Speedy and Effective Dispute Resolution through Virtual Mediation as an Environmental Protection Tool

Fátima Clotilde Alves de Abreu Galvão¹, Eduardo Antonio Maia Lins², Luiz Filipe Alves Cordeiro³, Daniele de Castro Pessoa de Melo⁴, Martorelli Dantas da Silva⁵

¹Master in Environmental Management, Technological Institute of Pernambuco, Recife, Brazil.
²Department of Environmental Engineering, Catholic University of Pernambuco, Recife, Brazil.
³,⁵Professor of the master’s in environmental management, Technological Institute of Pernambuco, Recife, Brazil.
⁴Coordinator of the master’s in environmental management, Technological Institute of Pernambuco, Recife, Brazil.

Received: 09 Dec 2020;
Received in revised form: 03 Feb 2021;
Accepted: 26 Feb 2021;
Available online: 06 Mar 2021
©2021 The Author(s). Published by AI Publication. This is an open access article under the CC BY license (https://creativecommons.org/licenses/by/4.0/).

Abstract—Natural resources are renewable, however, they need time to recover, being essential to guarantee a healthy environment, for the benefit of future generations, attitudes of preservation and non-degradation of the environment. The carbon dioxide emitted by vehicle engines was a major cause of global warming of the earth. This work will show environmental impacts caused by the emission of gases from the burning of fuel and the unnecessary use of paper by the Court of Justice of Pernambuco. The theme has great relevance in view of the pressing need for everyone’s contribution to sustainability, and the Judiciary Branch must demonstrate its collaboration through sustainable practices, within new paradigms, to minimize the impacts that some of its activities cause to the environment. In view of this, the main objective here is to demonstrate how the disuse of paper and the use of electronic means in mediation sessions at the Center for the Resolution of Conflicts and Citizenship in Recife, will contribute to the reduction of carbon dioxide in the atmosphere due to the mitigation of deforestation. This work was carried out in the Municipality of Recife, based on a case study developed at the Rodolfo Aureliano Forum, in a specified way, at Cejusc - Recife. To this end, semi-structured interviews and questionnaires were carried out, as well as bibliographic research, with the methodology used being mixed (qualitative / quantitative) and exploratory; the case being understood in accordance with the Sustainable Logistics Plan indicated by the National Council of Justice and the Sustainable Logistics Plan itself of the Pernambuco Court of Justice. Depending on the exposure in the discussions of this work, it is important to highlight one of the main results found in this case, considering that in 2019 64,020 new processes were distributed (TJPE), if they were resolved by virtual mediation, 1,707.2 (one thousand, seven hundred and seven point two) eucalyptus trees, which means that an average of 150 (one hundred and fifty) tons of carbon dioxide would be sequestered from the atmosphere, thus making it possible to verify the environmental gain, as well as the economic and social gain, in a win-win process, where the courts, the Court itself, as well as the whole society win, with the speed, effectiveness and sustainability presented by the approached system.
I. INTRODUCTION

At the United Nations Conference in Stockholm, 1972, the principle was defined that man has the fundamental right to freedom, equality and to enjoy adequate living conditions, in an environment of such quality that allows him to lead a life dignified, enjoy well-being and has a solemn obligation to protect and improve the environment for present and future generations (GENTIL, NOVAIS, 2011).

The United Nations World Commission on Environment and Development, when it met in 1987 in Norway, produced a document called “Our Common Future” also known as the Brundtland Report, where the signatory governments committed themselves to promote development economic and social in accordance with environmental preservation (GONÇALVES, 2005).

In this report, the definition of sustainability or sustainable development was presented, as one that seeks to satisfy the needs of the current generation, without compromising the ability of future generations to meet their own needs. It means enabling people, now and in the future, to achieve a satisfactory level of social and economic development and human cultural achievement, while making reasonable use of the earth’s resources and preserving species and natural habitats, without compromising the right to meet their own needs (UN, 1987).

The renewal of existing natural resources does not happen at the same speed since some of them take longer than others to recover. Consumption at a too fast pace and not following the renewal of natural resources, implies the finitude and depletion of these natural goods. Attitudes of preservation and non-degradation of the environment can guarantee a good social / economic development of society and public and private companies without destructive environmental impact (ZANIRATOI, ROTONDARO, 2016).

In this sense, sustainable development is based on economic, social and environmental growth in harmony. It is the tripod of sustainability, composed of the results of any organization and measured in social, environmental, and economic terms (GONÇALVES and CATAPAN, 2016).

For there to be sustainable economic and social development, it is necessary to reconcile the economic, social and environmental aspects, becoming an orientation for people and companies in their processes of production, operation, commercialization and use of goods and services. services provision (ESTENDER, PITTA, 2008).

Economic development can be considered the great villain of global warming of the earth, given that its greatest growth occurred in the industrial period, along with the creation of machinery and equipment dependent on energy considered unsustainable and emitting polluting gases (COSTA, 2019).

On the other hand, although there is evidence that economic growth has caused damage to the environment, one cannot forget that it is necessary and indispensable for the growth of a society made up of people and any organization, it is called sustainable development. The term sustainable development was first used in 1980 by a private research organization, the World Alliance for Nature (RAUPP, 2020).

The preservation of the environment is established in the Brazilian Constitution, at the level of the fundamental principle of the Brazilian nation, since it is closely linked to the right to life (CF, art. 225).

In this context, the Judiciary of the State of Pernambuco, as a public entity, has the responsibility for sustainable development, requiring a change in its own paradigm, which has been in place for a long time and this is an important point of this work.

The idea to be presented here is that stimulating and encouraging mediation as an alternative and quick way of resolving conflicts, combined with virtual technology, will lead the state government to contribute to a sustainable development of the Pernambuco judiciary and to be a model of practice by other courts.

In this regard, the possible impacts on the environmental sphere, caused by the emission of gases from the burning of fuel by means of motor vehicles, as well as using paper unnecessarily in the processes and procedures will be verified.

The general purpose of this work is to analyze the mitigation of greenhouse gas emissions and the environmental benefits due to the non-use of vehicles and the use of paper in conflict resolution through virtual mediation at Cejusc-Recife.

To this end, the environmental damage caused by the emission of gases by motor vehicles used by the courts, lawyers, public defenders, civil servants and magistrates to go to the Rodolfo Aureliano Forum and the consumption of paper in processes and procedures will be addressed in a first step (pre-processes).

Subsequently, it will be demonstrated that the Pernambucano Judiciary, as a driver of public policies and through changes in the traditional dispute resolution process, can contribute to the environment.
Finally, the gains presented by means of virtual mediation will be evaluated either by the non-use of motor vehicles by the courts, lawyers, public defenders, civil servants and magistrates, or by the non-use of paper in the judicial activity, showing that this alternative method of solving conflict is a sustainable practice and therefore a tool for protecting the environment.

II. METHODOLOGY

STUDY AREA

The Rodolfo Aureliano Forum was the place chosen to produce this work. The realization was carried out, more specifically, at Cejusc - Center for Conflict Resolution and Citizenship of the District of Recife, sector that is part of Nupemec - Permanent Center for Consensual Conflict Resolution Methods, with the said forum, located about Ilha do Leite, in Recife, Capital of the State of Pernambuco.

The building that houses the Rodolfo Aureliano Forum, located in the Ilha do Leite neighborhood, is the most important of the Pernambuco State Judiciary, being responsible for 25% of all materials used by the TJPE, which demonstrates the importance of this Forum for work (Figure 1).

![Fig.1: Part of the Map of Recife - Ilha do Leite Neighborhood.](image)

METHODOLOGICAL STEPS

Initially, a bibliographic research was carried out in this work to build a theoretical basis to have data in a later discussion and analysis of the concepts involved here. Information was captured to seek an idea, an improvement in the conflict resolution system in the local judiciary.

Later, some literature dealing with the subject matter of this work was analyzed and, from that point on, the theory can be applied in existing practice, checking possibilities of increment for an improvement in the form and result, in the dispute resolution system. Therefore, this research can be classified as applied.

The problem presented was approached both quantitatively, through data and numbers, and qualitatively, which were instruments to reach the conclusion.

Thus, this research is of the mixed, quantitative / qualitative type, being used the quantifiable data, identified both in the questionnaire, as in the productivity and data provided by Nupemec and the qualitative elements, provided by the interview, with all the results presented in the form of graphs and a subjective analysis of the problem encountered.

There was an identification and collection of information on the spot and, therefore, it can also be indicated as an exploratory and field research.

- Survey of primary data

This work is configured in a mixed method research - procedure of collection, analysis, and combination of quantitative and qualitative techniques in the same research design (PARANHOS, 2016). Taking this statement as a reference, this work was delimited in two stages.

The first involves the realization of a qualitative phase, with the gathering of information and theories related to the object of the research, through bibliography, from the legal literature in its broadest scope, doctrine, legislation, positions of authorities and scholars in the topics addressed, scientific articles, websites and journals specialized in the subject, for greater familiarity with the content and improvement of ideas, enabling the deepening and discussion of the studied topic, which also denotes an exploratory research.

The second step, follows the quantitative orientation, encompassing procedures for data collection, validation and analysis, with survey application, which is based on the questioning of users / participants (MALHOTRA, 2015), through questions about certain characteristics, way of life, their intentions, attitudes, behaviors, perceptions and motivations, etc., allowing the collection of a quantity of information about each respondent at once.

Therefore, this research is aimed at data exploration, based on the application of structured questionnaires and the use of information collected from a sample of the target population (PINSONNEAULT; KRAEMER, 2016).

- Research Locus

The research was carried out from the collection of real data at the Judicial Center for Conflict Resolution and Citizenship of Recife - CEJUSC, located at the Rodolfo Aureliano Forum, in the Ilha do Leite District, in this Capital.
SEARCH OPINIONS

The method used in the survey of opinions was mixed (qualitative and quantitative), with bibliographic research, to compose the theoretical basis, and with survey type research, to collect data and information from the characteristics and opinions of the chosen group, where the The result found can be extended to the entire studied universe, considering the group that represents a certain population. The survey is widely used in academia, as it proves to be of great use for scientific research, as emphasized by Babbie (2016).

In the desire to understand with precision the local reality of the TJPE about the topics verified in the present work, a structured opinion poll was carried out, based on pre-formulated questions about the theme and with closed answers, and an open question, intended to collect suggestions to increase the amount of information on the topic in the TJPE. This interview was carried out using a Googleforms tool, whose form was prepared using the Likert Scale, which allows measuring attitudes and knowing the interviewee's degree of compliance with the proposed statements.

The investigated population is configured among the servants and magistrates of Rodolfo Aureliano's Forum. The population is 8000 people, with a sample of 367 people, considering the users who participated in the survey, from August 17 to September 3, 2020.

For the 95% confidence level and 5% error estimate. The following formula was applied:

\[
N = \frac{Z^2}{E^2} \times \frac{1}{n} + \frac{1}{N}
\]

For the 95% confidence level and 5% error estimate.

Thus, the sample number of 178 is acquired, where:

\[
n = 367 \text{ samples}
\]

\[
N = \text{population number} = 200
\]

\[
Z^2 / 2 = \text{equivalent critical value Grade of 95%}
\]

\[
E = \text{margin of error} = 5\% = 0.05
\]

The target audience of the opinion poll were TJPE employees who are directly or indirectly involved in the topic, as well as judges, lawyers and public defenders who participated in mediation sessions in a virtual way and were selected exactly for this link to the matter. The scope of the questionnaire also included managers and civil servants who act mediatly or immediately with mediation, and, finally, other employees who study, who nurture or are unfamiliar with the subject also participated in the assessment. To maintaining ethical confidentiality of the source, the respondents were not identified.

DATA ANALYSIS TECHNIQUES

The research method used was the survey, and the research instrument was based on the model of Ainin, Bahri and Ahmad (2016), combined with the dimension "ease of use", of the TAM model, suggested by Davis (1989), the to assess the impact on end user satisfaction. The method is used, through a questionnaire, to collect information about the actions or beliefs of an established group of people, which represents a specific population to be studied. Models, on the other hand, consider constructs that impact user satisfaction in relation to the use of a given system.

CASE STUDY

According to Coutinho (2011), the case study is one of the methodological references with the greatest potential for studying the diversity of problems that are posed to a social scientist.

This author also states that: the characteristic that best identifies and distinguishes this methodological approach, is the fact that it is a research plan that involves the intensive and detailed study of a well-defined entity: the case (COUTINHO, 2011).

The case study is a methodological approach that consists of a detailed observation of a particular context, or individual, from a single source of documents or a specific event (MERRIAM, 1988).

For the success of this work, it was used as a fundamental starting point with a bibliographic review on the topic and later for the development of activities, the research will consist of data collection: a case study was made in a specific building of the Court of Justice from Pernambuco. After collecting these data, the analysis and interpretation of facts and phenomena were carried out that allowed a better way to develop the objectives established in the present study.

In the investigation of contemporary events, the case study is the preferred approach in relation to historical investigation, although the case study uses techniques from which a story is used. However, in the case study, it is possible to add the observer's physical presence, direct observation, and systematic interview, which makes it possible to attend to a wide variety of evidence, such as documents, artifacts, interviews, and observations (MERRIAM, 1988).

For some critics, the case study is seen as an investigation for beginners, as it is considered easier than other types of investigation: It is not by chance that most
researchers choose, for their first project, a case study (COUTINHO, 2011, p.89).

As a research strategy, we opted for the development of a case study, which, according to Yin (2015), is preferred when the control that the investigator has over the events is very reduced, or even when the temporal focus is on contemporary phenomena, within the context of real life. Godoy (1995, p. 25) further states that, "adopting an exploratory and descriptive approach, the researcher who intends to develop a case study must be open to his discoveries".

In addition to the questionnaire already mentioned, an individual semi-structured interview was carried out later, with the construction of the script for the interviews elaborated from the theoretical framework. The semi-structured interview, although commonly conducted in person, needed to be adapted and migrated to digital format so that the interviewee did not need to leave the house, due to the social isolation measures that were imposed due to the pandemic of the new Corona virus, thus obeying, the established standards.

Thus, based on a pre-defined script, developed in a flexible way; both in the questionnaire and in the interview, there were questions that made it possible to extract from the respondent’s information about knowledge related to TJPE mediation. The interviewees were informed about the purpose of the empirical investigation and the importance of their collaboration for the study, as well as about the guarantee of confidentiality.

Respondents were not identified due to confidentiality and secrecy and therefore the names, positions and any other forms of identification of respondents are not mentioned. The analysis was of a qualitative and interpretative nature, based on the evaluation of the content of the responses of the interviews carried out and on the comparison of the results with the items of the theoretical framework used and, no statistical methods were used.

In relation to the population investigated for the second instrument applied, the opinion poll, the chosen population was configured among users who attend the TJPE, magistrates, civil servants, lawyers, and public defenders who work at the Court of Justice of the State of Pernambuco, Brazil.

III. RESULTS AND DISCUSSION

- Students

The CFB of 1988, provides in its article 225 that “Everyone has the right to an ecologically balanced environment, a good for the common use of the people and essential to a healthy quality of life, imposing on the government and the community the duty to defend it, and preserve it for present and future generations.” With sustainability as a supreme value, there is no doubt that there is a need for a change in the insatiable and destructive model of life / consumption in which society is made. [...] because of the synapse of the constitutional commands in question, the constitutional value of sustainability emerges crystalline, with its pluridimensionality (ethical, social, economic, legal-political and environmental), demanding a complete, reconfiguration of the traditional model development, in order not to restrict it to the mediocre, limited and limiting sphere of unjust material growth (FREITAS, 2011).

In this sense, sustainable development begins to be the concern even of the law, as a way of supporting sustainability from a legal point of view and with supreme value, since it is protected by the country's largest law, which is the Brazilian Federal Constitution (CF, art. 225).

In this way, there is no longer the possibility of trivializing both sustainable development and environmental degradation; bearing in mind that the Magna Carta guides the practice of sustainable development together with the achievement of the fundamental objectives inserted therein.

Although the primary activity of the judiciary is that of being an instrument of pacification, it could not remain passive in the face of the worldwide need for cooperation from all of society for the benefit of the planet, and its participation and encouragement of sustainable public policies is very necessary.

And the Court of Justice of the State of Pernambuco, in accordance with the provisions of Resolution No. 201/2015, of the National Council of Justice, which determines the implementation of the Sustainable Logistics Plan in the organs and councils of the Judiciary, took care to establish the guidelines organ’s environmental requirements.

Published Ordinance No. 18/2018, published in the Diário de Justiça de Pernambuco, on September 25, 2018, which regulates the Sustainable Logistics Plan within the scope of the Judiciary of the State of Pernambuco, making it mandatory for all to comply with it. The magistrates, civil servants, interns, and outsourced employees of the TJPE.

It determines that normative, in its art. 4th, II, as one of the attributions of the Sustainability Management Commission, the identification and proposal of the improvement of methods, techniques and tools to be used in the PLS Planning and Monitoring process.
When it comes to resolving pre-procedural and procedural conflicts, through mediation in a virtual way, the way mediation sessions are being held at Cejusc in Recife, since the beginning of the pandemic, mediation already has characteristics to be framed as a method, technique, or tool to be improved in the Planning and Monitoring of the TJPE Sustainable Logistics Plan.

To discuss the subject matter of this research, it is important to highlight Law No. 11.419 / 2006, which provides for the computerization of processes, with this rule leading to the effective introduction of virtual procedure into the judiciary. This norm, presented in the jurisdictional activity, a transformation relative to the understanding before the judiciary of the necessary look at paradigm changes for the benefit of the jurisdiction and, also, of the environment.

With the advent of the legislation, enabling the use of information technology as a means of transmitting procedural data, the Judiciary, full of pathologically slow demands, was definitively inserted in the era of technological development and is currently striding towards full compliance. effectiveness of effective judicial protection (BARBOSA, 2013).

After the implementation of the electronic process, the procedural process took on the pace of technological and social development of the world population. The provision of jurisdictional protection is leaving the stigma of dissatisfaction in the past, which, every day, renews its confidence in the just judicial provision (BARBOSA, 2013).

The computerization of the judicial process, following the dynamics of new technologies, is a useful instrument for the modernity of justice, and it honors the premise of everyone's access to a fair legal order that is in line with the human pretensions of today (BARBOSA, 2013).

SOCIAL PACIFICATION

The consequence of the implementation of computer technology in the TJPE can be seen in the comparative graph in Figure 2, which demonstrates the real result of approval of the virtual mediation system, established in Cejusc-Recife, after the pandemic and the use of the virtual method for mediation sessions, authorized by Joint Resolution No. 05/2020, of the TJPE.

The percentage of agreements increased considerably after the implementation of the system of mediation sessions by remote means; thus, demonstrating many disputes resolved quickly, effectively, sustainably and leading to the social pacification sought by the judiciary.

The custom of Brazilian society is the cult of litigation, precisely because of the absence of institutional spaces aimed at the communication of people in conflict. Along this path, to make the fundamental right of access to justice effective, it is necessary for the State to promote the use of extrajudicial means of conflict resolution, such as conciliation, mediation, and arbitration (SILVA, 2018).

The concept of access to justice goes beyond the limits of accessibility to the courts and includes the guarantee and satisfaction of the rights that are part of the legal order, whether through the judicial process or other means, as consensual methods of confronting conflicts (HESPANHOL et al, 2018).

Thus, it is necessary that there be a variety of mechanisms available to society, to provide individuals with awareness and confrontation appropriate to the nature of the conflict, since it deserves a deeper analysis, considering that their formation has multiple factors, such as social, economic and political factors. And for that, it is necessary a deep process of reflection of those involved (HESPANHOL et al, 2018).

That was when the need arose for a system in which the party that demands the resolution of their conflict is made possible.

The Multiport Court can contribute to inserting the population without an active voice, who has little opportunity to participate in the process, in the center of the actions. The lack of interaction, inside and outside the court, ends up generating more conflicts and exclusion, which underscores the potential of alternative methods,
which enable the integration of those who were deprived of expressing their opinion properly (SILVA, 2018).

This multiport system could provide citizens with the opportunity to exercise participation, choosing the conflict resolution process, experimenting with a different form of conflict resolution, and offering new options - in addition to courtrooms and court enforcement measures, as the main mechanisms for conflict resolution (SANDER; CRESPO, 2012).

Mediation, as one of the alternative means of resolving conflicts, aims more than the agreement, also seeks to restore relations and a deeper reflection on the conflict, aiming to unveil the legal, social, and economic situation involved in that situation. Thus, there is the search for autonomy and the construction of adequate and meaningful responses to the conflict (HESPANHOL et al, 2018).

The conciliative justice participates, in summary, in three spheres (1) a social one, which is directed towards true social pacification, because it is concerned with the sociological conflict that is at its base and does not stick to the conflict merely presented in the records, as occurs in a jurisdictional process. (2) A politician, for providing a direct dialogue between the citizens involved in the search for a common solution facilitated by trained conciliators and mediators. And (3) a functional one, which is the easing of the justice crisis due to its ability to relieve it (GRINOVER, 2012).

Thus, mediation as a way of resolving disputes, occupies a privileged place as an appropriate method of conflict resolution, since in addition to being able to establish or restore communication between those involved in the dispute, it brings social pacification more effectively in reason that the litigants are the protagonists of the resolution.

**ECONOMIC RESULTS**

Reducing costs with the elimination of waste, developing clean technology and cheap recycling inputs are more than environmental management principles. They present conditions for survival in the current global capitalist world. (ALMEIDA et al, 2000).

The combination of self-composed forms for resolving disputes, especially mediation, combined with technology, presents a restructuring of the Judiciary, both from a social, environmental, and economic point of view (MONTESQUIO; IOCOHAMA; NETTO, 2020).

The Judiciary lacks material means of having technical conditions that make it possible to resolve conflicts in a short period of time, given the emergence of new rights. The causes of a delayed and backward jurisdiction do not stop there. Excessive procedural and process resources, insufficient number of judges or servants of the Judiciary, outdated legislation, overload of work for magistrates, useless or unnecessary demands, etc. also contribute to such a crisis (COSTA, 2011).

Financial and time savings are among its characteristics. In contrast to the slow legal proceedings, which prove to be costly, the disputes brought to discussion through mediation tend to be resolved in a much shorter time than they would have been if debated in a traditional court, which ends up causing a decrease in indirect cost, behold, the more the pending lengthens, the greater will be the expenses with its resolution (BARBOSA, 2013).

When the form of resolution is established through mediation, when the dispute is resolved by agreement, the interested parties will only travel to the Rodolfo Aureliano Forum, on the day of the mediation session and, if necessary, the depending on the case, one or two more days (NUPEMEC / CEJUSC).

And with mediation remotely or virtually, as established by the TJPE, through Normative Instruction No. 05/2020, everything is done electronically, virtually, with no need for the parties, their attorneys, and the respective servers to move. In contrast, in the traditional form of decision, when dealing in most cases, it lasts for years, awaiting the decision of a judge.

Thus, if the dispute is resolved through mediation in a virtual way, there will be a decrease or even absence in the number of people who will circulate in that forum and, consequently, no elevator, bathroom, electronic equipment will be used, causing a reduction of costs by the Court of Justice of Pernambuco with energy, water and, mainly, paper.

**THE SUSTAINABLE ROLE OF VIRTUAL MEDIATION**

The production and use of paper is harmful to the environment, not only with respect to cutting down trees, but also with respect to the carbon dioxide emitted into the atmosphere and possible to be absorbed by the tree when in life (ADÁRIO, 2011).

The manufacture of paper causes great damage to the environment because in the manufacture cellulose is used as a necessary raw material, which is found inside the tree, in its cell (RODRIGUES, 2018).

The pollution generated in large urban centers originates mainly from the burning of fossil fuels, basically gasoline and diesel, which are substances of mineral origin formed by carbon compounds, resulting from the decomposition of organic materials, which lasts
millions of years. Therefore, they are considered non-renewable natural resources. The burning of these fuels happens incompletely when used in thermal machines and motor vehicles, this process results in the release of a large amount of carbon monoxide and dioxide (carbon dioxide) into the atmosphere, making these great villains about global warming and greenhouse effect (DRUMM, 2014).

In the global balance of carbon in the atmosphere of our planet, of about 8 billion tons of carbon emitted annually in the form of carbon dioxide (CO2) by burning fossil fuels and changes in land uses, about 3.2 billion remain in the atmosphere, causing an increase in the greenhouse effect (increased heating of the surface and troposphere due to the absorption of thermal infrared radiation by various trace gases present in the atmosphere, mainly carbon dioxide). The rest is reabsorbed by the oceans and terrestrial biota (NORE and NORE, 2002).

According to an estimate by CETESB (2004), motor vehicles are responsible for 83.2% CO emissions; 81.4% HC; 96.3% NOx; 38.9% of PM10 and 53% of SOx in the Metropolitan Region of São Paulo, concluding that they produce more air pollution than any other human activity and, with this, become great agents that attack the environment and public health. Motor vehicle means any vehicle with an engine, of light or heavy category (DRUMM, 2014).

Motor vehicles are an important source of emission of these gases, both directly through the emission of gases through the exhaust, and through the emissions produced during the production processes of the fuels used by the vehicles (SILVA; SOUZA, 2019).

Due to air pollution, problems related to human health can emerge from mild allergies, cardiorespiratory diseases to the development of cancers and increased rates of morbidity and mortality in urban areas are examples (SALDIVA et al., 1995; SILVA; SOUZA, 2019).

Nature itself can combat this carbon dioxide emitted by motor vehicles. Trees are capable of absorbing carbon dioxide in the air through the process of photosynthesis and, therefore, the most appropriate forest species is eucalyptus, given that it has a high photosynthetic efficiency (CHANG, 2002).

The concept of carbon sequestration was enshrined by the Kyoto Conference, in 1997, with the objective of containing and reversing the accumulation of CO2 in the atmosphere and with the intention of minimizing environmental impacts, related to climate changes as regards global warming and the rise of greenhouse gases. Carbon sequestration refers to the removal of atmospheric carbon gas and, according to Renner (2004), it can be defined as the photosynthetic capacity that plants have to fix CO2 from the atmosphere, in which it is synthesized through light in the form of carbohydrates that are deposited in the cell wall of the vegetable.

Although the sequestration of carbon dioxide is a source of reduction of carbon dioxide in the air, there is dissonance among authors on the subject, with two aspects regarding the use of this process to combat global warming of the earth (CHANG, 2002).

In Brazil, there are opposing opinions, in the sense that this process constitutes an obstacle to compliance with the Kyoto Protocol on the reduction of domestic emissions of polluting gases by industrialized countries. They understand it as if it were an authorization for these countries to remain emitting carbon dioxide and not actually worry about taking actions aiming at the reduction desired by the Kyoto Protocol (CHANG, 2002).

On the other hand, there are those who defend the sequestration of forest carbon, on the grounds of the existence of a vast forest in the country, adding that this process would attract environmental investments to Brazil, generating jobs and income for the people around it. Another argument raised by the supporters of this current would be the low cost to implement the carbon sequestration technique, among the other existing mechanisms (CHANG, 2002).

However, going against this great benefit of nature in favor of the environment is the excessive and unnecessary use of paper by the judiciary.

The science of law, for many years, proved to be plastered from a procedural point of view. Because of his activities, he has always stood out as a huge consumer of labor and paper (MOREIRA, 2012).

During the process, until the dispute is resolved, thousands of information are cataloged in a single process, perpetuating over time, in the so-called forensic archives, without any possibility of reusing the raw material used.

The conventional judicial process, since its creation in remote times, has always had the presence of paper as a striking feature, being responsible for fixing the initial and irrevocable ideas of the parties, in addition to the entire manifestation of the judges responsible for the demand (MOREIRA, 2012).

As a result, the Brazilian judicial system has been accumulating criticisms of the most diverse nature and by all sectors of civil society every year. The way of entering the Judiciary through the so-called traditional way, causes many other obstacles to the emergence of a fully effective Judiciary Power, that is, one that gathers concern with the environment, with its procedural aspects, understood as the speed and acceleration in processing information, in
addition to the effectiveness from the social point of view, about facilitating access by virtual means (MOREIRA, 2012).

The use of sheets of paper in organizational spheres has gradually declined over the years. This achievement has as one of the main factors the great expansion of the use of technologies that make the production and processing of documents wide and flexible. However, the use of leaves is still high, and this problem stems from several factors, many of them intrinsic to organizational factors, such as lack of incentive, education, among others (QUIRINO, 2018).

Approximately 0.013% of the trunk of an eucalyptus tree is used to make a sheet of A4 type paper. An entire trunk generates approximately 7,550 sheets of paper of the indicated type, around 15 reams of paper, each with 500 sheets.

According to data collected from Nupemec-Cejusc-Recife, a process solved by the traditional method of decision, that handed down by a magistrate, on average, about two hundred sheets of paper are used. On the other hand, in the resolution of processes and procedures through mediation sessions remotely, virtually, without paper.

Using computer technology, the virtual way, as mediation sessions are being carried out, since the beginning of the pandemic, the use of paper is unnecessary because they are carried out through the WhatsApp application or by video conference, as established in Normative Instruction nº 05/2020, of the Pernambuco Court of Justice (TJPE).

The following relationship between the process and deforestation can be extracted:

Table 1. Relationship between Process and Deforestation

| Type of Procedure       | Number of Pages | % Deforestation |
|-------------------------|-----------------|-----------------|
| Traditional Process     | 200             | 2.6% of a       |
| (physical)              |                 | Eucalyptus tree |
| Virtual Mediation       | 0               | 0               |
| Process                 |                 |                 |

Source: The Authors (2021).

In this case, a whole trunk of a eucalyptus tree would be necessary to produce approximately 39 (thirty-nine) processes, these being processed by the traditional method of conflict resolution. In this line, considering that in 2019 64,020 new court cases (TJPE) were distributed, being electronic, approximately 1,665 (one thousand, six hundred and sixty-five) eucalyptus trees would be spared deforestation, which means that they would be kidnapped, on average, 150 (one hundred and fifty) tons of carbon dioxide from the atmosphere (LIMA, 2015).

Therefore, of great relevance to the environment, the use of mediation as a method of conflict resolution in a virtual way by the TJPE, bearing in mind that this procedure, by not using paper, protects deforestation, thus contributing to a greater capture by trees, of carbon dioxide in the atmosphere and naturally. Likewise, the non-use of vehicles by users of the remote dispute resolution method will mitigate the direct emission of polluting gases.

In the scenario outlined by the IPCC, the future of humanity depends not only on eliminating fossil fuels, such as coal and oil, and zeroing deforestation on a global scale to reduce emissions, but also protecting forests, savannas, and other forms of natural vegetation to capture the excess of CO₂ that is already in the atmosphere and what will still be emitted in the transition phase to a carbon neutral economy (GERHARDT, 2018).

In fact, as shown by the results indicated, the sequestration technique should be encouraged and well received by Brazil, as it is a country that has a vast forest, rich in humid forests, large carbon sequesters and at low cost. Corroborating this understanding, there is also a strong argument that this natural carbon absorption system opens up possibilities for investments in Brazil and, consequently, generation of jobs and income (CHANG, 2002).

In addition, the main argument in defense is that carbon sequestration is significant in combating the greenhouse effect, caused by the excess of carbon dioxide in the environment, resulting from the burning of fossil fuels and deforestation (CHANG, 2002).

Thus, due to the results found in the case under study, virtual mediation, as a fast and effective method of consensual resolution of conflicts, with the use of computer technology, in the way that mediation sessions have been held in Cejusc-Recife, since March 2020, it is a tool for protecting the environment and a sustainability model to be followed by the other courts in the country.

INTERVIEW RESULTS

In an interview with users of the virtual mediation hearings system, implemented by the TJPE since the beginning of the pandemic, with the aim of analyzing the satisfaction of the jurisdictions and the environmental
gains brought by using this form of dispute resolution, the result was verified responses according to the graphs bel.

It can be seen here a minimum percentage of 7.3% of the interviewees who prefer to hold the hearing in person, the vast majority (92.75), at least, being satisfied with the virtual form of production of the audience; including, most respondents rated it as an excellent way to conduct an audience.

It remains to be seen from this result that many respondents live at least 10 km (ten kilometers) from the Rodolfo Aureliano Forum.

Almost all respondents use a passenger vehicle to travel from their homes to the Rodolfo Aureliano Forum, where mediation sessions / hearings are held, and it should be noted that the passenger vehicle emits a high percentage of polluting gases.

It was observed that automobiles, light commercial vehicles, and motorcycles, were responsible for approximately 90% of carbon dioxide emissions, in the period presented there (years from 2009 to 2020), proving that there was an increase in the emission of polluting gas by automobiles increased from 48% in 2009 to 51% in 2020 (CETESB, 2020).

All respondents / users of the mediation hearing, held virtually, would use transportation to travel to the Rodolfo Aureliano Forum, where the session / audience would be held, if it were in person and, thus, the percentage of one hundred percent of the respondents understood that the mediation audience in a virtual way contributes to the mitigation of pollutant gas emissions.

Due to the constant and progressive concern with the sustainable use of natural resources, the electronic process brings significant collaboration in terms of sustainability, proving to be an effective instrument to be used by the State to correct the social costs of environmental degradation (SILVA, 2012).

It was also observed that all interviewees, users of mediation hearings through virtual means, whether parties, lawyers or public defenders, understand that the Pernambuco Court of Justice should invest and encourage sustainable practices.

Despite the adversities, countless alternatives are being taken to reduce or make the use of paper more effective in government agencies. After the installation of systems such as the electronic Judicial Process (PJe) and the Electronic Information System (SEI), the use of paper in organizations that have adapted to these systems has reduced up to 70% in some entities, according to data shown in the Report of Performance of Goals - 2016, organized by the Court of Justice of the Federal District and Territories (TJDFT) in 2016. (QUIRINO, 2018).

SEARCH RESULTS

The elaboration of research had the intention to verify the idea that has about the mediation through virtual, as a fast, effective and sustainable way and still, to analyze the participation of the Judiciary Power in the effective commitment with paradigm changes related to the means of solution of conflicts in order to achieve social pacification.

It was observed that many civil servants (53.2%) participating in the survey have more than 20 years of service at the Pernambuco Court of Justice.

Regarding the area of operation of TJPE employees, 76.3% answered the questionnaire about the practice of mediation. Regarding mediation as an adequate form of solution, almost an unanimity (99.2%) among the respondents' answers, demonstrated that mediation reached its objective as a convenient means of social pacification. Corroborating this understanding, the National Council of Justice itself, as a body that controls the administrative and financial activity of the Brazilian judiciary, has mediation as an appropriate mechanism for resolving conflicts (Resolution No. 125/2010).

The survey also proved the existence of a high percentage (92.3%) of people who understand that when the dispute is resolved through dialogue between the parties involved, where they themselves create the solution, they are more likely to be fulfilled than when the solution is determined by a judge.

Mediation, as one of the alternative means of resolving conflicts, aims more than the agreement, also seeks to restore relations and a deeper reflection on the conflict, aiming to unveil the legal, social, and economic situation involved in that situation. Thus, there is the search for autonomy and the construction of adequate and meaningful responses to the conflict (HESPANHOL et al, 2018).

The TJPE civil servants demonstrated that they consider that the resolution of conflicts through virtual mediation, reduced the judicialization, bringing to the Pernambuco Court of Justice great savings with expenses with water, energy, and hours of work of the civil servants and magistrates.

The emergence of mediation was important to remedy the lack of understanding and dialogue between people, a fact that reduces the culture of litigation and decongests the Judiciary with any conflicting issue (HENCHEN, 2020).
It was noticed that 96.4% of respondents understand virtual mediation as a better way of resolving disputes than the traditional way of resolving, as it is faster, more efficient and restores relations between litigants, because through it, the dialogue is stimulated and the dispute resolved, by the parties involved, different from the traditional way of making decisions, which is adversarial.

Regarding conflict resolution by consensual method, therefore, it is a consensual method of resolving deadlocks, also called non-adversarial method, which appears in the Brazilian scenario to assist in conflict resolution. However, Cappelletti and Garth (1988, p. 28) explain that mediation: “It is not restricted to the agreement between the parties, as this is only one of its purposes, since it also motivates the dialogue between the parties thus rescuing the relationship among them so that together they can get back to dealing with their interests”.

As in the result of the interview answered by the users of the virtual mediation system, in the questionnaire carried out with the TJPE servers, they understand, in almost all the responses, that virtual mediation brings benefits to the environment due to the nonuse of paper and shipping.

According to Warat (1999, p. 5): “[...] mediation is an ecological way of resolving social and legal conflicts; a way in which the desire to satisfy the desire replaces the coercive and outsourced application of a legal sanction” (HENCHEN, 2020).

It remains proven in this result that the respondents, in an extremely high percentage (84.3%), agree that there was an increase in the number of consensual resolutions through mediation, from when the mediation hearings / sessions started to be held in a virtual way, being corroborating with this result the data provided by Nupemec / Cejusc-Recife, indicated in this work.

People were also asked about the need and importance of the involvement of public power in the environmental issue. Practically, all people stated that the participation of the state power in contributory management is relevant and, in a way, aimed at sustainable develop.

To be able to achieve what we call socio-environmental responsibility and sustainability, business organizations and public authorities and even society, must structure themselves to reduce the negative actions that act on the environment. But it is not only linked to the environment, as stated by VEIGA (2010) it is essential that its users break with naivety and inform themselves about the available answers to the question “what is sustainability?” (LACORTT, 2018).

### IV. CONCLUSION

The perspectives presented here relate to the history of the traditional and lengthy procedure for judging disputes by the judiciary, passing through the alternative method of mediation, as a faster and more effective solution to conflicts and the advent of computerization in the judiciary.

In view of the bibliographic expositions by some authors, as well as, through the results demonstrated and discussed, both in the questionnaire and in the interview presented here, it was found in this work, that the use of mediation as a method of dispute resolution presents a great social gain.

In addition to the speed and effectiveness of the method, the resolution given by the litigants themselves leads to the satisfaction of those involved, thus bringing the desired social pacification in a satisfactory, fast and effective way.

It can also be evidenced that the computerization of the processes and procedures authorized by Law 11.419 / 2006, in addition to speeding up the judicial provision by electronic means, also allowed, after the pandemic, the institution and regulation of mediation sessions through WhatsApp or Videoconference, making this model of dispute resolution to be presented as a tool for saving and protecting the environment, due to the non-use of paper and vehicles by users of virtual mediation.

From an economic point of view, as evidenced, the state court of justice has a great savings on energy, water and paper expense with virtual mediation, since mediation sessions are held remotely, and users of this system do not have to attend the forum.

Regarding the consumption of paper, in a specific way, its disuse when the solution of the conflict happens through electronic mediation, contributes in a very expressive way to the benefit of the environment. Deforestation and, with that, makes it possible to maintain the trees that capture carbon dioxide in the atmosphere, reducing the exacerbated warming of the atmospheric temperature.

In this context, due to the results presented in this research regarding the use of paper, if the processes distributed in 2019, at the Rodolfo Aureliano Forum, were resolved through virtual mediation, the amount of carbon dioxide in the atmosphere, equivalent to approximately 150 (one hundred and fifty) tons, since approximately 1,665 (one thousand, six hundred and sixty-five) eucalyptus trees would be saved from deforestation.

Likewise, the non-use of vehicles by users of the remote dispute resolution method, mitigates the direct
emission of polluting gases, with motor vehicles being more responsible for air pollution than any other human activity, thus being great aggressive agents of the environment and public health, as expressed in the bibliography cited here.

The use of faster and more effective non-traditional methods of conflict resolution such as mediation, combined with virtual electronic media; according to the case study carried out at Cejusc / Recife, the object of this research, leads the Pernambuco Court of Justice to a win-win process, presenting greater satisfaction, speed and effectiveness in resolving the disputes resolved by the parties themselves and can be a model of sustainable practice to be copied by other courts in the country.

This model, according to the reasons set out here, contributes considerably to non-deforestation and the consequent increase in the uptake of carbon dioxide in the atmosphere by trees and a reduction in the emission of polluting gas by motor vehicles, contributing significantly to the mitigation of the effect stoke.

Although the paradigm shift is not an easy task for the Court of Justice of Pernambuco, due to the habit rooted in the Brazilian legal culture regarding traditional procedures, this transformation will be essential in view of the pressing need for the judiciary to have a faster, more efficient judicial provision, satisfactory and protective of the environment.

ACKNOWLEDGEMENTS

To Technological Institute of Pernambuco.

REFERENCES

[1] 1º Inventário Nacional de Emissões Atmosféricas por veículos automotores – Ministério do Meio Ambiente – Secretaria de Mudanças Climáticas e Qualidade Ambiental – 2011.

[2] ABELHA, Marcelo. Manual de Direito Processual Civil. 5ª edição. Rio de Janeiro Grupo Gen- Editora Forense, 2016).

[3] ABELHA, Marcelo. Manual de Execução Civil. Grupo Gen-Editora Forense, Vitória/ES, 2015

[4] ALENCASTRO, Maria A. C.; SILVA, Edson. V.; LOPES, Ana. M. Contratações sustentáveis na administração pública brasileira: a experiência do Poder Executivo federal. Rev. Adm. Pública, Rio de Janeiro v. 48, n. 1, p. 207-35, jan./fev. 2014.

[5] ALMEIDA, Diogo assumção Rezende de; PANTOJA, Fernanda Medina; PELAJO, Samantha. A mediação no novo código de processo civil. Rio de Janeiro, Forense, 2016

[6] ARRUDA, Daniel Péricles; VIDAL, Ricardo Flores. Lugar de escuta:uma proposta metodológica para a mediação de conflitos. Revista de Ciências Jurídicas Sociais, v.10, n.1, 2020

[7] ASSESSORIA DE COMUNICAÇÃO DA AEMS, Produção de folha de papel A4 necessita de 10 litros de água, disponível em http://aems.edu.br/noticias/view?id=788. Acesso em: 25 dez.2020.

[8] ASSIS, Araken. Manual dos Recursos. Revista dos Tribunais.9º Ed. 2017

[9] BABBIE, E. Métodos de pesquisas de survey. Belo Horizonte: UFMG, 2016.

[10] BACELLAR, Roberto Portugal. Mediação e Arbitragem. Coleção saberes do Direito, v. 53. São Paulo: Saraiva, 2016.

[11] BACELLAR, Roberto Portugal. Mediação e Arbitragem. Editora Saraiva. São Paulo, 2012.

[12] BARBOSA, Adriana Josélen Rocha Morais - O Processo Judicial Eletrônico como instrumento de concretização do Direito Fundamental à celeridade da prestação da tutela jurisdicional. Revista Esma, Palmas, Ano 5, nº 6, p. 101 a 122 - jul/dez 2016.

[13] BARBOSA,Roberto Rivelino do Nascimento; SILVA, Aurilena de Aviz; NEVES, Myriam; GALVÃO, Alexandre Roger de Araújo; NETO, Cândido Ferreira de Oliveira. Produção e Sequestro de Carbono na Atmosfera (2013).

[14] BARRETO, Leandro de Marzo, e PONTES, Carolina de Moraes. O Concteto de entrelaçamento participativo e teoria discursiva em Habermas e a conciliação e mediação como positivação da solução eficiente dos Conflitos. Revista de Formas Consensuais de Solução de Conflitos, vol. 2, no. 1, Jan.-June 2016, p. 323.

[15] BRASIL. Resolução 125 de 29 de out. de 2010 - CNJ, Dispõe sobre a Política Judiciária Nacional de tratamento adequado dos conflitos de interesses no âmbito do Poder Judiciário e dá outras providências. Disponível em: <http://www.cnj.jus.br/busca-atos-adm?documento=2579> Acesso em: 25 de junho de 2018.

[16] BRASIL. Resolução 201 de 03 de março de 2015 – CNJ. Dispõe sobre a criação e competências das unidades ou núcleos socioambientais nos órgãos e conselhos do Poder Judiciário e implantação do respectivo Plano de Logística Sustentável (PLS-PJ). Disponível em http://www.cnj.jus.br/busca-atos-adm?documento=2795

[17] BULZICO, Bettina Augusta Amorim, O Direito Fundamental ao meio ambiente ecologicamente equilibrado, Curitiba, 2009.

[18] CACHAPUZ, Rozane da Rosa. Mediação nos conflitos & Direito de Família. Curitiba: Juruxá, 2006.

[19] CAMPELO, Olivia Brandão Melo e LEAL, Macela Nunes – Mediação: um eficiente instrumento de acesso à justiça. Disponível em: Arquivo Jurídico – ISSN 2317-918X – Teresina-PJ – nº. 4 – n. 1- 100-110, Jan./Jul. de 2017.

[20] CASTRO, Alcineá Guimarães de. Estimativa de sequestro de carbono florestal para restauração ecológica para derivação e instalação de uma central geradora hidrelétrica – CGH, Universidade Estadual Paulista – UNESP, Guaratinguetá 2017

www.ijaers.com
[21] Chang, Manyu. Sequestro Florestal: Oportunidades e Riscos para o Brasil. Revista Paranaense de Desenvolvimento, Curitiba, n. 102, p. 85-101, jan/jun 2002.

[22] CHAVES, Débora Almeida; CASTELLO, Rebecca do Nascimento. O Desenvolvimento Sustentável e a Responsabilidade Socioambiental Empresarial. Getec – Simpósio de Excelência em gestão e tecnologia (2013).

[23] CINTRA, Antonio Carlos de Araújo, GRINOVER, Ada Pellegrini e DINAMARCO, Cândido Rangel. Teoria Geral do Processo, 29ª ed., São Paulo Malheiros, 2013.

[24] COPENHAGEN ACCORD. The United Nation Climate Change Conference. In: Copenhagen, 2009.

[25] CORREIA, Mary Lúcia Andrade, DIAS, Eduardo Rocha. Desenvolvimento sustentável, crescimento econômico e o princípio da solidariedade intergeracional na perspectiva da justiça ambiental. Planeta Amazônia, Revista Internacional de direito ambiental e políticas públicas, (2016, n.8)

[26] COSTA, Luana Folchini da; NEUMANN, Susana Elisabeth; DORION, Eric Charles Henri; OLEA, Pelayo Munhoz e SEVERO, Eliana Andréa. Revista Metropolitana de Sustentabilidade - RMS, São Paulo, v. 9, n. 2, p. 6-19, Maio/Ago., 2019

[27] COTTA, Michele Karina¹, TONELLO, Kelly Cristina². Os projetos florestais no contexto das mudanças climáticas. (Ano 6. Enc. Energ. Meio Rural 2006)

[28] DENIS, Fernando Ramos. Estudo da arte da obtenção de crédito de carbono via adoção de veículo elétrico, v.8, n.3, pág. 344, Taubaté, São Paulo-Brasil(2012)

[29] DRUMM, Fernanda Caroline, GERHARDT, Ademir Eloí, FERNANDES, Gabriel D’avila, CHAGAS, Patrícia, SUCOLOTTI, Mariana Scheffer, KEMERICH, Pedro Daniel da Cunha. Poluição atmosférica proveniente da queima de combustíveis derivados do petróleo em veículos automotores. Revista do Centro de Ciências Naturais e Exatas - UFSM, Santa Maria - V. 18 n. 1 Abr 2014, p. 66-78.

[30] FERNANDES, Igor Benevides Amaro, GONÇALVES, MOREIRA, Flávio José. A prática da mediação e da conciliação no tratamento de conflitos ambientais através do Poder Judiciário: discussão a partir da realidade do Estado do Ceará. Revista de Formas Consensuais de Solução de Conflitos, vol. 3, no. 1, Jan-Jun 2017, p. 93+. Gale Academic OneFile. Disponível em <https://link-gale.com/apps/doc/A606750900/AONE?u=capes&sid=AONE>. Acesso em: 03 ago.2020.

[31] FIORITTI, Renato Rodrigues Zé Pacel calcula o número de árvores para fazer uma folha de papel. Revista O Papel (junho 2015). Disponível em <http://www.revistapapel.org.br/noticiaanexos/1434649219_3279f3c121250d10467468872cc75f56_387739056.pdf>. Acesso em 19 de novembro de 2020.

[32] FREITAS, Cláudia Virgínia de, SILVA, Maria Lúcia Pereira da, MUDANÇAS DO CLIMA. Análise das Conferências que trataram do mercado de carbono e seus principais resultados. Vol. 6, n.10, 2020)

[33] FROUFE, L. C. M.; RACHWAL, M. F. G.; SEOANE, C. E. S. Potencial de sistemas agroflorestais multietnico para sequestro de carbono em áreas de ocorrência de Floresta Atlântica. Pesquisa Florestal Brasileira, Embrapa Florestas (Pesquisa Florestal Brasileira, Colombo, v.31, n.66, p. 143-154 (abr.jun.2011).

[34] GABATZ, Celso, ARAÚJO, Danielle Freire Medeiro da Silva de, SILVA, Giovanni Codeza da. A crise ambiental e a necessidade de uma educação sustentável. perspectivas contemporâneas de educação (2020, vol. 2)

[35] Gases do Efeito Estufa e Fontes de Emissão. Disponível em <https://cetesb.sp.gov.br/proclima/gases-do-efeito-estufa/>. Acesso em 23.12.2020.

[36] GENTIL, Rivaldo da Silva; NOVAIS, Fabricio Muraro. O Meio Ambiente como direito fundamental à luz da Constituição de 1988, (2011).

[37] GERHARDT, Rodrigo. Ou agimos agora ou será tarde demais. Greenpeace Brasil. Disponível em <https://www.greenpeace.org/brasil/>. Acesso em 20 de dezembro de 2020.

[38] GONÇALVES, Rafael; DE CASTRO, Alessandro, CATAPAN, Anderson, CATAPAN, Dariane Cristina, Uma Discussão da Sustentabilidade e inovação como variáveis para o crescimento e desenvolvimento econômico sustentável, (2016, vol 2, n.1)

[39] GONÇAVES, Daniel Bertoli, Revista Espaço Acadêmico, 2005.

[40] HESPANHOL, Liliane Cristina de Oliveira1, SOUZA, Evana Barros Pereira2, LEMOS, Ana Flávia Souza3. Reflexões sociojurídicas sobre a política judiciária nacional de tratamento aos conflitos de interesses. 16º Encontro Nacional de Pesquisadores/ores em Serviço Social.Vitória/ES, Dez.2018).

[41] Instrução Normativa Conjunta nº 05, de 29 de março de 2020, a qual foi publicada no DOE do dia 31 de março de 2020

[42] IPCC-WGIII. Contribuição do Grupo de trabalho III ao 4º. Relatório de Avaliação do Painel Intergovernamental sobre Mudança do Clima. 2007.

[43] LACORTT, Bianca da Veiga – Direito e Sustentabilidade: o paradigma do direito ao futuro e a importância da legislação e do Poder Público na busca do desenvolvimento sustentável – Ijuí (RS) – 2018

[44] LEIRÃO, Luciana Ferreira Leite; ABE, Karina Camasmie; MIRAGLIA, Simone Georges El Khouri. Avaliação do Impacto do Programa de Controle da Poluição do Ar por Veículos Automotores no Número de Óbitos por Problemas Cardiorrespiratórios na Região Metropolitana de São Paulo, 2017

[45] LIMA, Ana Carla Bezerra et al. Custos para Mitigação das Emissões de CO² da Paraíba via reflorestamentos (2015).

[46] LIMA, Ana Karmen Fontenele Guimarães – Consumo e Sustentabilidade: em busca de novos paradigmas numa sociedade pós-industrial – 2010.

[47] LIMA, Gleiphyson Santana de (et. al). Metodologia para estimativa de emissão de poluentes pelo transporte rodoviário. Rio de Janeiro – Brasil (2014).

[48] MACHADO, Ana Cláudia, Os Fundamentos da integridade ecológica:um estudo a partir da Carta de Terra, Universidade Tecnológica Federal do Paraná, Dois Vizinhos, 2019
MALHOTRA, N.; ROCHA, I.; LAUDISIO, M.C. Introdução à Pesquisa de Marketing. São Paulo: Pearson Prentice Hall, 2015.

MARTINEZ, Sergio Rodrigo Martinez, SCHULZ, Stéphanie Galhardo. Análise da institucionalização da mediação a partir das inovações no novo código de processo civil (NCPC) e da Lei nº 13.140/2015 (Lei da mediação). Revista Eletrônica do Curso de Direito, Universidade Federal de Santa Maria, v.12, n.1, 2017

MERRIAM, S. B. Qualitative research and case study applications in education. San Francisco: Jossey-Bass, 1998.

MONTESQUIO, Horácio; IOCOHAMA, Celso Hiroshi; NETTO, José Laurindo de Souza. Solução aos desafios decorrentes da judicialização da epidemia de Covid-19. 2020. Disponível em <https://www.conjur.com.br/artigos/exibir/10394/Conciliacao-e-mediacao>. Acesso em: 22.12.2020.

MOREIRA, Luciana Maria Reis. A informatização do processo judicial sob a ótica do desenvolvimento sustentável – Revista Direito Ambiental e Sociedade. V.2,n.1, 2012., págs 293/296

NOBRE, Carlos A. e NOBRE, Antônio D. O Balanço de Carbono da Amazônia Brasileira (2002).

OLIVEIRA, Thifani Ribeiro Vasconcelos de. A mitigação do princípio da autonomia da vontade na mediação à luz do Código de Processo Civil. (Salvador, 2017)

PENONNEAULT, A.; KRAEMER, K. Survey research methodology in management information systems: an assessment. Journal of Management Information Systems, Autumn, 1993.

PINTON, Fatima Cristina Vaz e DOS SANTOS, Robson Nogueira – Potenciais de redução de emissões de dióxido de carbono no setor de transportes: um estudo de caso da ligação Hidroviária Rio-Niterói - Engevista, v. 6, n. 3, p. 64-74, dezembro 2004

Produzir papel destroi as florestas. Disponível em <https://twosides.org.br/Produzir-papel-sempre-destroi-as-florestas>. Acesso em 22.12.2020. Acesso em 10 de jun.2020.

QUIRINO, Marlos Angelo Silva, 2018. Análise do Uso, Descarte e Reciclagem de Folhas de Papéis Utilizadas nos Ministérios (Brasília, 2018)

RAUPP, Daniel. O Direito ao meio ambiente ecologicamente equilibrado e a possibilidade de ocupação da zona costeira mediante desenvolvimento sustentável. Universidade do Vale do Itajaí – Univali.(junho 2020)

MONTESQUIO, Horácio; IOCOHAMA, Celso Hiroshi; NETTO, José Laurindo de Souza. Solução aos desafios decorrentes da judicialização da epidemia de Covid-19. 2020. Disponível em <https://www.conjur.com.br/artigos/exibir/10394/Conciliacao-e-mediacao>. Acesso em: 22.12.2020.

MONTESQUIO, Horácio; IOCOHAMA, Celso Hiroshi; NETTO, José Laurindo de Souza. Solução aos desafios decorrentes da judicialização da epidemia de Covid-19. 2020. Disponível em <https://www.conjur.com.br/artigos/exibir/10394/Conciliacao-e-mediacao>. Acesso em: 22.12.2020.

MONTESQUIO, Horácio; IOCOHAMA, Celso Hiroshi; NETTO, José Laurindo de Souza. Solução aos desafios decorrentes da judicialização da epidemia de Covid-19. 2020. Disponível em <https://www.conjur.com.br/artigos/exibir/10394/Conciliacao-e-mediacao>. Acesso em: 22.12.2020.

MONTESQUIO, Horácio; IOCOHAMA, Celso Hiroshi; NETTO, José Laurindo de Souza. Solução aos desafios decorrentes da judicialização da epidemia de Covid-19. 2020. Disponível em <https://www.conjur.com.br/artigos/exibir/10394/Conciliacao-e-mediacao>. Acesso em: 22.12.2020.

MONTESQUIO, Horácio; IOCOHAMA, Celso Hiroshi; NETTO, José Laurindo de Souza. Solução aos desafios decorrentes da judicialização da epidemia de Covid-19. 2020. Disponível em <https://www.conjur.com.br/artigos/exibir/10394/Conciliacao-e-mediacao>. Acesso em: 22.12.2020.

MONTESQUIO, Horácio; IOCOHAMA, Celso Hiroshi; NETTO, José Laurindo de Souza. Solução aos desafios decorrentes da judicialização da epidemia de Covid-19. 2020. Disponível em <https://www.conjur.com.br/artigos/exibir/10394/Conciliacao-e-mediacao>. Acesso em: 22.12.2020.

MONTESQUIO, Horácio; IOCOHAMA, Celso Hiroshi; NETTO, José Laurindo de Souza. Solução aos desafios decorrentes da judicialização da epidemia de Covid-19. 2020. Disponível em <https://www.conjur.com.br/artigos/exibir/10394/Conciliacao-e-mediacao>. Acesso em: 22.12.2020.

MONTESQUIO, Horácio; IOCOHAMA, Celso Hiroshi; NETTO, José Laurindo de Souza. Solução aos desafios decorrentes da judicialização da epidemia de Covid-19. 2020. Disponível em <https://www.conjur.com.br/artigos/exibir/10394/Conciliacao-e-mediacao>. Acesso em: 22.12.2020.

MONTESQUIO, Horácio; IOCOHAMA, Celso Hiroshi; NETTO, José Laurindo de Souza. Solução aos desafios decorrentes da judicialização da epidemia de Covid-19. 2020. Disponível em <https://www.conjur.com.br/artigos/exibir/10394/Conciliacao-e-mediacao>. Acesso em: 22.12.2020.

MONTESQUIO, Horácio; IOCOHAMA, Celso Hiroshi; NETTO, José Laurindo de Souza. Solução aos desafios decorrentes da judicialização da epidemia de Covid-19. 2020. Disponível em <https://www.conjur.com.br/artigos/exibir/10394/Conciliacao-e-mediacao>. Acesso em: 22.12.2020.

MONTESQUIO, Horácio; IOCOHAMA, Celso Hiroshi; NETTO, José Laurindo de Souza. Solução aos desafios decorrentes da judicialização da epidemia de Covid-19. 2020. Disponível em <https://www.conjur.com.br/artigos/exibir/10394/Conciliacao-e-mediacao>. Acesso em: 22.12.2020.

MONTESQUIO, Horácio; IOCOHAMA, Celso Hiroshi; NETTO, José Laurindo de Souza. Solução aos desafios decorrentes da judicialização da epidemia de Covid-19. 2020. Disponível em <https://www.conjur.com.br/artigos/exibir/10394/Conciliacao-e-mediacao>. Acesso em: 22.12.2020.

MONTESQUIO, Horácio; IOCOHAMA, Celso Hiroshi; NETTO, José Laurindo de Souza. Solução aos desafios decorrentes da judicialização da epidemia de Covid-19. 2020. Disponível em <https://www.conjur.com.br/artigos/exibir/10394/Conciliacao-e-mediacao>. Acesso em: 22.12.2020.

MONTESQUIO, Horácio; IOCOHAMA, Celso Hiroshi; NETTO, José Laurindo de Souza. Solução aos desafios decorrentes da judicialização da epidemia de Covid-19. 2020. Disponível em <https://www.conjur.com.br/artigos/exibir/10394/Conciliacao-e-mediacao>. Acesso em: 22.12.2020.

MONTESQUIO, Horácio; IOCOHAMA, Celso Hiroshi; NETTO, José Laurindo de Souza. Solução aos desafios decorrentes da judicialização da epidemia de Covid-19. 2020. Disponível em <https://www.conjur.com.br/artigos/exibir/10394/Conciliacao-e-mediacao>. Acesso em: 22.12.2020.

MONTESQUIO, Horácio; IOCOHAMA, Celso Hiroshi; NETTO, José Laurindo de Souza. Solução aos desafios decorrentes da judicialização da epidemia de Covid-19. 2020. Disponível em <https://www.conjur.com.br/artigos/exibir/10394/Conciliacao-e-mediacao>. Acesso em: 22.12.2020.

MONTESQUIO, Horácio; IOCOHAMA, Celso Hiroshi; NETTO, José Laurindo de Souza. Solução aos desafios decorrentes da judicialização da epidemia de Covid-19. 2020. Disponível em <https://www.conjur.com.br/artigos/exibir/10394/Conciliacao-e-mediacao>. Acesso em: 22.12.2020.

MONTESQUIO, Horácio; IOCOHAMA, Celso Hiroshi; NETTO, José Laurindo de Souza. Solução aos desafios decorrentes da judicialização da epidemia de Covid-19. 2020. Disponível em <https://www.conjur.com.br/artigos/exibir/10394/Conciliacao-e-mediacao>. Acesso em: 22.12.2020.
América Latina. Disponível em <http://www.publicadireito.com.br/artigos/?cod=2e15c92ca db82b0>. Acesso em 10 de outubro de 2020.

[78] VALLE, Carina Duque. A mediação como instrumento adequado à pacificação social. Faculdade de Direito, Universidade Federal Rural do Rio de Janeiro, Três Rios, 2017.

[79] Veículos são os maiores causadores de poluição do ar em centros urbanos. Disponível em <http://portalautomulher.com.br>. Acesso em 16 de novembro de 2019.

[80] VEIGA, José Eli da. Meio Ambiente e Desenvolvimento. Ed. Senac, São Paulo, 2008 (p. 182, v.5).

[81] YIN, R. Estudo de caso: planejamento e métodos. 5. ed. Porto Alegre: Bookman, 2015.

[82] ZANIRATO, Silvia Helena, ROTONDARO, Tatiana. Consumo, um dos dilemas da sustentabilidade (São Paulo, 2016, vol. 30, n.88).

[83] CONSELHO NACIONAL DE JUSTIÇA. Resolução nº125 de 29/11/2010. Dispõe sobre a Política Judiciária Nacional de tratamento adequado dos conflitos de interesses no âmbito do Poder Judiciário e dá suas providências. Disponível em: https://atos.cnj.jus.br/atos/detalhar/156. Acesso em 10 de mar. de 2020.

[84] COSTA, Lav da. Relações de Consumo x Meio Ambiente: Em busca do Desenvolvimento Sustentável. Revista Âmbito Jurídico (dez 2011). Disponível em <https://ambitojuridico.com.br/cadernos/direito-ambiental/relacoes-de-consumo-x-meio-ambiente-em-busca-do-desenvolvimento-sustentavel/>. Acesso em 27 de dezembro de 2020.

[85] GIMENEZ, Charlise Paula Colet; SPENGLER, Fabiana Marion. Contribuições da Teoria da Ação Comunicativa de Jurgen Habermas nos meios complementares de tratamento de conflito: o estudo do Multidoor Courthouse System - Quaestio Iuris, vol. 09, nº. 01, Rio de Janeiro, 2016, pp.164-180.

[86] GONÇALVES, Jéssica de Almeida. Princípios da mediação de conflitos civis. Âmbito Jurídico. 2017. Disponível em: https://ambitojuridico.com.br/cadernos/direito-processual-civil/principios-da-mediacao-de-conflitos-civis/. Acesso em: 6 out. 2020.

[87] GONSPENGLER, Fabiana Marion. Mediação de Conflitos - da teoria à prática. 2.ed. Porto Alegre: Livraria do Advogado Editora, 2017.

[88] HENCHEN, Adriana Flores. A importância da mediação e suas perspectivas no poder judiciário. Coleção Sistema de Justiça: conciliação, mediação e justiça restaurativa - Unisul (2020)

[89] PEREIRA, Jéssica Reis, PEREZ, Valéria Vasconcelos, SANTOS, Gabriella da Silva, CONSOLI, Lucas dos Santos. A Sustentabilidade e a criação do valor compartilhado: o caso da empresa Faber Castell, Fundação de Ensino e Pesquisa da Itajubá. Revista Científica Universitas (2016)

[90] Tribunal de Justiça de Pernambuco. Portaria nº 18/2018. Publicada no Diário da Justiça de Pernambuco do dia 25.09.2018.