freely develop activities that are usually consummated in the intimacy of the house-home. First of all, we refer to personal activities related to the satisfaction of basic requirements such as food, hygiene, rest, reproduction, safety and care. But we also refer to activities for the realization of human aspirations, such as the development of intersubjective relations and interspecies relations, through communication and conviviality between people and animals; scientific production and assimilation, knowledge transfer and education; the creation, expression or artistic and literary enjoyment, and other spiritual activities, such as reflection, meditation or liturgical worship". Alexandra Aragão. "Conteúdo e âmbito do direito ambiental do domicílio, em diálogo com a jurisprudência (o direito ao respeito pelo ambiente associado à proteção do domicílio na Convenção Europeia dos Direitos Humanos)", in Paulo Pinto de Albuquerque, org. *Comentário da Convenção Europeia dos Direitos do Homem e dos Protocolos Adicionais.* No prelo. Lisboa: Editora Universidade Católica, 2019. 6-7. It should be noted, therefore, that, no matter how laudable and determined the attempt to make reparation for human damage related to the degeneration of one's home, the cultural and emotional aspects involved are irreparable.

competitive compliance programs"[8], issued by the Administrative Council for Economic Defense (CADE) in 2016, the only Brazilian official document (at least regarding the adoption of the anglicist nomenclature) that expressly states what compliance is and what it is for, this tool is embodied in "a set of internal measures that prevent or minimize the risk of breach of the laws arising from activity by an economic agent and any partners or collaborators" with the primary objective of persuading people to "do the right thing".

It is, therefore, a mechanism of self-regulation, characterized by the adoption of practices aimed at the implementation of an integrity programme, usually adopted within the scope of business activities to achieve a substantial change in corporate culture. There is, however, current discussion of the healthy adoption of the same practices in the context of public activities[9] to serve as a valuable instrument for preventing corruption.

Concerns about "doing the right thing" may come from a voluntary ethical commitment and moral awareness of business, or even governmental activities, but it is common for good compliance practices to emerge from a move to avoid administrative, civil and criminal accountability, monetary expenditure and economic devaluation as a result of these. This is what happened in Brazil.

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[8] CONSELHO ADMINISTRATIVO DE DEFESA ECONÔMICA — CADE. *Guia — Programas de Compliance — Orientações sobre estruturação e benefícios da adoção dos programas de compliance concorrencial.* 2016. 9. Available in: <http://www.cade.gov.br/acesso-a-informacao/publicacoes-institucionais/guias_do_Cade/guia-compliance-versao-oficial.pdf>. Access on: 07/16/2019.

[9] For a better overview of the subject, *Cf.* Cláudio Carneiro Bezerra Pinto COELHO. "*Compliance* na administração pública: uma necessidade para o Brasil", *RDFG — Revista de Direito da Faculdade Guanambi* 3/1 (jul/dez 2016) 75-95. Available in: <http://revistas.faculdadeguanambi.edu.br/index.php/Revistadedireito/article/download/103/21/>. Access on: 07/16/2019.

Compliance practices gained special prominence with the massive accountability of companies and entrepreneurs, previously unheard-of in Brazil, mainly for crimes of active corruption, which occurred in the midst of the so-called Lava Jato Operation beginning in 2014.

Although Law 12.846/13 (anti-corruption law) had already provided, in 2013, in art. 7, item VIII, that compliance — or, rather, to be faithful to the legal provision, "internal integrity procedures" — was one of the aspects to be taken into consideration in the application of administrative sanctions in response to acts of corruption provided for in the same law, the effective adoption by companies started only when the companies saw their peers embarrassed by the scope of the abovementioned operation and when, in 2015, Provisional Measure nº 703 was issued, which temporarily changed the law in question mainly in terms of the leniency agreement.

This Provisional Measure, which expired in May 2016, stated that leniency, that is, tolerance of unlawful acts perpetrated by companies to the detriment of the public exchequer, could be agreed upon with the competent bodies if the companies committed themselves, cumulatively with other measures, to the implementation or improvement of internal integrity mechanisms[10].

It was in the wake of these legislative benefits — whether the expired special leniency regime or the still existing

[10] Art. 16. The Union, the States, the Federal District and the Municipalities may, within the scope of their competences, through their internal control organs, individually or in conjunction with the Public Prosecution Service or the Public Attorney, celebrate leniency agreement with the legal entities responsible for the acts and facts investigated and provided for in this Law that effectively collaborate with the investigations and the administrative process, so that this collaboration results in:

(...)

IV - the commitment of the legal entity in the implementation or improvement of internal integrity mechanisms.

attenuator of administrative sanctions — and the vague fear of liability that compliance gained ground in the exercise of corporate governance in Brazil. Bear in mind, however, that it is recognized, regardless of the reasons for setting up the mechanism, that it is of great value in overturning corruption schemes and in avoiding the incidence of similar new acts.

With regard to the object of this inquiry, it is important to clarify that, interestingly, the mining company Vale is one of the companies that invests the most in integrity programmes, especially after the first tragedy, in Mariana, due mainly to the severe losses of value in the financial market, the requirement of foreign investors and the presumed liabilities that it will suffer when investigations and legal proceedings reach their outcomes. The effort to implement compliance in that company was not able to prevent that tragedy from occurring, nor was it able to prevent the recurrence of chaos three years later in Brumadinho. Was the company's effort to implement compliance, therefore, a facade[11], aimed at improving its image with society and investors and/or to avoid eventual legal sanctions?

The next topic addresses, generally and not exclusively in Brazil, the environmental development of compliance, how it is compatible with the logic of human rights protection and how, as a tool that seems to be focused only on normative concertation, it can — and should — prevent environmental and human tragedies similar to those of Mariana and Brumadinho.

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[11] CONSELHO ADMINISTRATIVO DE DEFESA ECONÔMICA — CADE. *Guia — Programas de Compliance — Orientações sobre estruturação e benefícios da adoção dos programas de compliance concorrencial.* 2016. 15. Available in: <http://www.cade.gov.br/acesso-a-informacao/publicacoes-institucionais/guias_do_Cade/guia-compliance-versao-oficial.pdf>. Access on: 07/16/2019.

4. **Compliance, the environment and human rights**

Compliance is apparently linked only to normative concertation because most references to it, especially the most conservative ones, restrict it to the adequacy of productive activities with formally established rules, especially the law, in order to avoid corporate liability. This good governance tool is and may, or rather should, mean more.

It is, in fact, a mechanism that, in order to be socially and environmentally useful — which is understood as a function to be fulfilled by any person, whether simple (individual) or collective (company) — and to be characterized as a true change in organizational culture, rather than being imposed by law and generally by norms, and beneficial to business, must be informed by values essential to human subsistence and the safeguarding of the natural die[12] and focused primarily on the good of society.

This perspective has already seemed to advance, albeit not satisfactorily, in the environmental field, unfolding this self-regulation tool in what is known as environmental compliance. Even if, to some extent, adopted to avoid liability for environmental and ecological damage and even to acquit business activity in cases of environmental tragedy, this aspect of compliance is also informed by the ethics of sustainable development[13], especially because, with it, the axioms of

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[12] For Dominique Bourg, the natural die is all that exists independently of human existence. "(...) *ce qui advient spontanément à l'existence — le donné naturel* — (...)". Dominique Bourg. *Une nouvelle terre: pour une autre relation au monde.* Paris: Éditions Desclée de Brouwer, 2018. Epub reader. s/n. Safeguarding the natural die because, like human beings, they have dignity in themselves that guarantees their proper autonomous protection, regardless of their indispensability to human existence.

[13] Sustainable development, beyond being an international principle of environmental law, axiologically consecrated in the Stockholm Dec-

prevention and precaution have been consecrated.

A longed-for — and urgent — human compliance is thought to be able to succeed in the same way. While the principles of prevention and precaution link compliance practices with the logic of *a priori* protection of the environment — and not *a posteriori*, as before[14] — the dignity of the human person, as the guiding axiomatic *prius*[15] of all anthropic action, must link productive activities to safeguard the fundamental rights to which all persons are entitled, namely, human rights.

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laration of 1972 and literally in the Brundtland Report "Our Common Future" of 1987, is the central objective of the logic of environmental protection, striving to meet the needs of the present without compromising the environmental conditions required to meet the needs of future generations. This ethics has been incorporated by a number of national legal orders, for example, the Brazilian and Portuguese Constitutions, in articles 225, Caput and 66º-2/81º-a), respectively.

[14] Nicolas de Sadeleer. "Comentários sobre o status no Direito Internacional de três princípios ambientais", in Marcelo Dias Varella / Ana Flávia Barros-Platiau, org. *Proteção Internacional do Meio Ambiente.* Brasília: Unitar, Uniceub e UnB, 2009. 59. In this study, the author refers to a three-phase evolution of the logic of environmental protection. At first, it was concerned with the repair of environmental damage. Then, given the irreparability of certain characteristics of the environment, care was taken to safeguard the environment in advance, and the principle of prevention was founded. More recently, the precautionary principle emerged, aimed at protecting the environment in advance when science is unable to be certain about the environmental risks of human activities.

[15] "(...) the principle of dignity, responding to the desires of all those who see their rights violated, and seeking to secure people's vital needs and to preserve all facets of human life from degradation, instrumentalization and submission, stands as a true prius. axiomatic, as an indestructible, indefinable, even unspeakable assumption of the legal system". Mário Reis Marques. "A dignidade humana como *prius* axiomático". in Manuel da Costa Andrade / Maria João Antunes / Susana Aires Sousa. *Estudos em Homenagem ao Prof. Doutor Jorge de Figueiredo Dias.* vol. 4. Coimbra: Coimbra Editora, 2010. 566.

This can be done, as opportunely proposed in another study[16], for example, with the immediate densification[17] of the precautionary principle with the values that inform the dignity of the human person, avoiding the tyranny of scientific certainty[18] to allow, before the occurrence of tragedies such as those of Mariana and Brumadinho, the suppression of basic rights such as housing, work, income, territorial and cultural identities and life itself in a material sense.

Compliance would thus be constrained by making the figures of productive activities adopt measures when there is the slightest risk — even if uncertain — of the degeneration of these rights and to truly consider alternatives aimed at preventing — and not only minimizing or repairing — such derogation.

5. **Concluding questions and notes**

Regarding the question of why the compliance practices of one of the companies that invests the most in such programmes were unable to prevent the ecological and human damage

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[16] The idea of the immediate densification of the precautionary principle with the values that inform the dignity of the human person was defended in a paper entitled "Precautionary Principle: A Legal-Environmental Principle of Human Rights?" presented in the Faculty of Law of the University of Coimbra with the purpose of accomplishing evaluation in the Environmental Law discipline, taught by Profª. Drª. Alexandra Aragão.

[17] Immediate densification was mentioned because the precautionary principle, like the general logic of environmental protection, is already informed, immediately, by the values of the dignity of the human person, since the anthropocentrist conception that the environment deserves protection only because it is indispensable to the subsistence of the human being is dominant — although increasingly less so.

[18] Reference to the tyranny of the majority in John Stuart Mill. *Sobre a Liberdade/A sujeição das mulheres.* São Paulo: Penguin, 2017. 74-78, which, like the tyranny of certainty, carries enormously damaging value if it does not respect minority rights.

verified in Mariana and inadmissibly repeated in Brumadinho, the inability of this essay to answer it is re-affirmed.

It is asserted that, abstractly, compliance is a well-intentioned mechanism that deserves full recognition but that its good purpose cannot obscure its possible practical defects and, therefore, for its improvement, it must be able to withstand critical inspection.

However, a general criticism of the bad practices of compliance, or the so-called facade of compliance, parodies the proverb that "It is not enough for Caesar's wife to seem honest; she must be honest" in the sense that, under environmental, human and even corporate safeguards, it is not enough for companies to appear honest; they must be ethically committed to law enforcement, private and public anti-corruption practices, sustainable development and human rights.

Finally, the question is whether, in view of the consequences of tragedies such as those mentioned, it is appropriate to deploy compliance towards a greater humanization of the tool, as briefly advocated in the previous section, enabling it to find its place in efforts to protect human rights and contribute to the prevention of not only severe environmental degradation but also irreparable and irreconcilable human suffering.

References

Aragão, Alexandra. *A renovação ecológica do Direito do Ambiente: Sumários desenvolvidos. Ano lectivo 2017/2018.* Coimbra: fduc, 2017.

— "Conteúdo e âmbito do direito ambiental do domicílio, em diálogo com a jurisprudência (o direito ao respeito pelo ambiente associado à proteção do domicílio na Convenção Europeia dos Direitos Humanos)", in Paulo Pinto de Albuquerque, org. *Comentário da Convenção Europeia dos Direitos do Homem e dos Protocolos Adicionais.* No prelo. Lisboa: Editora Universidade Católica, 2019.

Bourg, Dominique. *Une nouvelle terre: pour une autre relation au monde.* Paris: Éditions Desclée de Brouwer, 2018. Epub reader. s/n.

Coelho, Cláudio Carneiro Bezerra Pinto. "*Compliance* na administração pública: uma necessidade para o Brasil", *RDFG — Revista de Direito da Faculdade Guanambi* 3/1 (jul/dez 2016) 75-95. Disponível em: <http://revistas.faculdadeguanambi.edu.br/index.php/Revistadedireito/article/download/103/21/>. Acesso em: 16/07/19.

conselho administrativo de defesa econômica — cade. *Guia — Programas de Compliance — Orientações sobre estruturação e benefícios da adoção dos programas de compliance concorrencial.* 2016. 15. Disponível em <http://www.cade.gov.br/acesso-a-informacao/publicacoes-institucionais/guias_do_Cade/guia-compliance-versao-oficial.pdf>. Acesso em: 16/07/2109.

G1 [Portal de notícias], disponível em: <http://g1.globo.com/espirito-santo/noticia/2015/11/lama-de-barragem-da-samarco-chega-ao-mar-no-es.html>. Acesso em: 05/07/19.

<http://www.vale.com/brasil/pt/aboutvale/servicos-para-comunidade/minas-gerais/atualizacoes_brumadinho/Paginas/listagem-pessoas-sem-contato.aspx>. Acesso em: 12/07/2019.

Jornal *O Globo*, em 22/02/2019, disponível em: <https://oglobo.globo.com/sociedade/ciencia/rejeitos-de-mariana-atingiram-corais-de-abrolhos-na-bahia-aponta-estudo-da-uerj-23471276>. Notícias veiculadas em 22/11/2015. Acesso em: 05/07/2019.

Marques, Mário Reis. "A dignidade humana como *prius* axiomático". in Manuel da Costa Andrade / Maria João Antunes / Susana Aires Sousa. *Estudos em Homenagem ao Prof. Doutor Jorge de Figueiredo Dias.* vol. 4. Coimbra: Coimbra Editora, 2010.

Mill, John Stuart. *Sobre a Liberdade/A sujeição das mulheres.* São Paulo: Penguin, 2017.

Observando rios: O retrato da qualidade da água na bacia do rio Paraopeba após o rompimento da barragem Córrego do Feijão — Minas Gerais. sos Mata Atlântica, fev. 2019.

Sadeleer, Nicolas de. "Comentários sobre o status no Direito Internacional de três princípios ambientais", in Marcelo Dias Varella / Ana Flávia Barros-Platiau, org. *Proteção Internacional do Meio Ambiente.* Brasília: Unitar, Uniceub e UnB, 2009.

Serra, Cristina. *Tragédia em Mariana: a história do maior desastre ambiental do Brasil*. Rio de Janeiro: Editora Record, 2018.

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