

An aerial photograph of a wide, dark river in the Amazon. On the left bank, there is a dense, lush green forest. A small boat with several people on board is moving along the river, leaving a white wake. The title text is overlaid on the image.

# **JUSTICE AND SOCIO-ENVIRONMENTAL PROTECTION IN THE BRAZILIAN AMAZON**

NOVEMBER 2020



CONSELHO  
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# JUSTICE AND SOCIO-ENVIRONMENTAL PROTECTION IN THE BRAZILIAN AMAZON

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## Acronyms

<b>CJEU</b>	Court of Justice of the European Union	<b>SFM</b>	Sustainable Forest Management
<b>CoE</b>	Council of Europe		
<b>EC</b>	European Commission	<b>TFEU</b>	Treaty on the Functioning of the European Union
<b>EU</b>	European Union	<b>UNFCCC</b>	United Nations Framework Convention on Climate Change
<b>LLEGT</b>	Forest Law Enforcement, Governance and Trade		
<b>NGO</b>	Non-Governmental Organisation		
<b>REDD+</b>	Reducing Emissions from Deforestation and Forest Degradation, plus the sustainable management of forests, and the preservation and enhancement of forest carbon stocks		



## 1. ABSTRACT

The main goal of this project is to provide an international exchange of best practices regarding the protection, by the Judiciary, of the Amazon forest resources, and the identification of difficulties and limitations of the Brazilian justice system in this subject. It also seeks to identify the countries of the European Union that also have experience in the issue of environmental degradation and deforestation, suggesting best practices to address this issue, and comparing European and Brazilian legislation at different levels (Commission and Member States) (Union and Subnational Amazonian States).

After a comprehensive analysis of the Brazilian and European frameworks, several typologies of policies, best practices and judiciary cases arise, permitting a wide comparison of both systems. Such comparison gave evidence, in general, of a common background of nature protection policies. However, few differences deserve attention, such as the mandatory assessments previous to any potential damage to EU forest resources, the integration of EU environmental objectives among citizens and, most importantly, the EU citizen's rights related to access to justice. In this latter case, EU citizens can address environmental issues directly to the EU and, as a result, the EU can hold the Member States directly responsible in the corresponding judiciary and restoring actions.

Finally, we provide a series of suggestions directed at public policies based on the identification of Brazilian and European best practices on the mentioned access to justice instruments and direct legal procedures. We propose legislative instruments, which could be relevant to the National Justice Council. Last but not least, we recommend the creation and harmonisation of a taxonomy methodology based on geo-referenced procedures and quantitative data.



## 2. EXECUTIVE SUMMARY

**Introduction and Context:** Since the late 1980s, Amazonian deforestation has been an increasingly relevant matter on the agendas of international environmental institutions. Several studies have shown the impact of environmental damage to the Amazon biome on global scales. Despite the efforts of the Brazilian government to enforce control policies, deforestation continues to expand at high annual rates. Currently, Brazilian environmental legislation is one of the most up-to-date frameworks in the world, allowing enabling legal instruments to coordinate the limits on, and the reduction of, illegal deforestation although the problem persists.

Within the European Union, qualified policy debates have forced mechanisms to restrict commodity imports of agricultural products from countries that are not preserving their forest resources, based on policies to reduce carbon emissions resulting from deforestation and forestry degradation. Under the perspective of sustainable development, the European Union is even more committed to targets for reducing impact on climate change, as drawn up in the “EU Green Deal” plan, a pact development aimed at tackling climate change and inequality, as well as seeking international cooperation as an essential way of achieving global challenges.

The origin of the present report are the EU-Brazil Dialogues: Environmental Dimension of Sustainable Development, which proposed looking at this problem from the perspective of the Judiciary System’s performance. It is therefore imperative to outline a diagnosis of the performance of the Judiciary and, based on this panorama, promote the involvement of national and international entities. This involvement will unfold by allowing the identification of similar experiences of EU countries with regard to deforestation (but also mining and civil rights), considering the wide experience of the Directorate-General for the Environment within the European Commission, the consecutive Environment Action Programmes, the European Union’s public policies for reducing emissions from deforestation and forest degradation, and the European Green Deal, which will guide the European Union’s internal and international policies and actions in the coming years. The Brazilian National Council of Justice (CNJ), in turn, has institutions capable of carrying out possible measures and programmes resulting from this project, given the existence of the National Observatory on Environmental, Economic and Social Issues of High Complexity, Great Impact and Repercussion, which includes the aim of protecting the Amazonian environment on its agenda, and maintains several campaigns, standards and working groups that address the Amazon challenge.

This report intends thus to investigate, analyse and map the functioning of the Brazilian justice system, with a protective perspective of the Amazon biome, through the analysis of legislative processes and the processing of legal actions, in order to propose actions and public policies to improve its guardianship, emphasizing the good Brazilian and European judicial practices. The perspective is to bring them closer and fine-tune them. A comparative analysis of environmental standards and policies between Brazil and the UE will be developed.

There will also be a need to create regulatory mechanisms, interaction techniques, establishment of a balance, and action of the three powers.

**Methodology:** This report intends to nurture and provide an international exchange of best practices on the protection of the Amazon deforestation by the Judiciary and identify difficulties and limitations of the Brazilian justice system in this regard. It seeks to identify the countries of the European Union that also have experience in the issue of environmental degradation and deforestation, indicating best practices to address this issue, and comparing European and Brazilian legislation at different levels (Commission and Member States) (Union and Subnational Amazonian States).

The mapping will be one of the results of this project that is divided into three parts: Diagnostics (further divided into European Union and Brazilian), Comparative study and Recommendations.

After a comprehensive analysis of the Brazilian and European framework, several typologies of policies, best practices and judiciary cases arise, allowing a wide-scope comparison of both systems.

**Comparison:** In general, the comparison showed evidence of a common background of nature protection policies. However, few differences warrant attention, such as the mandatory assessments prior to any potential damage to EU environmental resources, the integration of EU environmental objectives among citizens and, most importantly, the EU citizen's rights related to access to justice. In this latter case, EU citizens can address environmental issues directly to the EU and, as a result, the EU can hold the Member States directly responsible in the corresponding judiciary and restoring actions.

**Recommendations:** the study brought, as main highlights, the following set of recommendations:

### **1. Suggestions directed to public policies based on the identification of Brazilian and European best practices on the subject:**

#### **Access to justice instruments:**

**Incremental instruments and policies** to facilitate concrete, real and effective access to justice and the ability to obtain swift decisions will be critical to being implemented and monitored in the Brazilian legal and regulatory framework.

#### **Direct legal procedures:**

**Direct legal infringement tools** – the adoption of direct fast-track infringement instruments that reduce the distance between the final decision maker and/or decision rule/institution could bring a higher degree of efficiency. In addition, the implementation of tools that allows the analyses of specific concrete issues (in opposite to broader and abstract policy noncompliance actions) allows a quick, focused and

more efficient and focused answer to the environmental concrete impact. The ability to directly enforce the responsibility of the “failure of action” on the protection of environment directly upon a member state is a powerful tool

## 2. Proposal of normative instruments that could be enacted by the National Justice Council:

**Regulation procedures on the land registry ('notarial registry'):** This allows the full implementation of the principles of transparency, monitoring and compliance with the Forestry Code and other land use legal framework in Brazil. There is inclusion of the diverse status of the land title (including judicial and non-judicial temporary and/or permanent decisions on administrative or judicial entities).

The Judiciary Branch, through the National Council of Justice, may also act with the aim of facilitating the unification of databases and registration information of producers and owners of land in the Amazon Region and promotion of unification of other systems that interest and affect rural producers, such as SIGEF, SICAR, SNCR, CCIR and ADA. There is a working group within the Brazilian Ministry of Agriculture for this specific purpose. This measure could improve the legal certainty of rural land registration and provide more information to support public policies in the Amazon region.

**The potential adoption, approval and enforcement of other similar international conventions and legal instruments like the Aarhus Convention** and The “**Regional agreement on access to information, public participation and access to justice in environmental matters in Latin America and the Caribbean**” as it is called, could bring a significant contribution to the right to environmental information, compliance and access to justice.<sup>1</sup>

Regarding the implementation of international legal conventions and instruments, and national regulation on environmental services and carbon, there is still the possibility for the Judiciary to study its role in regulating the environmental services and/or carbon emission from a technical and regulatory point of view, as part of the land title registry and its component attributes.

## 3. Proposal of a Taxonomy Creation and Harmonisation Methodology:

**Geo-referenced procedures:** It's critical to be able to identify the geo-localisation of the judicial cases, not only considering the identification of the court but also in relation to the real geo-localisation of the environmental damage, in this sense is recommendable that the CNJ could adopt taxonomic procedure that, through mandatory regulation, creates the obligation to input and harmonise the latitude and

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<sup>1</sup> [https://repositorio.cepal.org/bitstream/handle/11362/43611/51800493\\_pt.pdf](https://repositorio.cepal.org/bitstream/handle/11362/43611/51800493_pt.pdf)



longitude of the environmental damages (since the first notification of the case through to the final decision level). This strategy can be a tool to facilitate the regulation of the notarial registry of lands in the Amazon region.

**Quantitative data:** It's also critical to understand the real extension in hectares of the damage and consequently the remedies that will/have been adopted to indemnify and/or recuperate the area and environmentally protected goods. In this sense, it is recommendable that a taxonomic procedure should be implemented to create a procedure to identify the size/number of hectares (type of biome) of the damaged area. As a complement to this, it will also be value-added to include specific taxonomic procedures that allow the identification of the remedies applied to the specific cases: recovery, compensation, financial penalties and/or other alternative measures, and their effective implementation.

**Conclusions and Key Messages:** It is important to highlight that we are dealing with two of the most important, largest and most significant territories of the world with significant differences regarding the sense of land use and forest management uses, which need specific legal, regulatory and administrative instruments to address their own challenges. Nevertheless, we found significant common ground and similarities on many of the thematic issues addressed, such as:

Illegal deforestation demonstrates a common concern in both jurisdictions in terms of the legal and regulatory framework, with administrative and judicial instruments at the service of environmental protection and legal/judicial action against infractions. Forest conservation includes in both territories significant and robust legalisation and administrative tools that address the common objective of maintaining forest cover (and especially in Brazil native forest cover), with highlight to the Brazilian legislation that obligates the maintenance of 80% of legal reserve on the amazon biome (even in areas that could be destined to agriculture and cattle ranching production).

Forest Management arises as areas of mutual interest with a slightest increase in the detailed legal framework in forest management in Brazil at the national and subnational levels, revealing a huge attention at monitoring and control of transactions in the internal market.

Illegal mining reflects almost a unanimous restrictive regulatory procedure and legal framework with detailed legal and regulatory frameworks, a special highlight in Brazil to what concerns the prohibition of mining in indigenous areas.

With regard to Citizen's Rights and access to justice, both systems present instruments that allow access to information and to justice, with slight differences between Brazil and Europe in what concerns to the signature of the Aarhus Convention. Brazil has made a huge effort to create instruments that could allow integrity of the acknowledgement and assurance of individual and collective rights and also access to the judicial systems (by establishing, in Article 5 of its constitution the right to access justice, and creating legal and judicial instruments just like Civil Action and the People Class Action, but there is

the lack of other direct legal environmental responsibility (direct infringement tools) just like the “direct infringement action” that European citizens can propose to the European Commission allowing the fast and direct tracking of the specific environmental damage with the ability to make the state member responsible for “failure to act”. The effective implementation of access measures of the citizen’s and the citizen’s access to justice, especially to assure the security of citizens and other institutions to the exercise and use the justice instruments could result in an important and practical way to progress on the road to full enforcement of those rights.

On social integration, we see that social integration is clearly the importance of the permanent investment in educational, research and communication programmes related to environmental protection, and a similar pathway is been taken in some areas in Brazil.

Direct infringement instruments assure an agile and more efficient means to call the attention of the citizens and other institutional organisations of the society and assure greater efficiency in the prevention of deforestation and environmental degradation.

Finally this study is made possible through the comparison to bring several recommendations that have the potential to increase the agility, robustness, accuracy and efficiency of the judicial system in Brazil in what concerns to the environmental and social protection of the Amazon Region its people, culture and environmental wealth.



### 3. INTRODUCTION AND CONTEXT

Since the last years of the 1980s, Amazonian deforestation has been an increasingly relevant matter on the agendas of environmental organisations and national and international institutions concerned about environmental issues (Greenpeace 2017). Despite the efforts of the Brazilian government to enforce control policies, deforestation continues to expand at high annual rates (UNEP-WCMC 2018) due to a combination of global environmental and economic change (Mercure et al 2019). There have been important developments in Brazilian environmental legislation, including the environmental criminal law, the Forestry Code and the Water Resources Law. Currently, Brazilian environmental legislation is one of the most up-to-date frameworks in the world, enabling legal instruments to coordinate the limits and the reduction of illegal deforestation.

Several studies have demonstrated the impact of environmental damage to the Amazon biome in the climate and geophysical aspects of countries in the Northern hemisphere, among many global impacts (Gedney et al 2000; Werth & Avissar 2002). Within the European Union, reports and studies have forced qualified policy debates for the preservation of global forests through mechanisms to restrict commodity imports of agricultural products from countries that are not preserving their forest resources (Weatherley-Singh & Gupta 2018). Such measures are based on policies to reduce carbon emissions resulting from deforestation and forest degradation (such as the REDD+).

From the standpoint of sustainable development, the European Union is even more committed to targets for reducing impact on climate change, drawn up in the “EU Green Deal” plan, a pact development aimed at combating climate change and inequality, as well as the development of deforestation and environmental degradation, which includes international cooperation as an essential means to achieve global challenges.

The origin of the present report are the EU-Brazil Dialogues: Environmental Dimension of Sustainable Development, which proposed facing this problem based on a perspective of the Judiciary System’s performance. The Brazilian Judiciary System has an important role in prioritising environmental protection in the Amazon, including the subject in its strategic goals and developing specific public policies. In this sense, it is crucial to outline a diagnosis of the performance of the Judiciary and then, based on this panorama, promote involvement of national and international entities.

This involvement will take place based on the perspective of the EU-Brazil Dialogues, allowing the identification of similar experiences of EU countries in the area of deforestation (but also mining and civil rights), considering the wide experience of the Directorate-General for the Environment within the European Commission (DG Environment)<sup>2</sup>, the consecutive Environment Action Programmes (explained in Section 4 - EU Legislation), the

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<sup>2</sup> [https://ec.europa.eu/dgs/environment/index\\_en.htm](https://ec.europa.eu/dgs/environment/index_en.htm)

European Union's public policies for reducing emissions from deforestation and forest degradation (Section 4 - EU Agreements), and the European Green Deal (Section 4 - EU Legislation), or European Ecological Pact, which will guide the European Union's internal and international policies and actions in years to come.

The Brazilian National Council of Justice, in turn, has institutions capable of implementing possible measures and programmes resulting from this project (Boucher 2014), due to the existence of the National Observatory on Environmental, Economic and Social Issues of High Complexity, Great Impact and Repercussion, which includes the aim of protecting the Amazonian environment in its agenda, and maintains several campaigns, standards and working groups that address the Amazon challenge.

This report thus intends to investigate, analyse and map the functioning of the Brazilian justice system, with a perspective protective of the Amazon biome, presenting a diagnosis of its function and monitoring, through due analysis of legislative processes and the processing of legal actions, seeking to propose actions and public policies to improve its guardianship, emphasizing the good Brazilian and European judicial practices . The perspective is to bring them closer and fine-tune them. A comparative analysis of environmental standards and policies between Brazil and the UE will be developed. There will also be a need to create regulatory mechanisms and/or compulsory/coercive licensing, mechanisms and techniques of interaction, balance and action of the three powers.

The mapping will be one of the results of this project, divided mainly into three parts: Diagnostics (further divided into European Union and Brazilian), Comparative Study and Recommendations.



## 4. METHODOLOGY

The main methodological premises of this report are the survey, mapping and practical analysis, comparative data, legal sources and good environmental practices between Brazil and the EU, implementation of the survey and construction of jurisprudential knowledge free of valuation, explanatory and parsimonious, aiming to list the facts in a systematic, verifiable and accurate manner.

The first part of the diagnosis, will take place through the following vectors: Legal Instrument Models, Environmental Laws, Normative Acts or Public Policies on environmental protection, analysis of the European and Brazilian judiciary, courts, environmental agencies, electronic tools as available, and best judicial practices BR-EU with regard to environmental protection. In addition, REDD Law, the Paris Agreement, CONAREDD, Roadmap and graph showing the lawsuits in progress addressing degradation within the legal Amazon Region, as well as the identification of the Courts that deal with their collection of lawsuits of this nature.

The aim is that of achieving, in the medium term, an efficient and integral survey of the scenario of the European and Brazilian jurisdictions and their relationship with the protection of the environment. To facilitate a quick review of this part and make the following comparison easier, we provide a table of results, divided according to a series of numbered typologies (T1.1.1, T1.1.2., T1.2., etc.). These numbers can be found in the previous section and in the general index, to provide the interested reader with an easy way to find the appropriate information.

From the diagnosis, cartography, and the second part, the comparative study, the following entry will be made: Weaving, a comparative study of legislative and executive approaches to issues such as the norms, laws and best environmental practices guiding the formatting of a standardised taxonomy between Brazil and the EU. In this direction it is intended to analyse the dialogue-based, international scenario and to punctuate the exchange of successful experiences in prevention of deforestation, environmental protection, control actions with regard to mining companies and protection of indigenous lands, as well as to identify and/or to suggest georeferenced electronic tools, which help in the survey of data and control of the conduct of the judiciary, especially in the field of socio-environmental responsibility. These recommendations will be presented in the third part.

In this direction, data will be collected, and comparative studies will be carried out, as necessary for the construction of scientific data on the subject. It intends to design, encourage and consolidate an electronic tool for checking out lawsuits and collecting quantitative and qualitative data that covers the entire national territory and that will contribute towards protection of the resources of the Amazon biome. It will also list the already existing tools close to the proposal as here exposed.

As a result, the third part of the recommendations come on the scene, as a propositional stage of this work, through guidelines, indications, case studies and examples. There will be the announcement of proposals/alternatives and solutions for the problem issue: of how to safeguard the Amazon biome, with a conclusive outcome through key messages, referential vectors, propositive - product 1, fruit of the Brazil - EU connection.



## 5. DIAGNOSIS

### ■ International Agreements

The **New York Declaration on Forests**<sup>3</sup> (NYDF) began in September 2014, when a series of governments, companies, civil society, and organisations of indigenous peoples (now over 200) agreed to work toward halving tropical deforestation by 2020 and ending it by 2030. The NYDF also calls for the restoration of 150 million hectares of degraded landscapes and forestlands by 2020 and 350 million hectares by 2030. In order to keep temperature increases below 2 degrees Celsius, pre-industrial levels deforestation should be interrupted.

The **Convention on Biological Diversity**<sup>4</sup> is one of the international treaties signed in Rio in 1992, which have a direct influence on European forests. The CBD has clearly boosted the development of an EU strategy aimed at stemming the loss of biological diversity, although it did not provide any concrete instruments for national implementation.

The **United Nations Framework Convention on Climate Change**<sup>5</sup> (UNFCCC) is the second most important agreement signed at Rio 1992, and the key mechanism for addressing forest emissions. It has clearly influenced the European climate change programme, the EU Emission Trading System and the Climate and Energy Package. On the one hand, the UNFCCC includes the Land Use, Land Use Change, and Forestry (**LULUCF**) mechanism, which stipulates how developed countries can account for land use and forest-related emissions. The European Commission imposes LULUCF Action Plans from Member states in order to incorporate removals and emissions from forests into the EU's climate policy. On the other hand, the UNFCCC established the mechanism of Reducing Emissions from Deforestation and Forest Degradation (**REDD** and **REDD+**), which focuses on reducing forest losses in developing countries. The EU has already established a REDD+ facility in order to support related activities in developing countries.

The **Convention on International Trade in Endangered Species of Wild Fauna and Flora**<sup>6</sup> (CITES) restricts international trade in endangered species, including several relevant for timber production. CITES has been incorporated into several EU Wildlife Trade Regulations, which should be implemented by the EU Member states.

The 2030 Agenda for Sustainable Development proposed 17 **Sustainable Development Goals**<sup>7</sup> (SDGs), an international guiding policy framework to combine economic prosperity, social inclusion and environmental sustainability, as agreed globally by all 193 UN member states. SDGs include, among others, challenges towards

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<sup>3</sup> [forestdeclaration.org](http://forestdeclaration.org)

<sup>4</sup> [www.cbd.int](http://www.cbd.int)

<sup>5</sup> [unfccc.int](http://unfccc.int)

<sup>6</sup> [www.cites.org](http://www.cites.org)

<sup>7</sup> [sdgs.un.org](http://sdgs.un.org)

sustainable agriculture and food systems (SDG 2), achieving sustainable consumption and production (SDG 12), halting climate change (SDG 13), and the protection and preservation of biodiversity (SDGs 14 and 15). The European Union has committed to implementing them in both its internal and external policies, as they represent an affirmation of European values. EU Member States lead globally on SDG completion, although none of them is likely to reach the Goals by 2030. In order to do that, EU must eliminate adverse feedback from other parts of the world, by ensuring sustainable and full traceability of all international value chains, including deforestation-related products like soy, palm oil, timber, cacao, and coffee, in order to stamp out deforestation, and responsible policies in the tax and finance spheres. Tracking tools, including **Transparent Supply Chains for Sustainable Economies**<sup>8</sup> (TRASE, 2015) and **Global Forest Watch**<sup>9</sup> (GFW, 2019) can help make this ambition a reality (SDSN & IEEP 2019).

The **United Nations Convention to Combat Desertification**<sup>10</sup> (UNCCD) was set up in 1994, as a legally binding international agreement linking environment and development to sustainable land management. The Convention addresses specifically improving the living conditions for people in dry lands, which also include some vulnerable forest areas. This includes maintenance and restoration of land and soil productivity, and to mitigate the effects of drought through a bottom-up approach, encouraging the participation of local people.

The **Indigenous and Tribal Peoples Convention**<sup>11</sup> (No. 169), 1989, of the International Labour Organisation, clearly states that indigenous and tribal peoples shall enjoy the full extent of human rights and fundamental freedoms without obstacles or discrimination. Governments should have the responsibility for taking action, with the participation of the people, action to protect their rights and to guarantee respect for their integrity. The EU cannot ratify ILO conventions because the EU is not a member of the organisation, only Member States can and have ratified such conventions (Denmark in 1996, the Netherlands in 1998, Spain in 2007 and Luxembourg in 2018).

## *EU Agreements*

Deforestation within the European Union is negligible in comparison to the imports necessary for EU consumption. When looking at the “embodied deforestation”, associated with the production of a good, commodity or service, within total final consumption, the EU consumption currently accounts for some 10% of the global embodied deforestation consumption. The EU imports almost 40% of all deforestation-linked crops and livestock products traded between regions and therefore has some responsibility in relation to global deforestation (Cuyper et al 2013). The following are the international agreements created by the Union in order to sustainably manage such dependence.

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<sup>8</sup> [trase.earth](http://trase.earth)

<sup>9</sup> [www.globalforestwatch.org](http://www.globalforestwatch.org)

<sup>10</sup> [www.unccd.int](http://www.unccd.int)

<sup>11</sup> [https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100\\_IL0\\_CODE:C169](https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_IL0_CODE:C169)

### *EU Timber Regulation; Forest Law Enforcement, Governance and Trade (FLEGT)*

The European Union Timber Regulation (EUTR 995/2010), applicable across the EU since 2013, prohibits the placing of illegally harvested timber and derived products on the EU internal market (Article 4(1)). Operators are required to put in place, use and maintain a due diligence system in order to identify and mitigate the risk of such illegal markets (Article 6 (1)). In the context of the EUTR, 'illegally harvested' refers to timber harvested 'in contravention of applicable legislation in the country of harvest', including 'third parties' legal rights concerning use and tenure of land and forest resources (Article 2). More information can be found in the section on EU Legislation (COWI 2018).

In 2005 the European Commission enacted the Forest Law for Enforcement, Governance and Trade (FLEGT 2173/2005) to address the problem of the illegal logging trade. The Law includes a series of guidelines such as Voluntary Partnership Agreements (VPA) with timber producing countries and regions, which include binding commitments, action and a licence scheme for both parties to halt trade in illegal timber. VPAs should also promote better enforcement of forest legislation and an inclusive approach involving civil society and the private sector. One of the main aims of the bilateral agreements is to endorse the necessary reforms within the forestry sectors of wood producing countries, including credible legal and administrative structures and technical systems to make sure that timber is produced in accordance with national laws, and reliable verification systems. Policy reforms are also essential to improve transparency and accountability in governance of forest resources (Hirschberger 2008).

### *EU law to stem the trade in conflict minerals (2017/821)*

Although the EU aims at being (and almost is) self-sufficient in construction minerals and most industrial minerals, it still depends on imports of metals. Between 2000 and 2014, the average import dependency of the EU for metal ores was on average 59 % while for metals such as antimony, vanadium and rare-earth elements dependency reached 100 % (MinPol, 2017).

The new regulations, to take effect in 2021, aim to ensure that EU importers of tin, tungsten, tantalum and gold meet international standards for responsible sourcing (set by the Organisation for Economic Co-operation and Development, OECD). The regulations also target source responsibility for global and EU smelters and refiners, break the link between conflict and the illegal exploitation of minerals, and put an end to the exploitation and abuse of local communities while supporting local development. The regulation requires EU companies in the supply chain to make sure they import these minerals and metals from responsible and conflict-free sources only.

### *Mercosur*

The EU and Mercosur concluded their Agreement in Principle in 2019, twenty years after trade negotiations were first launched. Mercosur is an economic bloc comprising Argentina, Brazil, Paraguay and Uruguay, although



much of the discussion focused on the economic and environmental impact of the preferential trade agreement (PTA) with Brazil, which has been criticized by civil society groups, farmers and politicians around the EU. The controversy lies in the import of Brazilian beef, as a few EU member states believe this would threaten the UNFCCC and the Paris Agreement (Colli 2019). In the Mercosur Agreement, all parties should encourage trade in sustainably harvested timber and ensure the inclusion of local and indigenous communities in the supply chains, as well as sharing information and cooperating on the issue.

### *Others*

In 2018, the recast **Renewable Energy Directive** (2018/2001/EU) took effect, as part of the Clean energy for all European packages, to help the EU meet its commitment towards emission reductions as per the Paris Agreement. Therefore, it is closely aligned with IPCC guidelines and UNFCCC COP decisions. The Directive is part of the EU Renewable Energy regulations and includes measures on transparency, sourcing and sustainability of biomes for energy purposes (please see also the section on EU legislation). The directive requires EU Member States to keep track of the carbon stored in wood and wood products imported to, and exported from, third countries. Although the abilities of the various States to report on such information vary significantly, the legislation assumes an important first step towards regulation, which may help supporting transparency initiatives on trade in timber and related products.

**The New European Consensus Development** is the most recent advance in EU policy for development cooperation. The Consensus provides support to sustainable management of natural resources (including not only forest, but also soils and the ecosystem as a whole), improves governance relating to the tenure of land and forests, promotes co-benefits from sustainable management and enhances integration of sustainability in all cooperation sectors. Another important part of the cooperation policy is the **Financing Instrument for Development Cooperation 2014–2020** (233/2014). The instrument also includes procedures for the protection of biodiversity and forests, including activities for sustainable forest management with the active participation of local communities in eligible developing countries.

The **Common Market Organisation Regulation** (1308/2013) of the EU Common Agricultural Policy brings measures for market intervention and prices for agricultural products on the internal market. This initiative introduces a number of trade barriers through elements such as import tariffs, sector aid schemes and import licences that essentially protect EU production, which also include forest-derived products.

Regulation on the **protection of species of wild fauna and flora**, (EC) No 338/97 amended by (EU) 2017/160, regulates care of the trade of animal and plant species listed in the Appendices to the Convention on International Trade in Endangered Species of Wild Fauna and Flora, as well as species whose conservation status requires trade regulation and monitoring, no matter if from, into or within the Union.

## ■ European Union

The European Union is characterised by containing a high quantity of wildlife, notably rich in endemic plants and animals, and so many different landscapes within a small area. With 27 member countries, the European Union, with its 27 member countries, covers around 4 million square kilometres, an area that has twice the population of Brazil (some 450 million people) despite being half its size. The EU can be divided into nine distinct biogeographic regions (see Figure 1 in the Natura2000 section) based on climate, topography, geology and vegetation: Alpine, Boreal, Mediterranean (one of the top biodiversity hotspots in the world), Atlantic, Continental, Pannonian, Black Sea, Macaronesian and Steppic. Each region includes their particular habitats and species, while influencing each other by cross-migrations.

The EU shows a total forest area (including other wooded lands) of 182 million hectares, which is about 43% of its surface area and steadily increases at a rate of approximately 0.3% per year. In 2015, seven EU Member States, showed more than half of their land area as wooded; Finland and Sweden (75%), Slovenia (63%) and Estonia, Latvia, Spain and Portugal (in the range of 54–56%). Sweden reported the largest wooded area in 2015 (30.5 million hectares), followed by Spain (27.6) and Finland (23.0), while Germany showed 11.4 million hectares<sup>12</sup>. EU Forests cover a huge variety of climatic, geographic, ecological, and socio-economic conditions, ranging from the coastal plains to the Alpine zone, from small family holdings to large estates belonging to vertically integrated companies.

Europe has a long-standing tradition of sustainable forest management (EC 2003), although without human intervention it would have looked completely different today. Ideally between 80% and 90% of the continent should be covered in forest but only a third is actually forested, almost all of this being managed or used for commercial timber extraction. Remaining old-growth and virgin forests are located in remote inaccessible places, far from human presence. Today, almost half of Europe's wildlife is under threat and many of the continent's ecosystems have been degraded or fragmented. Governments responded to this call for action through the EU environmental legislation, which is one of the EU great success stories.

### *EU Legislation*

Although forests cover almost half of Europe (the other half being almost exclusively agricultural land), forests and forestry are not addressed in primary EU primary law. In any case, the EU shows a regulatory framework on forests built on its competences in areas such as agriculture, trade, energy, climate change, and environmental issues. Based on the Treaty on the Functioning of the European Union (TFEU – Treaty of Lisbon), the EU has exclusive competences concerning competition rules that are necessary for the functioning of the internal market and commercial policy, while it shares competences with the Member States on the internal market,

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<sup>12</sup> <https://ec.europa.eu/eurostat/web/main/home> data of 2015

agriculture, environment and energy. The limits of Union competences are governed by the principles of conferral, subsidiarity and proportionality, and therefore the EU has no exclusive competence across a range of issues relating to forests. In any case, a regulatory network has been developed over time covering different forest-focused and forest-related policies, which is in fact an existing European Forest Policy, even if important aspects of forest policies remain in the hands of the Member States (Pülzl et al 2013).

### *Environmental Action Programme (T2.1.)*

Environment action programmes have guided the development of EU environment policy since the early 1970s. The 7th **Environment Action Programme** (1386/2013/EU) guided European environment policy until 2020 by three key objectives: to protect, preserve and enhance the Union's natural capital; to turn the Union into a resource-efficient, green, and competitive low-carbon economy; to safeguard the Union's citizens from environment-related pressures and risks to health and wellbeing. These objectives have been backed by a series of measures towards a better implementation of legislation, better information by improving the knowledge base; higher and wiser investment for environment and climate policy, and a full integration of environmental requirements and considerations into other policies. All under the aims of making the Union's cities more sustainable and help the Union address international environmental and climate challenges more effectively (Medarova-Bergstrom et al 2014).

The **European Green Deal** announced the adoption of a new environment action programme through a Proposal for a Decision of the European Parliament and of the Council regarding a new General Union Environment Action Programme to 2030 (COM (2020) 652 final). It is based on Article 192 (3) TFEU to ensure ownership of this Programme and delivery on its priority objectives by the EU and its Member States. This proposal for a Decision has been developed in line with the Commission proposal for the EU Multiannual Financial Framework 2021-2027 and includes the need for additional resources in the European Environment Agency (EEA) and in the European Chemicals Agency (ECHA) to support the new monitoring, measuring and reporting framework.

### *Habitats and Wild Birds Directives (T1.2.1. and T1.2.2.)*

The Habitats Directive (92/43/EEC) and Wild Birds Directive (2009/147/EC, version of 79/409/EEC) can be considered as the two most successful initiatives produced by the European Union for protecting the environment. The aim of the **Habitats Directive** is "to contribute towards ensuring bio-diversity through the preservation of natural habitats and of wild fauna and flora in the European territory". It also clarifies that "Measures taken pursuant to this Directive shall be designed to maintain or restore, at favourable conservation status, natural habitats and species of wild fauna and flora of Community interest" taking account of economic, social and cultural requirements and regional and local characteristics. In any case, we must mention the cautious but beneficial position of the European Court of Justice in relation to restoration measures (Schoukens & Cliquet 2016). While the **Wild Birds Directive** focuses on the protection, management and control of naturally occurring birds in the wild in Europe and lays down rules for their exploitation. both Directives target the preservation of a number

of species, which are considered endangered, vulnerable, rare or endemic to Europe. For those species (listed in the continuously expanding appendices to both Directives), protection measures forbid deliberate capture, killing, collection or sale, and regulate hunting and fishing, among other practices.

Although there is still work to do and improvements are not only welcome but also needed, it is also undeniable that there are many successful stories, which have been commonly associated with a series of facts (Tucker et al 2019), including, among many others: the political and governmental support of the corresponding Member Country (although also the individuals and organisations implied could greatly contribute) and its own structures of habitat and species protection; the involvement of land owners and similar stakeholders within the protected area or species habitat; the use of broad preservation and conservation measures extending beyond protection, as those related to sustainable management and water and air quality, with special attention to the surrounding environments and considering long term objectives; access to funding, whether national or through initiatives as the LIFE + programme; support through research and monitoring.

Apart from that, both directives contributed to the setting up of the **Natura 2000 network**, which has radically contributed to environmental conservation in Europe (Figure 1). Both Directives require that the key habitats of those species of interest to the Community be safeguarded by including them in the European network of protected sites, i.e. the Natura 2000 network (Sundseth 2008). This means that every EU Member State should propose sites (for endangered species or because these are characteristic, rare or in a habitat vulnerable *per se*) and, once protected, should secure their long-term protection and management. The Natura 2000 network contains more than 25,000 sites, covering approximately a fifth of the European Union territory. Inclusion in the network implies a series of economic benefits that are directed to conservation measures but also the gathering of information and monitoring. Thanks to the Habitats Directive the knowledge of European species and habitats has been enhanced evolved drastically from the 90s, favouring their effective preservation.

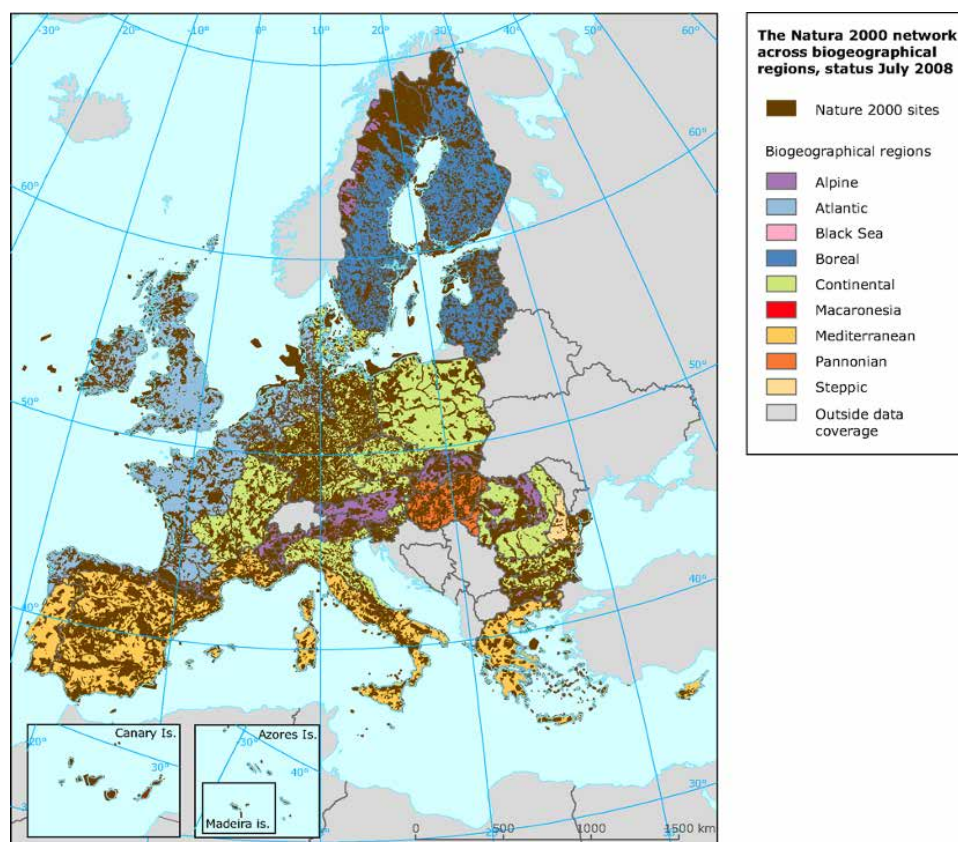


Figure 1: The Natura 2000 network across biogeographical regions, status as at July 2008. European Environment Agency (EEA)

### *EU Forest Strategy (T2.2.)*

At EU level, there is no legislative regulation regarding forests. In fact, the TFEU does not consider forests as a competence of the Union (although this has been challenged via article 191 on natural resources), being subject to the principle of subsidiarity (article 5(2) of the TFEU) and therefore under the competence of EU Member States. However, the EU is involved in forest-related policies through a range of regulatory frameworks based on its shared and exclusive competences in other sectors. As a result, the main EU binding initiative to perform forestry measures is the **Common Agricultural Policy** (CAP) through the funding source of the European Agricultural Fund for Rural Development. Moreover, as stated in the EU Forest Strategy, the Commission considers that these funds should be used to promote sustainable forest management by improving competitiveness, promoting the diversification of economic activity and quality of life, and deliver specific environmental public goods. It is predicted that under the reformed CAP post 2020, Member States will be able to encourage forest managers to perform sustainable forest management through their national strategic plans.



The **EU Forest Strategy** is a non-legislative initiative, and the newest one is expected to be prepared by the Commission for the first quarter of 2020 (COM (2018) 811 final). The first EU Forestry Strategy was adopted back in 1998 (1999/C 56/01) with the main objectives of applying sustainable forest management and considering the multifunctional role of forests. The Strategy was reviewed in 2005, and the Commission presented an EU Forest Action Plan in 2006 (COM (2006) 302 final), which emphasises the important role played by forest owners in the sustainable management of forests and it is based on national forestry programmes, on the increasing importance of global and cross-sectorial issues in forest policy, on the need to enhance the competitiveness of the sector and the governance of forests, and on respect for the principle of subsidiarity. A new EU Forest Strategy for forests and the forest-based sector was taken up in 2013 and an multi-annual implementation plan was adopted in 2015. The strategy sets two key objectives under three dimensions of sustainable development: ensuring that all forests in the EU are managed according to principles of Sustainable Forest Management and strengthening the EU's contribution to promotion of SFM and reduction of deforestation at a global level.

To date, the Strategy has supported and guided a series of activities by the Commission, Member States, public and private stakeholders. Among them: Forestry measures combined with other rural development measures to address specific regional needs, such as advisory services, training, investments and cooperation; fostering of competitiveness and sustainability of forest-based Industries, bioenergy and other related green economy activities; promotion, within national policy frameworks; reduction of emissions; sequestration of CO<sub>2</sub> and building forest resilience. Assurance of the provision of ecosystem services, including biodiversity. Strengthening of the knowledge base and provide a research and innovation agenda able to address the challenges ahead that the forests and the forest-based sector face, as the sector's sustainability and the development of innovative products and processes (through the different EC programmes as the Green Deal, Horizon 2020, EIP-Raw Materials, EIP-AGRI and SCAR). Reinforcement of governance and communication, in particular through the Standing Forestry Committee (SFC), the Civil Dialogue Group on Forestry and Cork (CDG-FC), and **FOREST EUROPE** (the former Ministerial Conference on the Protection of Forests in Europe is a voluntary political process of political commitments, including a definition of SFM in the pan-European context, and criteria and indicators for the State of Europe's Forests Report). Adoption of a common position to promote SFM international forest-related initiatives (e.g. UNFF, FAO, ITTO, the UN Convention on Biological Diversity and the Sustainable Development Goals). The EU FLEGT Action Plan is a relevant, innovative response to the challenge of illegal logging and its implementation has significantly improved forest governance in partner countries.

Under this knowledge, it is challenging to assume the need to develop a more coherent Community approach to forest protection. The Strategy still does not address many policy instruments that affect the whole forest value chain, resulting in significant costs for the forest-based industry (Aggestam & Pölzl 2018). The situation of forest and related sectors has changed a lot since the first forest strategy, three decades ago. Forest markets, forestry and forest-based industries have developed, adapting to adapt to European standards while European forests were inserted in a changing socio-economic and ecological international context of developments, challenges and problems (mainly economic globalisation and climate change loss of biodiversity and related

global policies). Moreover, European Community policies and directives in the environmental and resource policy fields have also progressed. Within this framework, the lack of regulation in the field of forest protection, one of the few major resources/fields for environmental policy, is challenging. In fact, this cannot be explained by comparison to other resources enclosed by well-developed policy frameworks such as water systems or agricultural land (Winkel et al 2009).

### *Common Agricultural Policy (T1.2.1.)*

Launched in 1962, the EU **Common Agricultural Policy** (CAP) is a partnership between agriculture and society, and between Europe and its farmers for all EU countries. Managed and funded at European level from the resources of the EU budget, it aims to support farmers and improve agricultural productivity, safeguard European Union farmers to make a reasonable living, help tackle climate change and the sustainable management of natural resources, maintain rural areas and landscapes across the EU, keep the rural economy alive by promoting jobs in farming, agri-foods industries and associated sectors. The legal basis for the common agricultural policy is established in the TFEU while EU regulations 1307/2013, 1308/2013, 1305/2013 and 1306/2013, respectively rule for direct payments to farmers, provide a common organisation of the markets in agricultural products, support rural development, and rule financing, management and monitoring of the common agricultural policy. The CAP is managed by the European Commission's department for agriculture and rural development by adopting, delegating and implementing acts. The CAP foresees the creation of market orders for the agricultural goods (although no forest products have been integrated into the CAP except for cork), authorising interventions to ensure minimum prices. The 1992 reform reduced guaranteed prices but compensated farmers through area-based direct payments linked to production. The 2003 reform brought further price reductions and higher direct payments linked to newly established rules of good sustainable practices. The 2013 reform extended the area-based payments but included environmental requirements such as maintenance of permanent grassland, crop diversification on arable land and setting aside of areas for ecological use amounting to 5% of the titled land. To broaden the public appeal of the CAP, various rural development measures have been in place since 1999. Among them, the LEADER programme to support cooperation for innovation in rural areas and the European Innovation Partnership on Agricultural Productivity and Sustainability.

### *EU Timber Regulation (T1.1.1.)*

The **EU Timber Regulation** (EUTR 995/2010; see also the section on International Agreements) applies not only to imported, but also to domestically produce timber and timber products. The Regulation covers solid wood products, flooring, plywood, pulp and paper. The EUTR counters the trade in illegally harvested timber and timber products by prohibiting its placing on the EU market, requiring EU traders to exercise 'due diligence' (the operator must have access to information describing the timber and timber products, including country, species, supplier and legislation compliance, assess the risk of there being illegal timber in his supply chain, and require further information and verification if necessary). Once on the market, operators are required to keep records of their suppliers and customers to facilitate the traceability of timber products.

### *Environmental Crime Directive (T1.1.2.)*

The **Protection of the Environment Through Criminal law Directive** (2008/99/EC) main objective is to indicate to the Member States the kind of illegal activities that should lead to criminal penalties as according to their national laws, considering an environmental crime as being any criminal act committed against the environment and cause significant harm (or risk thereof) harm to the environment, human health, or both. Member States have the right to decide how to incorporate the Directive in their criminal law and to establish the effective, proportionate and dissuasive sanctions, including administrative fines, if necessary. In the last 10 years, the sanctions administered by the Member States have been open to varying interpretations, even more considering the limited knowledge about how judges apply this condition in practice (Wates 2020).

For the appropriate detection, investigation and prosecution of environmental crime, it is necessary for Member States to allocate more resources to the different enforcement bodies in charge of investigations, to include illegal extractive activities whether or not it affects protected areas or species, and to bring an end to the impunity of criminals and the perceived complicity of some public authorities in the occurrence of environmental crimes (Wates 2020). As an example related to deforestation, illegal logging in Romania is a systemic problem due to inadequate enforcement measures, where even foresters and activists have been attacked and killed. The case is explained in greater detail in the “Exemplary legal cases” section and the subsection about the Aarhus Convention.

### *Environmental Liability Directive (T1.1.2. and T1.6.1.)*

The polluter-pays principle of the **Environmental Liability with Regard to the Prevention and Remedying of Environmental Damage Directive** (2004/35/CE) is essentially based on the fact that a company causing environmental damage (i.e. affects the ecological, chemical or quantitative status of water resources, as defined in the EU Water Framework and the Marine Environment Strategy Directives, including the discharge of pollutants into the air and any deliberate release into the environment of genetically modified organisms, as defined by Directive 2001/18/EC; damage to land creating a significant risk to human health; damage to protected species and natural habitats that adversely affects preservation as defined in the Birds and Natural Habitats Directives) is liable for it and must take the necessary preventive measures (if there is an imminent threat of damage occurring, the company must, take the necessary measures without delay) or remedial action (if damage has already occurred the company must immediately inform the authorities and take steps to manage the situation to prevent further damage and threats, and take appropriate action) and bear all the related costs. Some exceptions are included, such as the damages related to armed conflict, natural disasters or those covered by other treaties and directives, or when the damage was caused by a third party, despite the appropriate safety measures having been taken, or which resulted from compliance with an official instruction.

The Liability Directive specifies that, as environmental protection is a diffuse interest on behalf of which individuals are not likely to act, environmental NGOs should be given the opportunity to properly contribute to the effective implementation of this Directive.

### *Strategic Environmental and Impact Assessment Directives (T1.1.3.)*

The **Environmental Impact Assessment Directive** (2014/52/EU) has been in force since 1985 and applies to a wide range of defined public and private projects, which are listed in Appendices I (all projects considered as having significant effects on the environment and EIA is mandatory) and II (national authorities have to decide whether an EIA is needed by a “screening procedure”, which determines the effects of projects on the basis of thresholds/ criteria or a case by case examination). The EIA procedure starts with the scoping stage, then the developer must provide information on the environmental impact for environmental authorities and public consultation, and finally the competent authority decides (the public is informed of the decision afterwards and can challenge the decision before the Courts). The newly amended EIA Directive entered into force in 2014 to simplify the rules for assessing the potential effects of projects on the environment. It is in line with the drive towards smarter regulation to reduce the administrative burden. It also improves the level of environmental protection through more sound, predictable and sustainable in long-term decisions on public and private investments. The **Strategic Environmental Assessment Directive** (2001/42/EC) transposes the Protocol on Strategic Environmental Assessment to the Convention on Environmental Impact Assessment in a Transboundary Context (SEA Protocol, Kyiv 2003), ratified by the EU on 21 November 2008, in the legislation. The SEA Directive applies to a wide range of public plans and programmes although does not refer to policies. It does not have a list of plans/programmes similar to the EIA, and thus these plans must be prepared or adopted by an authority (at national, regional or local level) and be required by legislative, regulatory or administrative provisions. SEA is mandatory for plans/programmes which are prepared for agriculture, forestry, fisheries, energy, industry, transport, waste/ water management, telecommunications, tourism, town & country planning or land use and which set the framework for future development consent of projects listed in the EIA Directive, or have been determined to require an assessment under the Habitats Directive.

### *EIP-AGRI (T2.4.)*

The **European Innovation Partnership on Agricultural Productivity and Sustainability** (EIP-AGRI) objective is to foster competitive and sustainable farming and forestry. A series of EIP-AGRI Operational Groups and initiatives are exploring new solutions to cope with forestry challenges, such as the use of digital tools to map forest resources for SFM, improving value chains, developing management practices for multifunctional forests, and setting up networks to exchange knowledge. The following EIP-AGRI Focus Groups related to forests are already developed: “Sustainable mobilisation of forest biomes”, “New forest practices and tools for adaptation and mitigation of climate change”, and “Agroforestry: introducing wooded vegetation into specialised crop and livestock systems”. EIP-AGRI has also organised the workshop “New value chains from multifunctional forests” (EIP-AGRI 2019).

### *LIFE (T2.4. and T2.5.)*

The **LIFE programme** (1293/2013) was created in 1992 as the financial instrument focused on the EU environment, as well as (after 2011 regulation) for climate action. It is designed to facilitate the implementation, updating and development of EU environmental policy and legislation, including forest protection, monitoring and forest fire prevention. Although it is a comparatively small EU financing programme, The LIFE programme makes a big difference to the EU environmental resources. It has supported more than 1,700 projects for nature and biodiversity, helping the Birds Directive and Habitats Directives and the derived Natura 2000 network of protected areas (Silva et al 2018). The LIFE programme has also supported forestry actions as adaptation to climate change (among 86 projects to date), including related research, adaptive management, monitoring, indicators of resilience and the development of new legislative standards to sustain forest ecosystems (Fetsis et al 2019). The new LIFE programme for 2021-2027 was proposed in 2018 including a 60% budget increase, with the aim to contribute to speed the shift towards a clean, circular, energy-efficient, low-carbon and climate-resilient EU economy, and to halt and reverse biodiversity loss through sustainable development (Silva et al 2018).

### *Interreg (T2.4. and T2.5.)*

The **European Territorial Cooperation Regulation** (Interreg 1303/2013) provides a framework for the implementation of joint actions and policy exchanges between national, regional and local players from different Member States since 1990. As part of the EU Cohesion policy investments, it provides EU funds through investment priorities laid down by the European Regional Development Fund Regulation. The last Interreg (V 2014–2020) focuses on the delivery of the Europe 2020 strategy for smart, sustainable and inclusive growth. Among the investment priorities, No. 6 is dedicated entirely to preservation and protection of the environment and promoting resource efficiency through areas on waste, water, natural, cultural heritage, urban, technology, industrial transition and, especially, protecting and restoring biodiversity and soil and promoting ecosystem services, including through Natura 2000, and green infrastructure (Sundseth et al 2020).

### *EU Biodiversity Strategy (T2.1.)*

The **EU Biodiversity Strategy** (COM (2020) 380) is a response to the fact that most of Europe's biodiversity and natural environment lies outside protected areas. EU biodiversity policy has thus adopted a more integrated approach addressing the whole territory and all relevant drivers, pressures and impacts from other policies, programmes, plans and projects. The main objective of the strategy is to halt the loss of biodiversity and the degradation of ecosystem services in the EU, and restore them in so far as feasible, while stepping up the EU contribution to averting global biodiversity losses. As many of the pressures reducing biodiversity are affected by financial support and capital investments, the effective integration of biodiversity concerns into sectorial funding policies is also a concerning challenge. The Common Agriculture Policy (CAP) and the Cohesion Policy account for up to 80 per cent of EU budget expenditure and therefore have the potential for a major impact on Europe's natural environment. The main elements of the Strategy for 2030 are establishment of a larger EU-wide network

of protected areas, building upon existing Natura 2000 areas; an EU Nature Restoration Plan with concrete commitments and actions to restore degraded ecosystems and manage them sustainably; a new strengthened governance framework to ensure better implementation and track progress, improving knowledge, financing and investments, and finally, a series of measures to tackle the global biodiversity challenge, working towards the successful adoption of an ambitious global biodiversity framework under the Convention on Biological Diversity (Rayment et al 2018).

The mentioned **EU Nature Restoration Plan** has been drawn up to reverse biodiversity loss, strengthen the EU legal framework for restoration of environmental resources, and to put forward a proposal for legally binding EU nature restoration targets in 2021. This new legal instrument as proposed in the EU Biodiversity Strategy for 2030 has the challenge to cover both a broad range of ecosystems and at the same time be specific, concrete and implementable.

### *Climate Action (T1.2.3.)*

The **Energy Union and Climate Action** (2018/1999/EU) stipulates, under the Regulation on Governance, that EU countries are required to draft national energy and climate plans (NECPs) for 2021-2030, including how they will meet the new 2030 targets for renewable energy and for energy efficiency. In December 2018, the recast **Renewable Energy Directive** (2018/2001/EU) took effect, as part of the Clean Energy for All Europeans package, helping the EU meet its emissions reduction commitments under the Paris Agreement (more information can be found in the International Agreements section). The Directive establishes a common framework for the use of energy from renewable sources in order to limit greenhouse gas emissions. Among other points, countries have agreed on a binding 2030 renewable energy target for the EU of at least 32% of final energy consumption, with a clause for a possible upward review by 2023. This climate and energy legislation may require changes to land use patterns and forest composition to satisfy the demand for wooded biomes.

### *INSPIRE Directive (T1.3.2.)*

The **Infrastructure for Spatial Information in Europe Directive** (INSPIRE; 2007/2/EC) aims to create an EU spatial data infrastructure for the purposes of EU environmental policies, and policies or activities which may have an impact on the environment. By means of measures addressing the exchange, sharing, access and use of interoperable spatial data and spatial data services across different levels of public authority and sectors, INSPIRE is thought to solve problems regarding the availability, quality, organisation, accessibility and sharing of spatial information. It should be based on infrastructures created by the Member States, which are made compatible and usable in a Community and transboundary context with common implementation rules and supplemented with measures at Community level.

### *Copernicus Programme (T2.3.)*

The European Union launched the **Copernicus Earth Observation Programme** to offer openly accessible and free-of-charge unique satellite information data on changes to land use and forest cover, among many others (its Climate Change Service being particularly important). Such data can be later combined with ground-based, airborne and seaborne measurement systems. Copernicus is coordinated and managed by the EC, and was implemented in partnership with Member States, the European Space Agency (ESA), the European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT), the European Centre for Medium-Range Weather Forecasts (ECMWF), EU Agencies and Mercator Océan. Satellite and remote sensing data of the Copernicus programme enable more in-depth understanding of how climate change is affecting forests, while decision-support systems allow rapid classification of forest vegetation into fuel types for prevention of forest fires. Together with the EU INSPIRE Directive, the aim is to standardise environmental and geographical data, so projects working at forest level will be able to build on these data sets and adapt them to more local circumstances.

### *Climate-ADAPT (T2.3.)*

The **European Climate Adaptation Platform** (Climate-ADAPT) supports EU adaptation to climate change by helping users to access and share data and information on expected climate change, current and future vulnerability of regions and sectors, and adaptation strategies, actions, case studies, potential options, and planning tools. Climate-ADAPT is a partnership between the EC and the European Environment Agency (EEA) with the support of the European Topic Centre on Climate Change Impacts, Vulnerability and Adaptation (ETC/CCA). It also provides information on EU policies for specific socio-economic sectors, including forestry, with links to key resources.

### *Action Plan for Nature, People and the Economy (T2.5.)*

The new **Action Plan for Nature, People and the Economy** (COM (2017) 198) was launched to rapidly improve the practical implementation of the Habitats and Birds Directives and accelerate progress towards the EU 2020 goal of halting and reversing the loss of biodiversity and ecosystem services. The so-called Nature Directives need to substantially improve their limited resources, weak enforcement, poor integration of objectives into other policy areas, insufficient knowledge and access to data, and poor communication and stakeholder involvement, to achieve their objectives and full potential. The Action covers four priority areas to solve these implementation limitations of the Nature Directives.

### *Rural Development Programmes (T2.5.)*

The **Rural Development Programmes** (EU Regulation 1303/2013), co-financed by the Member States, include voluntary measures targeted at promoting sustainable growth and inclusion at a regional scale. These incorporate procedures for environmental protection, sustainability, viability and production improvements for forest landowners, including restoration of production after natural disasters and payments to areas facing natural constraints (Clement & Froemberg 2007).

### *Raw Materials Initiative (T1.4.1.)*

Launched in 2008, the RMI (COM (2008) 699 final) seeks to reduce EU dependence on imports of metals by investing in improvement of import conditions (fair and sustainable supply of raw materials from global markets), domestic conditions for mining (sustainable supply of raw materials within the EU) and increasing the resource efficiency (resource efficiency and supply of “secondary raw materials” through recycling). Apart from the trade policies revised in section “EU Agreements”, the EU also supports internally sustainable domestic extraction by collaborating with Member States to improve the framework conditions for the mineral industry. However, mining and mineral policy are the responsibilities of the Member States and their approaches differ, from up-to-date, green and efficient ones taking into account sustainability and RMI targets to less developed ones with regulatory frameworks showing time-consuming and complex processes with quite unpredictable outcomes.

### *Framework Convention for the Protection of National Minorities (T1.5.1.)*

The **Council of Europe Framework Convention for the Protection of National Minorities - FCNM** (CoE 1995) sets out principles and goals to ensure the protection of national minorities by the States. They have to promote the equality of people belonging to minorities in all areas of economic, social, political, public and cultural life together with conditions that will allow them to express, preserve and develop their culture, religion, language and traditions. The Convention also provides guidelines to ensure minorities’ freedom of assembly, association, expression, thought, conscience, and religion, as well as their access to and use of media, linguistic freedom and education rights.

However, ancestral land rights, which have been incorporated into international human rights law, have not yet been included within the regime of the European Convention. The decolonisation of indigenous property is an essential step towards the necessary respect for legal cultures, especially for some Member States (Otis & Laurent 2013).

Other important Council of Europe documents in this field are The European Convention on Human Rights, The European Social Charter, The European Charter for Regional or Minority Languages, and the European Commission against Racism and Intolerance.

### *Aarhus Convention (T1.5.2. and T1.6.1.)*

Members of the public have a right, under the **Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters** (Aarhus Convention), to access justice and to be able to exercise this right safely, without any harassment or exposure to repercussions or retribution. The Convention explicitly clarifies that environmental NGOs are understood as having an interest in administrative decisions concerning the environment and thus are included in this right, as supported by case-law of the CJEU. However, the application of this rule varies across Member States (EEB 2018). In fact, a recent report found that harassment is growing across several Member States and much harassment goes unpunished and unsolved



(Smith 2019). A case that will be mentioned later in this report is the one in Romania; two wood-processing plants brought civil lawsuits against an environmental NGO for the reimbursement of lawyers' expenditures due to suits brought against them by the NGO (moreover, the companies also harassed and blackmailed the NGO after the lawsuits and offered to negotiate were they to give up). Fortunately, the Aarhus Convention allows NGOs to file suits without being held accountable for any damages caused by using this right.

It is the Member States' duty to ensure that access to justice is granted in their courts, providing sufficient legal backing to NGOs and individuals, in matters of environmental law covered by EU rules (Müller 2011). A recent EC communication on improving access to justice in environmental matters (COM (2020) 643 final) prioritises the review by the States of their own national legislative and regulatory provisions for the purpose of removing any barriers to access to justice (such as restrictions on legal standing or disproportionate costs) that prevent environmental NGOs or individuals directly affected by a breach of EU environmental law resulting from the actions or omissions of public authorities. It also emphasizes the obligation of national courts to guarantee the right of individuals and NGOs to an effective remedy under EU law.

The **Committee on Petitions of the European Parliament** helps citizens to lodge a petition directly to the EP about the application of Union law based on their right to do so (Article 227 TFEU). Citizens can contact the European Commission about any measure (law, regulation or administrative action), lack of measures or practice by authorities in an EU country (the EC cannot follow up matters that only involve private individuals or bodies) that could be against Union law. Moreover, the **Europe Advice** service provides expertise in Union law quickly and informally, and the **European Ombudsman** (Articles 24 and 228 TFEU) could offer support if the accuser considers that the EC has not dealt with the request properly. In the end, the process comprises an interesting feedback where the EC can bring infringement procedures through the CJEU to a Member State failing to fulfil its obligations under EU law, while the public bring these States to EC attention through its system for receiving complaints, fulfilling the role of the administrative apparatus to detect these failures (Eliantonio 2018).

We must also mention the **Public access to environmental information Directive** (2003/4/EC), in order to guarantee the right of access to environmental information held by or for public authorities and to set out the basic terms and conditions of, and practical arrangements for its exercise. Environmental information should be made progressively available and disseminated in order to reach out as much as possible.

### *Others*

The previous policies in the form of strategies, frameworks and directives, are supported and complemented by many instruments with a considerable importance and particular interest.

The **European Green Deal** (COM (2019) 640) sets out an ambitious plan to make the EU's economy sustainable by turning climate and environmental challenges into opportunities and making the transition fair and inclusive for all. The Deal is related to forests as it aims to increase forest sink, biodiversity protection, and afforestation and restoration of forests. The Green Deal has a strong potential for changing forest sectors in Member States,

but gives little consideration to the potential of forests in circular bioeconomy and rural development, and the potential of ecosystem services and multifunctional forestry. Therefore, Member States and forest sector stakeholders should make the Green Deal a tool to address the challenges society faces in the transition to climate neutrality by the support that the forest-based sector can provide.

The **Thematic Strategy for Soil Protection** consists of: a Communication from the Commission to the other European Institutions (COM (2006) 231), which sets the overall objective of the Strategy and explains what kind of measures must be taken during the ten-year work programme; a proposal for a framework Directive (COM (2006) 232) to provide common principles for protecting soils across the EU Member States; and an Impact Assessment containing an analysis of the potential economic, social and environmental impact. Within the framework of the directive, the Member States will draw up plans to address threats such as erosion, organic matter decline, compaction, salinisation and landslides, where a national or regional approach is more appropriate, using their own existing monitoring schemes and improve them if necessary. Their programmes may build on measures already implemented, such as rural development under the Common Agricultural policy, national forest programmes, sustainable forestry and practices for prevention of forest fires (EC 2006a).

The **Regulation on Invasive Alien Species** (1143/2014) came into force in 2015 in order to provide a policy framework to implement Target 5 of the EU 2020 Biodiversity Strategy, on the need to implement the measures required to control and eradicate invasive alien species (IAS) across the EU. Member States should deliver action plans to address IAS introduction, surveillance and eradication. The Regulation also calls for coordinated action across the EU to tackle already established IAS.

The EU **Water Framework Directive** (2000/60/EC) was adopted on 23 October 2000 to get polluted waters clean again, and ensure clean waters are kept clean. The need for a single piece of framework legislation to solve water policy fragmentation problems forced the Commission to present the Directive with the key aims of expanding the scope to all surface and ground waters, achieving “good status” for all waters by a set deadline, water management based on river basins, a “combined approach” of emission limit values and quality standards, getting the prices right, getting the citizen involved more closely and streamlining legislation. Although the Water Directive only explicitly mentions forests in the Appendix, both water quality and quantity can be considerably affected by forest management practices in those areas dominated by forests. Therefore, the forest sector has the coordinating role for ensuring water protection within forestry.

The **Flood Directive** (2007/60/EC) was created to require Member States to carry out assessment and management of flood risks, mapping of flood extent and humans at risk in these areas, and the provisioning of the adequate and coordinated measures to reduce this flood risk.

The **Nitrates Directive** (91/676/EEC), as an integral part of the WFD, is one of the key instruments in the protection of waters against nitrates from agricultural sources polluting ground and surface waters, and by promoting the use of best farming practices. Regulation of such agricultural pressures is thus beneficial to forested ecosystems.

The New **Air Quality Directive** (2008/50/EC) was adopted on 2008 to lay down measures aimed at: defining and establishing objectives for air quality to avoid harmful effects on human health and the environment; assessing air quality in Member States, with the use of common methods and criteria; obtaining information to help fight air pollution and monitor long-term trends and make such information available to the public; maintaining and improving air quality, also by promoting increased cooperation between the Member States. Member States shall make annual reports for all pollutants covered by this Directive available to the public. This may include further information and assessments on forest protection.

The **Protected Forests from Atmospheric Pollution Regulation** (804/2002) was established over three decades ago but has been reinforced by subsequent work, the last of it being in 2002. The main objective is to protect forests against atmospheric pollution in order to provide increased protection for forests in the Community and thereby contribute in particular to safeguarding the productive potential of agriculture. By 1996 over 450 projects were established, mainly concerned with monitoring air pollution effects on forest ecosystems.

The mission of the **Plant Health Policy** (2016/2031) is that of protecting the safety of food derived from plants, mainly by preventing the introduction and spread of organisms harmful to plants or plant products within the EU, and by regulating the trade of plants and plant products in accordance with international standards and regulations. The EU plant health policy indirectly affects the forest sector, as a package concerned with animal and plant health and regulation for seed and plant propagating material includes legislation on forest reproductive material.

### *Example countries legislation*

Member States of the EU, as explained, display their own policies, institutions and instruments for forest management under the sustainability-oriented guidelines and recommendations of the Commission. A relatively recent report analysing the countries inside the Pan-European FOREST EUROPE agreement shows interesting patterns of national legislation (Rametsteiner 2015). All countries have a national forest programme (NFP) or similar and related forest policies in place, while they have significantly strengthened their mechanisms for participatory policy development. Almost two-thirds of reporting countries stated that significant changes were made in their institutional frameworks, such as merging previously separate bodies with forest competencies, integrating them into other existing bodies or establishing forest structures to private forest owners. Around two-thirds of these countries changed their financial instruments and economic policy to a stable financial support for sustainable forest management. Moreover, around two-thirds of the countries include communication strategies, improved public participation and consultation, and the integration of communication as part of an NFP or similar policy process.

Both Spain and Germany are part of the European Union, and in 2007 signed the former commitments of the Ministerial Conference on the Protection of Forests in Europe. While the main forests of Spain are Mediterranean,

Germany is a clearly continental country with temperate forests (see Figure 1). More interestingly, the two countries show clear differences in their intensity of forest harvesting, clearly higher in Germany (Levers et al 2014). These socio-ecogeographical differences are accompanied by different historical and cultural characteristics that result in two distinct but related examples of how Member States apply the European guidelines related to forest policy.

### Spain

Spain shows around 27.7 million ha of woodland, which represents 56% of total land area. Of the 18 million ha of forested land (the rest is considered other wooded areas, like shrubs or similar), approximately 90% is considered semi-natural (10% are plantations, namely of *Eucalyptus* spp.). The Mediterranean broadleaved forest, *dehesa*<sup>13</sup> landscape and conifer forests occupy approximately 58.7% of the natural land area in the south-central part of the Iberian Peninsula, while the Atlantic forest, mixed formations of beech, oak, chestnut, birch, etc., covers around 12% (FSC 2015). Two thirds of Spanish forests are private. Moreover, only a very small proportion of the remaining third is owned by the state, the rest best owned by local public corporations).

Forest policy in Spain is managed within different jurisdictional levels. Management and legislation are shared between State Laws, which include land tenure, tax payment, transports and general regulations of forest management, and Autonomous Communities, with most responsibility for the protection, management and harvesting of forests in their territory, including the specific technical constraints, diameters, species, etc. For example, wood harvesting is regulated by the forest agency of each Community, which authorises and supervises harvesting in accordance with applicable legislation. In any case, the general Countryside Law ("*Ley de Montes*") establishes the need for both public and private forests to have a Management Instrument (e.g. Forest Management Plan) to be provided by the forest owner and approved by the regional forest agency. Inducing private owners to assume forest management planning is a challenge to policymakers in Spain but it is essential to include them in the process in order to understand the factors that determine their decisions as key actors in Spanish forest management.

The main problems that Spanish forest policy has to face are fragmentation of ownership and the lack of strong markets for most forest products. On the one hand, smallholding characterises private forests, together with a rather undefined legal status. On the other hand, public policies supporting owner's income through subsidies have shown clear limits. There are also pressing issues such as the abandonment of rural areas and the consequent disappearance of forest traditions, the lack of investments in innovation, and the misunderstanding and thus poor societal valuation of the forest sector and many local forest products. In any case, the fact that Forest Plans encourage the participation of stakeholders in the planning and implementation processes would help to reach viable and long-lasting solutions in Spanish forest management (Živojinović et al. 2015).

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<sup>13</sup> Wikipedia defines *dehesa* as 'a multifunctional, agrosilvopastoral system (a type of agroforestry) and cultural landscape of southern and central Spain and southern Portugal'

### Countryside Law (T1.1.1. and T1.3.1.)

The objective of the **Countryside Law** (“*Ley de Montes*” in Spanish; 43/2003), also called Forest Act, is to ensure the preservation of Spanish forest lands, as well as to promote their restoration, improvement and rational use. It is based on principles of sustainable forest management, including multifunctionality, integration of forest planning in territorial management, territorial cohesion, rural development, preservation of biodiversity, integration into international environmental objectives, administration cooperation and stakeholder inclusion in decision-making. The Law dictates that Autonomous Communities as responsible and pertinent regarding forestry issues, as well as stating that forest owners are in charge of the technical and material management of forests.

The Countryside Law includes the creation of **Forestry Resources Management Plans** (“*Planes de Ordenación de los Recursos Forestales*” or PORF) as forestry planning tools affecting a forestry territory with similar geographical, socio-economic, ecologic or cultural characteristics. In consequence, the Forestry Plan should promote the Autonomous Communities’ preparation, updating and implementation of PORF in public and private forested areas, by qualified technicians and under the sustainable forestry management principles. All plans must be publicly reviewed by the competent authority and approved.

Almost all Autonomous Communities have developed consistent regulations for the management of forested areas, although there are large regional differences in the application of and compliance with this requirement. For example, only 29% of the 77% of forest area that is privately owned in Catalonia is covered by adequate forest management plans, while in Andalusia (74% private) it is even less at 15%, and in Galicia almost 10% (of the 98% private forests) (FSC 2015). Despite these examples, the risk of illegal harvesting of wood is low thanks to Chapter IV of the Countryside Law, requiring administrative authorisation prior to harvesting where no forest management plan has been approved.

The Countryside Law also enforces the drawing up of a **National Forest Inventory** on a regular basis (every 10 years) all over the national territory. It includes information in the form of tables, maps and accessible numerical and cartographical databases, about situation, land property and protection figures, legal status, evolution and production capacity of all kinds of forestry goods.

Finally, Spain is also an affiliate of the **FLEGT** through the Countryside Law (21/2015), Articles 67, 68, 69 and 74. The maximum penalty for prohibition, due diligence, and traceability in Spain is EUR 1,000,000 unless the value of the commercialised timber, or twice the cost of reparation of the damage caused, surpasses this (EC 2020).

### Autonomous Communities Legislation<sup>14</sup> (T1.3.1.)

Forestry Plans at regional level are different among them due to the lack of an authoritative national framework. Moreover, while the regional environmental authority is responsible for these Plans, the regional civil engineering authority is responsible for the land planning programmes, creating a coordination handicap between both policy processes (Montiel & Galiana 2005). In any case, with a few exceptions, they include priority actions, quantification and planning of resources, and temporal and spatial organisation. In most cases, they respond to nature and forest biodiversity protection, forestry defence, natural environment improvement and restoration, sustainable management and a series of transversal objectives, such as coordination, administrative management, information, research, education, etc. Higher differences are related to the organisms and institutions in charge of these Plans, from Agricultural to Environment, even including Tourism Administrations. Legal proceedings are also variable, from non-existent to those related to territorial planning. In such cases, taxonomic problems arise, affecting the administration of justice. In relation to funding and grouping all autonomous plans, 30% of budget expenses go to maintenance and improvement, almost 30% to restoration, 15% to preventive defence, 15 % to horizontal measures and 10% to protection of habitats and species.

### Spanish Forestry Strategy and Plan (T2.2, T 2.4. and T2.5.)

The Spanish Forestry Plan ("*Plan Forestal Español*") is a direct consequence of the Forestry Strategy approved by the Sectorial Conference in 1999. This Strategy requires that the National General Administration define a common forestry policy to facilitate the implementation of national ecological, economic and social objectives to follow international obligations and establish the institutional mechanism to guarantee the necessary interregional coordination. In fact, the Plan follows the Autonomous Communities strategies and plans and their respective competences on forest management. The Forestry Plan then aims to establish general objectives and basic guidelines to guarantee the international agreements assumed by the Spanish Government. It is based on the principles of sustainable development, multifunctionality of forested areas, and contribution to territorial and ecological cohesion. It also promotes public and social participation in policy-making, strategies and programmes, supporting societal co-responsibility in forested areas conservation and management.

It is divided into a series of priority areas grouped in territorial (restoration and increase of forest cover, sustainable forest management, countryside and forest public heritage defence and biodiversity conservation and forestry resources sustainable use), socioeconomic and cultural (forestry products industry promotion, forestry culture and forestry information and research), and institutional actions (coordination instruments and external forestry policy).

A **Socio-economic Stimulus Plan for the Forestry Sector** was published and implemented in 2014, promoting and connecting the economic and job creation opportunities offered by the sector. Thanks to the European Agricultural Fund for Rural Development and the Rural Development Programmes, around 2 billion euros were allocated to forestry measures, being allocated by the regional governments.

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<sup>14</sup> Leyes 6/1988 & 7/1999, 13/1990 & Decreto Foral 59/1992, 2/1992, 3/93 & Decreto 98/1995, Normas Forales 3/1994 & 7/2006 & 11/2007, 2/1995 & Decreto 114/2003, 16/1995, 3/2004 & 6/2010, 15/2006, 3/2008, 3/2009, and 7/2012.

### National Parks Network (T1.2.2.)

Several international agreements have contributed to the protection instruments for the natural environment in Spain. On the one hand the Protected Natural Areas by the Natura 2000 European Ecological Network (27.22% of the land area of Spain), consisting of 1,467 Sites of Community Importance, which embrace 1033 Special Areas of Conservation and 643 Special Bird Protection Areas. On the other hand, the 45 Biosphere Reserves as declared by the UNESCO Programme in Spain (9.5% of the territory), which rank the country second in the world for this such Programme. At the national level, the highest level of protection is the National Park status, which covers close to 370 thousand hectares through 15 recognised natural spaces They make up the National Parks Network, representing the main Spanish natural systems and the best environmental heritage to be found in the country.

### Environmental Assessment Law (T1.1.3.)

The basic legislation governing the **Environmental Assessment of plans, programmes and projects** is set out in Law 21/2013, of 9 December, on environmental assessment. This Law has been reworded in order to simplify and speed up procedures and therefore strengthen environmental protection. Citizens are able to take part in the consultation and public reporting phase of the environmental assessment process to guarantee public involvement and transparency of the process. They also may file claims and comments in response to the various environmental documents generated during the course of environmental assessment processes.

### National Adaptation Plan to Climate Change (T1.2.3.)

The **National Adaptation Plan to Climate Change** (PNACC) 2021-2030 is the basic planning instrument in order to promote coordinated action in reply to the effects of climate change effects all over Spain. Without interfering with Autonomous Communities competences, it provides objectives, criteria, work fields, and action guidelines to improve adaptation and resilience. It provides activities on assessing impacts and the vulnerability of water resources, coastlines, woodland, biodiversity, agriculture, the marine environment, energy and tourism. The Plan also organizes sectorial seminars, and boosts and improves the tool for information exchange and coordination between public authorities and other stakeholders active in the field of climate change adaptation (AdapteCCa). In the 2015 State Budget, a provision of 12.1 million euros has been made for adaptation, based on an Environment Promotion Plan format (PIMA). Seeking to develop specific climate change adaptation projects on coasts, in water management and in the natural and rural environment, a new heading with a provision of 17 million euros for this concept was approved for the 2016 budget. The Spanish Government prioritises a low-carbon growth policy, with the objective of reducing emissions while creating jobs and economic activity.

### National Strategy on Biological Diversity (T2.1.)

The **Natural Heritage and Biodiversity Law** (42/2007) provides a basic jurisdictional framework for the preservation, conservation, sustainable use, improvement and restoration of Spanish natural heritage and biodiversity, in order to guarantee a healthy environment for people's wellbeing. It includes the recommendations of the Council of Europe and the Convention on Biological Diversity in order to halt the loss of biodiversity and

promote the preservation of ecosystem services. The Law defines the necessary processes of planning, protection, preservation, conservation, and restoration, in a move to achieve a sustainable development compatible with the maintenance and increase of Spanish natural heritage and biodiversity.

### Criteria and Indicators for Sustainable Forest Management (T2.3.)

**Criteria and Indicators for Sustainable Forest Management in Spanish forests** were established at the third FOREST EUROPE Conference (Lisbon, 1998). Successive modifications and improvements have consolidated this system of indicators as a benchmark for the sector's characterisation and monitoring. The Spanish forest management's 28 principal quantitative indicators are grouped into six main categories: Maintenance and appropriate enhancement of forest resources and contribution to global carbon cycles; Maintenance of forest ecosystem health and vitality; Maintenance and Improvement of the productive function of forests; Maintenance, preservation and improvement of biodiversity in forest ecosystems; Maintenance and improvement of the protective function of forests; and Maintenance of other socio-economic functions and conditions.

### Rural Development Plan and Framework (T2.4. and T2.5.)

The **National Strategic Plan on Rural Development and the National Rural Development Framework**, in cooperation with the regional governments, set out national guidelines on development actions and establish certain measures to be introduced horizontally throughout the country, thereby encompassing each rural development programme of the 17 Autonomous Communities. Thanks to co-financing of the European Agricultural Fund for Rural Development, the Central Government and the regional governments, these Rural Development Programmes last for seven years, with potential deferrals for an additional 2 or 3 years. Royal Decree 1080/2014 was published in 2014 establishing the bases for coordinating application of the rural development policy in Spain.

### Access to Justice (T1.5.2.)

The **Aarhus convention** was validated in Spain in 2004. In conformance with Article 96.1 of Spanish Constitution and the Article 28.2 of Treaties and other International Agreements Law 25/2014. The Convention was included in the internal legal system of direct application in Spain.

### Others

The **National Strategy on Green Infrastructure and Ecological Connectivity and Restoration** is the strategic planning document to regulate implementation and development of green infrastructure in Spain. It provides an administrative and technical framework for the entire Spanish territory, and is a requirement of Law 42/2007, on Natural Heritage and Biodiversity. The general objectives of the strategy are to apply land planning and management tools based on the preservation of ecosystems and their services, to increase administrative coordination, to integrate green infrastructure into the territorial planning, and to promote knowledge, research and transference on the subject.



The **National Air Quality and Atmospheric Protection Plan** 2013-2016 (*Plan AIRE*) was drawn up by the Ministry of Agriculture, Food and Environmental Affairs and approved by the Council of Ministers in April 2013 in order to promote measures that will enable improvement the quality of the air, protecting both health and the environment. The *Plan AIRE* contains 78 measures that place emphasis on emissions generated by all sorts of activities ranging from transport to industry, including for example the regulation of biomes burning (which implies a high risk of forest fires). Another of the main measures contained in the Plan AIRE (AIRE Plan) is aimed at improving the information provided to the public on the quality of the air they breathe in terms of the limits provided for by law on the protection of health, by Royal Decree 102/2011: SO<sub>2</sub>, NO<sub>2</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, O<sub>3</sub>, Pb, C<sub>6</sub>H<sub>6</sub>, CO, As, Cd, Ni and B(a)P.

The **National Water Plan** (approved by Law 10/2001 and lately modified by Law 11/2005) and river basin management plans are the pillars of water planning in Spain, a country with a water shortage and where constant adaptations to the risks brought about by climate change are needed. It has been validated and promoted by the European Commission through the Water Framework Directive. Water management is organised through the River Authorities or river basin management bodies, which are public entities managed under the Directorate-General of Water. The river basin management plans ensure effective, efficient, solidarity-based and environmentally responsible water management.

The **Spanish Register of Invasive Exotic Species** (Royal Decree 630/2013) was one of the first comprehensive policies of the European Union for the control of invasive exotic species. The globalised trade of certain species is the main cause of the increasing pressure from invasive exotic species, which are a serious threat to autochthonous species, habitats and ecosystems, agronomy and economic resources, and even public health.

**Access to natural genetic resources and use control** (Royal Decree 124/2017) aims to generate the pertinent articles of the Natural Heritage and Biodiversity Law, as well as assure the correct use of the genetic resources under the European Regulation in relation to the Nagoya Protocol. Among other objectives, this Decree promotes preservation of biodiversity, regulates access to and assures control of genetic resources, use of traditional knowledge, and promotes related research.

**Forest Fires Law** (81/1968) has as principal objective the prevention and extinction of forest fires, the protection of goods and people involved and the sanctioning of infringements of this Law, as well as the adoption of restoration measures of the affected forest richness.

The Spanish **National Action against Desertification Programme** (PAND) aims to achieve the sustainable development of arid, semiarid and subhumid lands, while preventing and reducing land degradation and restoring partially degraded and desert lands. It is based on the United Nations Convention to Combat Desertification (UNCCD),

The **Hunting Law** (1/1970) is based on a series of main principles to regulate the hunting areas, the property of wild game, protection, conservation and use of hunting, responsibility of injuries, permits, administration, infractions and fees, and assurances.

The **Cattle Tracks Law** (3/1995) promotes the conservation of the natural paths that which provide a range of environmental services, such as the use of abandoned pasture lands, preservation of autochthonous genetic diversity, migration, and provision of ecological corridors.

### Legal proceedings (T1.1.2.)

**Criminal code** (“*Código Penal*”): Title XVI. Chapters III, crimes against natural resources and the environment (articles 325-331), and IV, crimes related to the protection of flora, fauna and domestic animals (articles 332 a 337). Title XVII about “crimes against public safety” related to environment (as forest fires).

The Spanish legislation follows the EC Protection of the Environment through Criminal Law Directive as it uses criminal law to protect the environment. In the Spanish legal system, administrative law and criminal environmental law coexist, the difference between administrative and criminal sanctions being the seriousness or gravity of the attack and the degree of damage or endangerment. This necessary relation requires control by the administration but cases of “active tolerance” of the Administration leading to corruption are of particular concern. It is also problematic that administrative sanctions are fragmented and laid down in different environmental laws. Moreover, a lack of clarity arises since each crime has different levels of completion, from presumed endangerment to damage, and affects different areas environment, water, flora and fauna, etc. A good thing, so however, is that there is autonomous criminal liability for corporations and collective entities, allowing them to be sanctioned. However, the 2010 reform of the Criminal Code excluded local public administrations and institutional government from criminal liability. In any case, there is a criminal liability of officials for illicit favourable reports, remaining silent on infringement of laws following inspections, omitted inspections, resolutions or votes in favour of granting illegal licences. The police force to deal with environmental crimes is SEPRONA while the public prosecutor is managed at provincial level. The Prosecutor is responsible for the charge and the procedure is the responsibility of the Judge or Court, while a private or popular accuser can also join in the trial. There is no possibility of plea bargaining in trials involving environmental cases although offenders can accept an agreement with the Prosecutor’s Office.

The evolution of prosecution of environmental crime shows that many of the trials and much of the sentencing focuses on urban planning problems. The conviction rate is very low, which raises problems mainly related to the lack of inspections and technical personnel. However urban planning still remains the largest category and should be analysed to see to what extent it has affected nature and wildlife and has hidden the problems of corruption. The number of trials related to forest fire crimes are higher than those related to urban planning, although the conviction rate is well below that for planning (Fajardo et al 2015).

### Other interesting, best practices (T2.1 and T2.2)

Payment for ecosystem services (PES) is the main tool promoted by the **Selvans programme** on mature forest conservation. The programme was designed in 2005 as a public forestry aid financed by private donors aimed at funding (the owner receives a subsidy corresponding to the estimated opportunity costs) the stumpage

rights of mature forest spots on public and private property, in order to leave the area unexploited for the next 25 years. In 2013, the public aid was kept as an independent call within the public scope whereas Selvans was hosted by *Acciónnatura*, an NGO that expanded and diversified the management tools and fundraising strategies. This programme has been successful in terms of reaching an operational stage although long-term financial resources are not guaranteed (Sastre 2016).

The *Consorti Forestal de Catalunya* (**Catalonian Forestry Consortium**) is a good example of a private owner association that provides support, assessment and training to private forest owners, lobbying and technology transfer activities, as well as dissemination. They provide capacity building structures, facilitating improved networking and collaboration among members and with other associations and institutions, and better assessment services due to economies of scale. Such associational structure helps them to face the progressive stomisation of the property, the difficulties to discuss and canalize proposals and initiatives, and the need to organise the private sector to facilitate communication with many different players (public administration, media, NGOs, industry, etc.). The success of the *Consorti* can be quantified through their market share, increasing average prices and involvement in innovation processes to improve product quality (Doblas-Miranda et al 2016).

The *Centre de la Propietat Forestal* (**Forestry Property Centre**) was created by the regional government to support and provide assessment to private forest owners. It is an exemplary case of improving governance and co-responsibility of forest landowners in developing forest policy, as well as the agency model to simplify and improve public action in forestry policy. There are clear difficulties due to the rigidity, fragmentation and lack of agility of different administrations with responsibilities in the forestry field. However, they managed to become the leading private forest planning initiative in Spain grouping 30% of total private forest owner's forests in Catalonia. Moreover, thanks to the Centre, 70% of local round wood and 90% of cork harvested come from forests with forest management plans. They also favour the implementation of forest certification, technical and administrative support to the regional association that promotes it, and the collaboration in most projects related to promotion and support of private forestry activities in Catalonia (Doblas-Miranda et al 2016).

### Germany

Forests take up more than 30% of the surface area of Germany, almost half of it private while a third is state-owned. Spruce stands cover 26% of the forested area, followed by pines (23%), beech forests (16%) and oak stands (11%). Although mainly commercial, they are managed on a sustainable, multifunctional basis. Forests are part of the country culture, since its ownership has been changed through large-scale, long-term socio-economic developments, including restitution and privatisation efforts of previously state-owned forest land in eastern states following reunification (Živojinović et al. 2015). Forest growth conditions in Germany are largely favourable, leading to the building up of considerable timber reserves. In fact, forests are the most important source of raw material for biomes.

In Germany, national implementation of FOREST EUROPE commitments coincided with the political goal of development of a new national forest strategy to balance growing demands for timber and biodiversity and to promote multifunctional forest management. Germany is indeed committed to the main forestry-relevant agreements, including the Convention on Biological Diversity, the Sustainable Development Goals, the Paris Agreement on Climate Change, the New York Declaration on Forests and the Global Forest Goals<sup>15</sup>. Thus, Germany ranks among the most active advocates, initiators and implementing partners of all these processes (GFG 2019).

In Germany there is an extensive system of legal provisions relative to the forest sector, based on a long history of experience in forest management that is being refined continuously. The Federal Department for Consumer Affairs, Food and Agriculture (BMVEL) is in charge of the forest management legal framework, international policies, and incentive measures. The Act for Preserving the Forest and for Promoting the Forestry Sector (Federal Forest Act) is the main forest protection law in Germany. Moreover, German *Länder* (Federal States) apply and supplement the Forest Act by the *Land*-level forestry acts. In addition, there are many laws related to environmental conservation such as the nature protection, hunting and plant protection acts.

#### Federal Forest Act (T1.3.1. and T1.3.2.)

The aim of the **Federal Forest Act** (BWaldG) is to preserve and increase forests, if necessary, and to assure their sustainable management by balancing their exploitation and their environmental relevance. The latter is based on the forest's capacity to provide ecosystem services as climate regulation and their role in water management, soil fertility and cultural landscapes. The Act also considers the agricultural and infrastructure, and the recreational use of forests, and seeks to reconcile the public interest with the concerns of forest owners. The Forest Act contains immediately effective provisions and the regulative framework that is then established in detail and put into effect by the federal state laws. The allocation of responsibility between the national administration and the federal states is recognised in the German constitution and permits the required adjustments to regional conditions, leading to a certain degree of diversification in the forest legislation.

The Federal Forest Act also includes the necessary regulatory framework to perform the periodical inventory of German forest resources (**Forestry Inventory Ordinance**) and the continuous monitoring of the environmental health of the forest and the services they provide (**Forestry Environment Monitoring**).

#### States Forestry Laws<sup>16</sup> (T1.3.2.)

Ministries of the federal states are in charge of the jurisdiction over the forests, forest administrations of the federal states acting as executive bodies. Federal states thus undertake regional legislation, implementation, planning support, consultancy to private forest owners and managing of state-owned forests. Economic responsibility for privately owned and corporate forests rests with the owner. As regards state-owned forests

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<sup>15</sup> <https://www.un.org/esa/forests/news/2017/01/six-global-forest-goals/index.html>

<sup>16</sup> Baden-Württemberg LWaldG, BayWaldG, Brandenburg-LWaldG, BremWaldG, HWaldG, LFG, LWaldG 2000 (Rheinland-Pfalz), LWaldG 2004 (Berlin), NWaldG, Saarland-LWaldG, Sachsen-Anhalt-LWaldG, SächsWaldG, Schleswig-Holstein-LWaldG and ThürWaldG.

the state forest authorities have been fulfilling both jurisdictional and managerial functions. However, the federal states of Saarland and Hessen have recently transferred the management function to autonomous limited liability companies (Häusler & Scherer-Lorenzen 2002).

### Forest Strategy (T2.1. and T2.4)

Based on the findings of the National Forest Programme (involving a number of interest groups, associations and public authorities since 1999 to develop models, general goals and recommended actions), the goal of the **Forest Strategy 2020** is to balance growing demands made on forests with their sustainable performance, based on the ecological, economic and social dimensions of sustainability. The Strategy should be combined and harmonised with other federal strategies such as the National Sustainability Strategy, the National Biodiversity Strategy, the Biome Action Plan and measures to mitigate climate change.

The Strategy provide an assessment of the current situation and challenges, together with a series of possible solutions for each of the selected Areas of Action: Climate protection and adaptation to climate change; Property, work and income; Raw materials, use and efficiency; Biodiversity and forest preservation; Silviculture; Hunting; Protection of soil and water management; Recreation, health and tourism; Education, public relations and research

### Federal Nature Conservation Act (T1.1.2, T1.2.1. and T1.2.2.)

The **Act on protection of nature and preservation of landscape** (*Bundesnaturschutzgesetz*, BNatSchG) promotes the conservation, preservation and development of nature and landscapes to maintain the efficiency of nature processes and nature's resources, to conserve fauna and flora, and to safeguard the variety of landscapes. The Act consists of 74 articles divided into general provisions, land use planning, protection of nature and landscape and of wild fauna and wild flora, water management for preservation of nature, recreation, participation of recognized associations, ownership, administrative fines and penalties and transitional provisions.

The Federal Administration is in charge of the jurisdiction of the regulation on the prevention of and compensation for impact on nature and landscape (**Federal Compensation Ordinance**, BKompV) based on the provisions of the third Chapter of the Federal Nature Conservation Act (amended last 4 March 2020). The Regulation specifies obligations about prevention of harm to nature and landscape, the content, type and scope of compensatory and replacement measures, and the amount of the compensation payment. Compensation for harm to nature can also be based on the Water Resources Management Act.

### Timber Trade Security Act (T1.1.1)

The **Timber Trade Security Act** (*Holzhandelssicherungsgesetz* HolzSiG) is the law against the trade with illegal timber, as stated in Articles 2, 7 and 8. It implements the Council Regulation on the establishment of a **FLEGT** licensing scheme for imports of timber. The text consists of articles on the sphere of application and enforcement, intervention, participation of custom authorities, exchange of data, power to issue provisions, the duty to give information, apply penalties, administrative fines, sequestration of objects, and entry into force.

### Climate Action Plan 2050 (T1.2.3.)

The **Climate Action Plan 2050** provides guidance to all areas of action (energy, buildings, transport, trade and industry, agriculture and forestry) in the process to attain German climate targets in line with the Paris Agreement. Key elements are a long-term target, greenhouse gas neutrality, transformative pathways, strategic measures, milestones and targets as a framework for all sectors and areas of action, a learning process. All elements able to be transformed if needed based on an evaluation of available climate scenarios. The strategy for modernising the national economy establishes open competition to produce the best ideas and technologies. The focus for climate action in land use and forestry is maintaining and improving the ability of forests to act as a carbon sink through sustainable forest management and the potential of natural forest development to mitigate climate change.

### National Strategy on Biological Diversity (T2.1.)

The **National Strategy on Biological Diversity** (NSBD) was put into place in 2007 for the implementation of the Convention on Biological Diversity. This multi-sectorial Strategy's main aim is to halt the decline in biodiversity in Germany, in line with the EU target. The NSBD seeks to make agriculture, forestry and fisheries more sustainable and diverse, thereby reducing the threat of genetically modified organisms in protected areas, as well as supporting the natural functions and correct functioning of soils. Particularly for forests, the Strategy looks for the improvement of conditions for typical biotic communities in forests, the rejuvenation of trees and bushes of the natural forest community, the strengthening of the ecological functions by semi-natural management, and available old and dead wood. The NSBD also promotes the eradication of poverty and development cooperation, increasing the resilience of livelihoods to disasters, and integration of climate change into strategies of other sectors for the conservation of biological diversity.

### Forestry Damage Compensation Act (T2.5.)

The **Forestry Damage Compensation Act** (ForstSchAusgl) focuses on the compensation of special loss events' effects on forestry in order to avoid market disturbances. The text deals with logging, limitation of timber imports, corporate compensation funds, operating expenses, tax measures, inventories in the timber industry, implementing provisions, penalties, etc.

### Access to Justice (T1.5.2.)

The purpose of the **Environmental Information Act** (*Umweltinformationsgesetz*, UIG) is to ensure free access to the information held by authorities on the environment. It also facilitates the distribution of this information and the prerequisites to make it available.

### Others

The German **Sustainability Development Strategy** (*Nachhaltigkeitsstrategie*) draws upon the UN 2030 Agenda for sustainable development and thus the German strategies to implement the 17 UN Sustainable Development Goals. It also includes sustainability measurement indicators and goals, principles for sustainable development,

and regular and transparent monitoring. In order to embrace all policy areas and assure cross-departmental monitoring and control, the main responsibility rests with the Federal Chancellery. Although an interplay of all relevant stakeholders, including civil society and the private sector, from international to municipality levels is necessary to achieve sustainability in the long-term. The target for preventing deforestation is addressed to developing countries under the REDD+ programme.

The **Federal Hunting Act** (*Bundesjagdgesetz*, BJagdG) lays down provisions relating to hunting activities in Germany, including fostering and taking possession of wild living animals. It provides punishment for certain conduct concerning protected species of wild fauna which fall under the legal hunting regime, such as unauthorised killing and hunting and the possession and trade thereof.

The aim of the **Forestry Seeds Act** *Forstvermehrungsgutgesetz* (FoVG) is to safeguard the forests in their varieties, and to promote forestry in general. Seeds of typical forest species may be produced, marketed, exported and imported only in compliance with the provisions contained in this Act.

The main purpose of the **Water Resources Management Act** (*Wasserhaushaltsgesetz* - WHG) is to regulate the management of water resources. The Act includes issues such as general provisions, management, special water resources, compensation, surveys, penalties and transitional provisions.

### Legal proceedings (T1.1.2.)

**Criminal code** (*Kernstrafrecht*): Chapter 29, Offences against the environment (Section 329 Endangering protected areas, Section 330 Particularly serious offences against the environment).

The German environmental criminal law is a modern legal system based on prevention and risk assessment, in compliance with the EC Directive on the protection of the environment through criminal law (which has influenced an increased dependence of environmental criminal law on administrative law, and an even wider criminalisation of environmentally harmful behaviour). The German Criminal Code provides the main set of rules regarding environmental crimes, while several environmental offences are spread over different environmental laws. For example, section 71 and 71a of the Federal Nature Conservation Act provide punishment for offences against protected species and thus are a complement to section 329 StGB, with regard to the endangerment of protected areas. In para. 1, certain intentional conduct such as the killing, capture, or destruction of such wild fauna or flora, or certain contraventions against provisions of the Wildlife Trade Regulations concerning the permission of imports or exports of such species is penalised. Finally, environmental criminal law in Germany is supported by a multitude of administrative penal offences imposed by the administrative authorities (Sina 2015).

In any case, Germany faces a number of problems enforcing environmental criminal law. On the one hand, decentralised large-scale enterprises make it difficult to attribute criminal liability to any particular person. On the other hand, there are insufficient resources and expertise of the prosecution service. These legal and factual problems of proof result in a vast majority of environmental criminal proceedings unfinished for insufficient grounds to proceed with public charges.

### Other interesting good practices (T2.1.)

**Union involvement in decision making.** Unions of workers in the forestry sector (no matter if state or company employees, self-employed, or contract workers) have a long tradition of developing their own models of involvement and are currently present at international, national and forest management unit levels. Their main needs to create such organisations are related to bringing safety and health into forestry work and to secure the forest resources. Unions participate in national governmental policy-making by bringing workers' rights and needs into public discussion and consideration. In Germany, unions of workers in forestry and their actions helped to improve the regulations for self-employment jobs, for part-time employment, and for adequate compensation in the face of weather disturbances (Jeanrenaud 2001).

## *Legal actions and proceedings*

### *Court of Justice of the European Union*

The Court of Justice of the European Union (CJEU) is the judicial authority of the European Union in cooperation with the courts and tribunals of the Member States. It was established in 1952 with the mission of ensuring the law is observed during the interpretation and application of EU Treaties. The CJEU is also involved in reviewing the legality of the acts of the institutions of the European Union, ensuring that Member States comply with obligations as agreed under the Treaties, and interpreting European Union law at the request of the national courts and tribunals<sup>17</sup>.

The CJEU is the backbone of the necessary legal proceedings in order to assure preservation of nature in Europe. Principally in the form of infringement proceedings and preliminary references, the Court has fostered the application of the Birds and Habitat Directives while defining the EU's environmental body of common rights and obligations that are binding on all EU countries, as EU Members. However, the results of the CJEU trials' implementation have not always been satisfactory. The principal failure of such cases is that, despite the judgements having determined an activity harmful to the environment, no remedial action was taken (Hildt 2020).

When considering recommendations for a similar figure in Brazil, it is therefore highly recommended, after judgement, to monitor cases in order to adequately follow up activities. Only by monitoring activities is the full implementation of the corresponding environmental law ensured, in theory and in practice. In addition, it is advised to set up a public monitoring database, where the Member States show the implementation of environmental law judgements and the related follow-up inquiries and remedial actions taken.

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<sup>17</sup> [curia.europa.eu](http://curia.europa.eu)



### *Exemplary legal cases (T3.)*

Most of the following cases, although not all of them<sup>18</sup>, have been identified thanks to the works of EC 2006b and Hildt 2020. The most common cases related to Member State violations of EU environmental law that reach the CJEU are infringement procedures, the second type being references for a preliminary ruling. However, for the latter, the CJEU does not necessarily look at whether the law is currently being violated (Epstein & Kantinkoski 2020). There are many example cases that stress the role of the Nature 2000 network in protecting nature, although not necessarily related to deforestation. In many of them, regional or national governments allow some kind of intervention that endangers the protected area. Later, after the infringement, the EC starts the necessary procedures. Representative cases of such a process are the following:

**Case C-209/02<sup>19</sup>**; *Directive 92/43/EEC - Failure of a Member State to Fulfil Obligations - Conservation of natural habitats - Wild fauna and flora - Habitat of the corncrake - Wörschacher Moos special protection area. Commission of the European Communities vs. Republic of Austria. 29 January 2004.* Two golf courses were built in a protected area, however, due to the judgement, the area was restored to its prior state.

**Case C-141/14<sup>20</sup>**; *Failure of a Member State to fulfil obligations - Directive 2009/147/EC - Conservation of wild birds - Kaliakra and Belite Skali special protection areas - Directive 92/43/EEC - Conservation of natural habitats and wild species - Kompleks Kaliakra site of Community importance - Directive 2011/92/EU - Assessment of the effects of certain projects on the environment - Temporal applicability of the system of protection - Deterioration of natural habitats of species and disturbance of species - Wind power – Tourism. European Commission vs. Republic of Bulgaria. 14 January 2016.* The case implies the implementation of several wind farms in recognized and important migration routes. However, the harmful situation has not been remedied or restored and insufficient management or conservation measures are being taken.

**Case C-304/05<sup>21</sup>**; *Failure of a Member State to fulfil obligations – Directive 92/43/EEC – Conservation of natural habitats and of wild fauna and flora – Directive 79/409/EEC – Conservation of wild birds – Assessment of the environmental impact of works to modify ski runs. Commission of the European Communities vs. Italian Republic. 20 September 2007.* That project provided for the creation of a corridor in a forest area for the ski runs.

In addition, changes in the status or conditions of already existing structures could increase their potential harmful effects, as in the following cases:

**Case C-308/08<sup>22</sup>**; *Failure of a Member State to fulfil obligations – Directive 92/43/EEC – Conservation of natural habitats – Wild fauna and flora – Protection arrangements before a habitat is placed on the list of sites of*

18 <http://curia.europa.eu/juris/recherche.jsf?language=en>

19 <http://curia.europa.eu/juris/liste.jsf?language=en&num=c-209/02>

20 <http://curia.europa.eu/juris/liste.jsf?language=en&num=C-141/14>

21 <http://curia.europa.eu/juris/liste.jsf?language=en&num=C-304/05>

22 <http://curia.europa.eu/juris/liste.jsf?language=en&jur=C,T,F&num=C-308/08&td=ALL>

*Community importance – Article 12(4) – Project for upgrading a country road. European Commission vs. Kingdom of Spain. 20 May 2010.* The implementation of a country road was authorised in 2000, taking measures such as the construction of wildlife crossings, the provision of appropriate road signs and the erection of animal fencing along the length of the section crossing the forest area, which is the area most favourable for the preservation of the Iberian lynx. Although later asphaltting works did not alter either the route or the dimensions of the road, an upgrading change in use by converting a byroad into a regional road has led to an increase in traffic, particularly private cars travelling at higher speeds.

**Case C-117/00<sup>23</sup>**; *Failure by a Member State to fulfil its obligations - Directives 79/409/EEC and 92/43/EEC - Conservation of wild birds - Special protection areas. Commission of the European Communities vs. Ireland. 3 June 2002.* The Commission argued that Ireland had failed to take the necessary measures to prevent the site's blanket bog from being damaged by overgrazing and that particularly the Rural Environmental Protection Scheme was inadequate to deal with this issue.

There are also cases related to the necessary inclusion of natural expanses of land (including forest) to already protected areas:

**Case C-334/04<sup>24</sup>**; *Failure of a Member State to fulfil obligations – Directive 79/409/EEC – Appendix I – Conservation of wild birds – Special protection areas – IBA 2000 – Value – Quality of the data – Criteria – Margin of discretion – Manifestly insufficient classification – Wetlands. Commission of the European Communities vs. Hellenic Republic. 25 October 2007.* The Commission mentioned other areas, including a precious forest that is partially covered, where the Hellenic Republic announced that it would carry out a reassessment.

**Case C-535/07<sup>25</sup>**; *Failure of a Member State to fulfil obligations – Directives 79/409/EEC and 92/43/EEC – Conservation of wild birds – Incorrect designation and inadequate legal protection of special protection areas. European Commission vs. Republic of Austria. 14 October 2010.* The Commission observes that the protection provided for the area by the forest management plan adopted by the Province Government was inadequate. The Republic of Austria responded that prohibiting measures and uses did, in fact, result in significant disturbance for those species. With regard to the forest plan, it was drawn up, with binding force, upon the instructions of the authorities in order to implement the necessary conservation measures.

**Case C-97/17<sup>26</sup>**; *Failure of a Member State to fulfil obligations – Protection of nature – Directive 2009/147/EC – Conservation of wild birds – Special Protection Area (SPA) – Classification as SPAs of the most suitable territories in number and size for the conservation of the bird species listed in Appendix I to Directive 2009/147 – Important Bird Area (IBA) – IBA Rila – Partial classification of IBA Rila as an SPA. European Commission vs.*

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23 <http://curia.europa.eu/juris/liste.jsf?language=en&num=c-117/00>

24 <http://curia.europa.eu/juris/liste.jsf?language=en&jur=C,T,F&num=C-334/04&td=ALL>

25 <http://curia.europa.eu/juris/liste.jsf?language=en&jur=C,T,F&num=C-535/07&td=ALL>

26 <http://curia.europa.eu/juris/liste.jsf?language=en&jur=C,T,F&num=C-97/17&td=ALL>

*Republic of Bulgaria. 26 April 2018.* The importance of the section of the area merited its being as an SPA for the typical forest species listed in the Birds Directive, which was final done by the Ministry of the Environment through the 'Environment' Operational Programme 2007-2013.

Others are related to the obligation imposed by the Environmental Impact Assessment Directive to carry out such assessment before any potential harmful activities in the protected areas could ensue, as the following:

**Case C-261/18<sup>27</sup>**; *Failure of a Member State to fulfil obligations – Judgement of the Court establishing a failure to fulfil obligations – Non-compliance – Directive 85/337/EEC – Consent for, and construction of, a wind farm – Project likely to have significant effects on the environment – Absence of a prior environmental impact assessment – Obligation to regularise – Article 260(2) TFEU – Application for an order to make a penalty payment and a lump sum. European Commission vs. Ireland. 12 November 2019.* Directive 85/337 states that the characteristics of projects must be considered in relation to the environmental sensitivity of geographical areas likely to be affected by projects. These include the absorption capacity of the natural environment, with particular attention being paid to mountain and forest areas.

**Case C-392/96<sup>28</sup>**; *Failure of a Member State to fulfil obligations – Environment – Directive 85/337/EEC – Assessment of the effects of certain public or private projects – Setting of thresholds. Commission of the European Communities vs. Ireland. 21 September 1999.* The 85/337 Directive lists a number of projects, including initial afforestation, which may lead to adverse ecological changes and land reclamation for the purposes of conversion to another type of land use.

**Case C-404/09<sup>29</sup>**; *Failure of a Member State to fulfil obligations – Directive 85/337/EEC – Assessment of the effects of certain projects on the environment – Directive 92/43/EEC – Preservation of natural habitats – Wild fauna and flora – Open-cast coal mines – 'Alto Sil' site – Special protection area – Site of Community Importance – Brown bear (Ursus arctos) – Capercaillie (Tetrao urogallus). European Commission vs. Kingdom of Spain. 24 November 2011.* The Commission argued, backed up by scientific studies, that the fragmentation of forest enclaves available for the protected fauna in the area has been made significantly worse, creating a barrier effect through the simultaneous and uninterrupted entry into operation of several mines.

There is a particular case directly related to deforestation that generated a lot of attention in the media but has also resulted in several studies on the capacity and the significance of European Law to Member States (e.g. Grzeszczak & Muchel 2018; Wennerås 2019).

27 <http://curia.europa.eu/juris/liste.jsf?language=en&jur=C,T,F&num=C-261/18&td=ALL>

28 <http://curia.europa.eu/juris/liste.jsf?language=en&num=C-392/96>

29 <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A62009CJ0404>

**Case C-441/17<sup>30</sup>:** *Failure of a Member State to fulfil obligations - Environment - Directive 92/43/EEC – Preservation of natural habitats and of wild fauna and flora - Article 6(1) and (3) - Article 12(1) - Directive 2009/147/EC - Conservation of wild birds - Articles 4 and 5 - ‘Puszcza Białowieska’ Natura 2000 site - Amendment of the forest management plan - Increase in the volume of harvestable timber - Plan or project not directly necessary for the management of the site, but that is likely to have a significant effect on it - Appropriate assessment of the implications for the site - Adverse effect on the integrity of the site - Actual implementation of the conservation measures - Effects on the breeding sites and resting places of the protected species. European Commission vs. Republic of Poland. 17 April 2018.* The Puszcza Białowieska Natura 2000 site is one of the best-preserved natural forests in Europe, included on the World Heritage List of the UNESCO and characterised by large quantities of dead wood and old trees. Its territory includes extremely well preserved natural habitats defined as ‘priority’ habitats within the Habitats Directive. However, the large-scale extraction of timber between 2012 and 2015 reached the maximum volume authorised in the Forest Management Plan (FMP) over a 10-year period. However, in March 2016, the Minister for the Environment approved an addendum to the FMP in order to increase the harvesting volume of the main forest products. The justification for that request was that of o maintain the forests in an appropriate state of health due to the occurrence of serious damage within forest stands because of the constant spread of the spruce bark beetle as observed by the Białystok Forest Office. According to the Commission, this 2016 appendix is not necessary to the management of the Natura 2000 site, but likely to triple the account of harvestable timber volume. The Habitats Directive enforces a series of specific obligations and procedures upon the Member States, in order to maintain and restore, at a favourable status of preservation, natural habitats and species of wild fauna and flora of interest to the European Union. On those grounds, the Court (Grand Chamber) has hereby ordered the Republic of Poland to pay the costs.

*Letters of formal notice. Forests: Commission urges Romania to stop illegal logging (February 2020 infringements package: key decisions)*<sup>31</sup>. The Commission urged Romania to properly implement the EU Timber Regulations, as the national authorities have been unable to effectively check the operators on large amounts of illegally harvested timber and apply appropriate sanctions due to inconsistencies in the national legislation. In addition, the Commission has found that the Romanian authorities manage forests without proper previous assessment of the impacts on protected habitats as required under the Strategic Environmental Assessment Directive. Moreover, there were problems related to the public access to environmental information in the forest management plans. Together with the previous Case C-441/17, the Commission decided to notice Romania to take the necessary measures to address these problems.

An interesting case is related to the lack of capacity of the Habitats Directive to consider the stakeholders opinion, reflecting the difficulties improperly balancing the interests of both local population and biodiversity (García-Ureta & Lazkano 2014):

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<sup>30</sup> <http://curia.europa.eu/juris/liste.jsf?num=C-441/17>

<sup>31</sup> [https://ec.europa.eu/commission/presscorner/detail/en/inf\\_20\\_202](https://ec.europa.eu/commission/presscorner/detail/en/inf_20_202)

**Case T-136/04**<sup>32</sup>; *Council Directive 92/43/EEC - Conservation of natural habitats and of wild fauna and flora - Commission Decision 2004/69/EC - List of sites of Community importance for the Alpine biogeographical region - Action for annulment - Inadmissible. Rasso Freiherr von Cramer-Klett and Rechtlerverband Pfronten vs. Commission of the European Communities. 22 June 2006.* Private owners of the concerned area, which wanted to maintain exploitation, attempting to reverse the inclusion in the preservation list. However, the Commission clearly states that only research concerns and state could even argue about such importance.

In any case, not only the Habitat Directive handles all the cases relate to forest damage, for example:

**Case C-282/02**<sup>33</sup>; *Failure of a Member State to fulfil obligations – Water pollution – Directive 76/464/EEC. Commission of the European Communities vs. Ireland. 2 June 2005.* With regard to aerial spraying of fertilisers on forest sites, Ireland states that this activity has always been subject to prior authorisation by the national regulatory authority and that, since January 2002, a special authorisation procedure is prescribed for such spraying.

**Case C-135/05**<sup>34</sup>; *Failure of a Member State to fulfil obligations – Waste management – Directives 75/442/EEC, 91/689/EEC and 1999/31/EC. Commission of the European Communities vs. Italian Republic. 26 April 2007.* Following various complaints, parliamentary questions and articles in the press, as well as the publication of a report of the Corpo Forestale dello Stato (National Forestry Authority) revealing the existence of a large number of illegal and uncontrolled waste tips in the forest and mountainous areas of Italy, the Commission decided to review that Member State's compliance with its obligations under the implied Directives.

### Exemplary national proceedings

A few national proceedings on deforestation coming from Spain and Germany have also been found. It should be mentioned that most of them were initiated by NGOs and implied a company in possession of the deforested land. Moreover, in many of the procedures the protection of the Natura 2000 figure was used. However, in Spain, the most common cases related to forest health are sentences to arsonists implied in forest fires.

Some of the proceedings that generated higher media attention are the German court order to the suspension of the Hambach Forest clearance (14 K 1282/15)<sup>35</sup> (Aitken & Gogolewski 2019), and the 2020 disciplinary proceedings of Spain versus Iberdrola illegal deforestation D212/2019 (S-113/2020)<sup>36</sup>.

32 <http://curia.europa.eu/juris/liste.jsf?language=en&num=T-136/04>

33 <http://curia.europa.eu/juris/liste.jsf?language=en&jur=C,T,F&num=C-282/02&td=ALL>

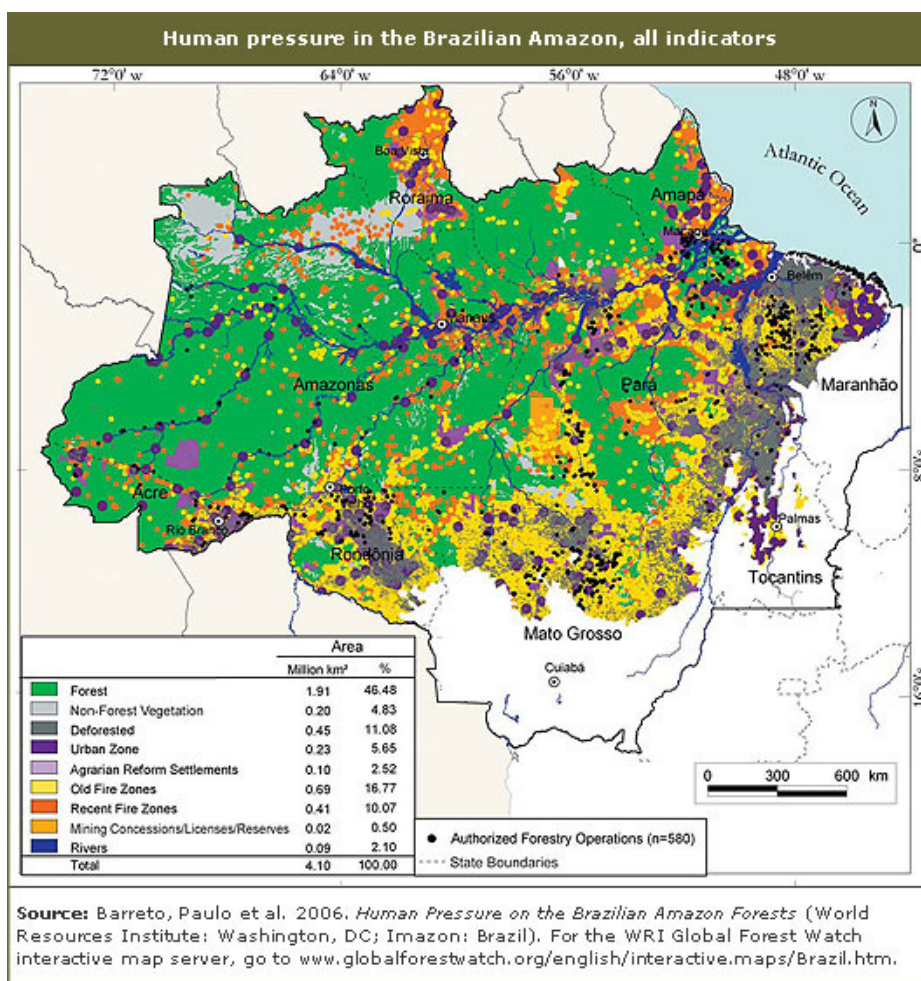
34 <http://curia.europa.eu/juris/liste.jsf?language=en&num=C-135/05>

35 [https://www.bezreg-arnsberg.nrw.de/presse/2018/03/063\\_18\\_03\\_29/2018-03-29-Zulassung-HBP-2018-2020.pdf](https://www.bezreg-arnsberg.nrw.de/presse/2018/03/063_18_03_29/2018-03-29-Zulassung-HBP-2018-2020.pdf)

36 Sanctions proceedings are not public in Spain in order to protect the privacy of the parts implied.

## Brazil

The Amazon region extends from the Atlantic Ocean to the Andes, encompassing part of nine countries in South America, with 69% belonging to Brazil. The Amazon biome runs through the Brazilian states of Pará, Amazonas, Maranhão, Goiás, Mato Grosso, Acre, Amapá, Rondônia and Roraima, giving a total area of 4,871,000 km<sup>2</sup> and a population of around twenty million inhabitants. The impacts of deforestation include loss of biodiversity, reduced water recycling (and precipitation) and contributions to global warming. Deforestation rates in the Amazon have been rising since 1991 with a variable but fast rate. Strategies to slow deforestation include repression through licensing, monitoring and performance of all three areas.



Source : <http://stanford.edu/group/spatialhistory/cgi-bin/site-bk/pub.php?id=73>



## *Brazilian legislation*

In Brazil, federal environmental policy starts being drawn up in the 1930s, having evolved with the contribution of international and multilateral organisations (World Bank, UN System - United Nations and ONG environmental movements) and from the major international events that came to pass in the second half of the 20th century. To understand the current institutional framework designed for the implementation of environmental policies in Brazil there is a crucial aspect to be considered. The federative structure of the country is divided into three levels of government: executive, legislative and judiciary.

In the organisation adopted by the Brazilian state, the Federative Units and municipal governments have the autonomy to establish policies according to their own priorities, within their areas of competence and within the limits set by their territories. The CF/88<sup>37</sup> establishes, in its articles 23, 24, 25 and 30, that the legal and public programmes, projects and other environmental administrative matters is the common competence of the union, the states, the Federal District and the municipalities.

Complementary Law 140/2011<sup>38</sup> in its Article 23, establishes rules for cooperation between federal entities, in order to harmonise and standardise the action between them, avoid overlaps and make environmental management more efficient.

At Federal level, we can mention article 225 of the CF/88<sup>39</sup>. This Article defines the importance of keeping the ecosystem stabilised through environmental preservation and recovery, with the main objective of the quality of life that the individual is worthy to have. The following is the text of the code:

**Art. 225.:** 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, thus enforcing on the Public Power and the community the duty to defend and preserve it for present and future generations.

It is also necessary to mention Article 170, item VI, of the CF/88, which provides that the economic order must observe the principle of defence of the environment, instituting differentiated treatment according to the environmental impact of products and services and of its elaboration processes.

Regarding the Amazon forest:

**Paragraph 4 of article 225 of the Brazilian National Federal Constitution** establishes that: The Brazilian Amazon Forest, the Atlantic Forest, the “*Serra do Mar*”, the Pantanal wetlands in Mato Grosso and Mato Grosso do Sul,

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<sup>37</sup> The competences established by the 1988 Constitution for the federal entities can be, in nature, executive, administrative or legislative. The administrative departments, dealt with by LC no. 140/2011, focus on the implementation and inspection aspects of measures related to the environment, such as the police character. Executive competencies relate to guidelines or strategies for exercising power related to the environment; the legislative ones, finally, deal with the possibilities that each entity has to legislate on environmental issues (Machado, 2012).

<sup>38</sup> The LC also changes Article 10 of the National Environment Policy - Law 6.938 / 81, adapting it to the new provisions.

<sup>39</sup> <https://www.jusbrasil.com.br/topicos/10645661/artigo-225-da-constituicao-federal-de-1988>.

and the Coastal Zone are national heritage, and their use will be, according to the law, within conditions that ensure the preservation of the environment, including the use of natural resources.

### *Main laws*

According to Brazilian law, public authorities are responsible for protection, recuperation and restoration of the fundamental ecological processes. Brazilian environmental legislation has a very modern and reasoned normative legal and regulatory framework, from which we would like to highlight 16 main laws:

#### 1. Cultural Heritage Law

**Decree-Law 25 - 1937**<sup>40</sup>: Passed into law in 1937, this is the law that defines and regulates the protection of the country's historical and artistic heritage, as well as natural heritage with value based on its history, beauty, representativeness and environmental relevance. This Law also set up the National Historical and Artistic Heritage Service.

#### 2. Forest Law

**Law 12,651 - 2012**<sup>41</sup>: Appearing in 2012 with updates to the judicial body, this Law regulates the protection of forest areas and their surroundings, as well as requiring the preservation of certain areas of the Brazilian territory with in relation to their original vegetation, in order to preserve deforestation. This law replaced the old Brazilian Forest Code (law 4771 - 1965)<sup>42</sup>.

#### 3. Public Forest Management Law

**Law 11,284 - 2006**<sup>43</sup>: From 2006, this law regulates the management of public forests for sustainable production; institutes, in the structure of the Brazilian Ministry of the Environment, the Brazilian Forest Service - SFB; creates the National Forest Development Fund – FND.

The Public Forest Management Law allows the Government to grant permission to carry out sustainable forest management to extract timber and non-timber products and to offer tourism services.

Concessionaires are selected through a public bidding process, which assesses the technical and price proposals received. The execution of contracts is closely monitored by the Brazilian Forestry Service.

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40 [https://www.planalto.gov.br/ccivil\\_03/decreto-lei/del0025.htm](https://www.planalto.gov.br/ccivil_03/decreto-lei/del0025.htm)

41 [http://www.planalto.gov.br/ccivil\\_03/\\_ato2011-2014/2012/lei/l12651.htm](http://www.planalto.gov.br/ccivil_03/_ato2011-2014/2012/lei/l12651.htm)

42 [https://www.planalto.gov.br/ccivil\\_03/leis/l4771.htm](https://www.planalto.gov.br/ccivil_03/leis/l4771.htm)

43 [http://www.planalto.gov.br/ccivil\\_03/\\_ato2004-2006/2006/lei/l11284.htm](http://www.planalto.gov.br/ccivil_03/_ato2004-2006/2006/lei/l11284.htm)



#### 4. Wild fauna Law

**Law 5197 - 1967**<sup>44</sup>: From 1967, it regulates the actions of humans and companies in relation to wild animals in the country, forming laws and typifying crimes related to them, in situations that are not previously authorised by national authorities.

#### 5. Nuclear Activities Law

**Law 6453 - 1977**<sup>45</sup>: From 1977, it regulates the responsibilities of accidents and acts of a nuclear nature. It defines the institutions and legal procedures that shall act in case of problems related to the type of activity. It is the result of a global context where the nuclear issue was on the agenda very vigorously.<sup>46,47</sup>

#### 6. Urban Land Parcelling Law

**Law 6766 - 1979**<sup>48</sup>: From 1979, it was environmental legislation that regulated how to carry out allotments of urban areas, restricting abuse in relation to the environment.

#### 7. Environmental Protection Law

**Law 6938 - 1981**<sup>49</sup>: From 1981, it is the environmental legislation that created the areas of environmental protection in Brazil, as well as the areas that represent Brazilian ecosystems that must be entirely preserved, with minor exceptions justified for scientific purposes.

#### 8. National Environment Policy Law

**Law 6,938 - 1981**<sup>50</sup>: This 1981 Law regulates the compensation that companies and people owe to the State and to the individuals affected in the event of environmental damage. It also regulates the format of the investigation and the prosecution of these damages.

#### 9. Coastal Management Law

**Law 7,661 - 1988**<sup>51</sup>: From 1988, this Law is responsible for defining the Brazilian coastal zones and their limits in relation to the type of environment that are part of these zones (sea, air, and land). It also regulates the definition of responsibility in relation to natural resources in these areas.

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44 [http://www.planalto.gov.br/ccivil\\_03/leis/l5197.htm](http://www.planalto.gov.br/ccivil_03/leis/l5197.htm)

45 [https://www.planalto.gov.br/ccivil\\_03/leis/l6453.htm](https://www.planalto.gov.br/ccivil_03/leis/l6453.htm)

46 SOMBRA, Carla Maria Lima et al. **Genetic biomonitoring of inhabitants exposed to uranium in the north region of Brazil**. *Ecotoxicology and environmental safety*, v. 74, n. 5, p. 1402-1407, 2011.

47 GUIMARÃES, Adriana Costa et al. **Cytogenetic biomonitoring of inhabitants of a large uranium mineralisation area: the municipalities of Monte Alegre, Prainha, and Alenquer, in the State of Para, Brazil**. *Cell biology and toxicology*, v. 26, n. 5, p. 403-419, 2010.

48 [https://www.planalto.gov.br/ccivil\\_03/leis/l6766.htm](https://www.planalto.gov.br/ccivil_03/leis/l6766.htm)

49 [http://www.planalto.gov.br/ccivil\\_03/leis/l7735.htm](http://www.planalto.gov.br/ccivil_03/leis/l7735.htm)

50 [https://www.planalto.gov.br/ccivil\\_03/leis/l6938.htm](https://www.planalto.gov.br/ccivil_03/leis/l6938.htm)

51 [http://www.planalto.gov.br/ccivil\\_03/leis/l7661.htm](http://www.planalto.gov.br/ccivil_03/leis/l7661.htm)

## 10. Law of Creation of IBAMA

**Law 7,735 - 1989**<sup>52</sup>: From 1989, this is the environmental legislation that unified secretariats and agencies related to the environment, setting up Ibama in order to implement the environmental policies developed by Brazil.

## 11. Pesticides Law

**Law 7.802 - 1989**<sup>53</sup>: Enacted in 1989, it regulates the entire process of manufacturing, marketing and use of pesticides. This is the law responsible for defining the parameters that go from the initial studies of the development of a product to the end of the packaging process. <sup>54</sup>There are studies that confirm the presence of pesticides in urban and forested soils, breast milk and aquatic biota, especially in the Amazon region. The results gathered since the middle of the 90s indicate that environmental contamination with this pesticide is still quite high. Due to the high fish consumption by traditional riverside populations, human breast milk may represent an important source of DDT pesticide exposure among newborns.<sup>55</sup>

## 12. Mineral Exploration Law

**Law 7,805 - 1989**<sup>56</sup>: From 1989, it is the environmental legislation that regulates mining activities, the necessary licences for its realisation and the liability in case of environmental damages during the execution.

## 13. Agricultural Policy Law

**Law 8,171 - 1991**<sup>57</sup>: From 1991, this Law regulates the relationship between agricultural activities and the respectful and rational use of Brazil natural resources through zoning, inspection and environmental education programmes by the authorities.

## 14. Genetic Engineering Law

**Law 11,105 - 2005**<sup>58</sup>: From 2005, this has been the environmental legislation that regulates the application of genetic engineering and the entire chain necessary for the correct treatment of modified organisms in relation to the Brazilian environment. This law mentioned in the present work due to concerns of inserting genetically modified organisms in the Amazon biome.<sup>59</sup> More than 1/3 of the soy produced in the Brazil is from the Legal

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52 [https://www.planalto.gov.br/ccivil\\_03/leis/l7735.htm](https://www.planalto.gov.br/ccivil_03/leis/l7735.htm)

53 [http://www.planalto.gov.br/ccivil\\_03/leis/l7802.htm](http://www.planalto.gov.br/ccivil_03/leis/l7802.htm)

54 WAICHMAN, Andrea Viviana et al. **Use and fate of pesticides in the Amazon State, Brazil**. Environmental Science and Pollution Research, v. 9, n. 6, p. 423, 2002.

55 TORRES, João Paulo M. et al. **Persistent toxic substances in the Brazilian Amazon: contamination of man and the environment**. Journal of the Brazilian Chemical Society, v. 20, n. 6, p. 1175-1179, 2009.

56 [https://www.planalto.gov.br/ccivil\\_03/leis/l7805.htm](https://www.planalto.gov.br/ccivil_03/leis/l7805.htm)

57 [https://www.planalto.gov.br/ccivil\\_03/leis/l8171.htm](https://www.planalto.gov.br/ccivil_03/leis/l8171.htm)

58 [http://www.planalto.gov.br/ccivil\\_03/\\_ato2004-2006/2005/lei/l11105.htm](http://www.planalto.gov.br/ccivil_03/_ato2004-2006/2005/lei/l11105.htm)

59 BARROSO, Paulo Augusto Vianna et al. **Zona de exclusão de transgênicos preserva populações in situ**. Visão Agríc, v. 6, p. 23-25, 2006.

Amazon and there are indications of a growth trend for new frontiers represented by the states of Rondônia, Pará, Amazonas, and with possible inclusion of Acre and Amapá.<sup>60</sup>

### 15. Water Resources Law

**Law 9,433 - 1997<sup>61</sup>:** From 1997, this was the law that definitively regulated the correct use of water, defining it as a limited resource, and establishing the norms for prevention in relation to the depletion of this resource.

### 16. Environmental Crimes Law

**Law 9,605 - 1998<sup>62</sup>:** From 1998, it is the law that finally defines the environmental crimes that are addressed in Brazilian legislation, and brings them together in a single piece of legislation. It is one of the major milestones in criminalising environmental damage.

These main laws and others could be classified following our proposed typologies (see the Results Found review section) as follows:

#### *On Illegal deforestation, regulation on wood (T1.1.1.)*

The Brazilian Federal Constitution of 1988, the country's strongest legal provision, upholds an extremely important right-for-forest policy, which is the "right to the ecologically balanced environment, of common use by the people and essential to a healthy quality of life, imposing on the Public Power and the collectivity the duty to defend it and preserve it for present and future generations". Still in its first section, the Constitution also determines that the Government shall "provide ecological management of species and ecosystems". Forest management became a legal requirement for forest exploitation in the Amazon long before the Federal Constitution was enacted. On 15 September 1965, when the first Brazilian Forestry Code was approved by Law No. 4,771, established in Art. 15, the following provisions were established:

"It is forbidden to explore the primitive forests of the Amazon basin in the primitive form, as these forest resources can only be used in compliance with technical management and management plans to be established by Government Act, to be downloaded within a period of one year. However, it was only in 1998 that IBAMA edited the first official rule to govern community sustainable management plans. This first standardisation was important for the expansion of timber or non-timber forest management initiatives in the Brazilian Amazon, and influenced the formulation of alternative mechanisms in the management of public forests. The Public Forest Management Law (Law 11,284 of March 2, 2006), in its Article 3, considers public forests as being: "all forests, natural or planted, located in the various Brazilian biomes, in assets under the domain of the Union, states, municipalities, the Federal District or entities the indirect administration. Article 4 establishes that the management of public forests

60 HOMMA, Alfredo Kingo Oyama. **A Expansão da Soja na Amazônia: a Repetição do Modelo da Pecuária?**. da Soja na, p. 89, 1999.

61 [https://www.planalto.gov.br/ccivil\\_03/leis/l9433.htm](https://www.planalto.gov.br/ccivil_03/leis/l9433.htm)

62 [http://www.planalto.gov.br/ccivil\\_03/leis/l9605.htm](http://www.planalto.gov.br/ccivil_03/leis/l9605.htm)

for sustainable production comprises, among others, the allocation of public forests to local communities, in the law defined as “traditional populations and other human groups, organised by successive generations, with a lifestyle relevant to the preservation and sustainable use of biological diversity”. Also in 2006, another important step in the legal evolution of Community Sustainable Forest Management came as the publication of MMA Normative Instructions No. 04 and 05, which provide, respectively: on the Prior Authorisation to technical analysis of sustainable forest management plan (Apat) and on technical procedures for the elaboration, presentation, execution and technical evaluation of Sustainable Forest Management Plans (PMFSs) in primitive forests and their forms of succession in the Legal Amazon. The MFSC reached another level in the Brazilian government agenda when Decree 6,874/2009 was launched, which instituted the Federal Programme for Community and Family Forest Management - PMCF, whose objective is to organise management actions and promote sustainable management in forests that are used by family farmers, settlers of agrarian reform and traditional peoples and communities.

“In addition to establishing the PMFC, this decree defines community and family forest management as: “the implementation of management plans carried out by family farmers, settlers of agrarian reform and by traditional peoples and communities to obtain economic, social and environmental benefits, respecting the mechanisms of ecosystem support”.

A working group was formed with participation of civil society, to stimulate and advance the PMFC, but currently this group seems to be inactive. Another important regulation in this agenda was federal law no. 12,651, of 25 May 2012, called the new “Forest Code”.

In a very positive way, the Code specifically provides for forest management guidelines for forest exploitation, the supply of forest raw material, the control of the origin of forest products and the control and prevention of forest fires, as well as economic and financial instruments to achieve these objectives.

Art. 45 of Law 9,605 – 1998, criminalises the conduct of cutting hardwood in disagreement with the legal requirements or transforming it into coal for energy industrial purposes or any other exploitation, whether economical or not. SNUC - Law 9.985 - 2000, Art. 18. The Extractive Reserve is an area used by traditional extractive populations, whose subsistence is based on extractivism and, complementarily, on subsistence agriculture and the creation of small animals, and aims at basic objectives to protect the livelihoods and culture of these populations, and to ensure the sustainable use of the unit's natural resources. Paragraph 7 - The commercial exploitation of timber resources will only be allowed on a sustainable basis and in special situations and complementary to the other activities developed in the Extractive Reserve, in accordance with the provisions of the regulation and the Management Plan of the unit.

### *About Damage Compensation (T1.1.2.)*

Law 6.938 - 1981 that establishes the National Environment System, stipulates and defines, that the polluter pays is obliged to indemnify the environmental damages that he/she causes, regardless of guilt, and that the Prosecution Office can propose civil liability actions for damages to the environment, such as the obligation to repair and or

indemnify damages caused. Among the legal rules that guide the protection of native vegetation still extant in the national territory, Art. 3, item II, of Federal Law 12,651 - 2012 defines the concept of Permanent Preservation Area - APP, which consists of the “protected area, covered or not by native vegetation, with the environmental function of preserving water resources, the landscape, geological stability and biodiversity, facilitate the gene flow of fauna and flora, protect the soil and ensure the well-being of human populations”. Under the terms of arts. 7 and 8 of Federal Law 12,651 - 2012 of the Forestry Code, the suppression of vegetation in a permanent preservation area, whose obligation of recomposition constitutes an obligation, will only be authorised in cases of public utility, social interest or low environmental impact. Environmental crime law 9,605 - 1998<sup>63</sup>, Art. 17. The verification of the repair referred to in Paragraph of Art. 78 of the Penal Code will be made through an environmental damage repair report, and the conditions to be imposed by the judge must relate to the protection of the environment.

### *Environmental assessment, guidelines and strategic environmental impact (T1.1.3.)*

Law no. 6.938 - 1981 established the “assessment of environmental impacts” (art. 9º, III)<sup>64</sup> as an instrument of the National Environment Policy. Decree No. 88.351 - 1983 (art. 18, § 1) ordered the National Environment Council (CONAMA) to set basic criteria and general guidelines for environmental impact studies for the purposes of licensing works and activities. Resolution number 1 - 1986 from CONAMA dealt with this matter. An Urban Land Regulation Law (Law 13.465/ 2017)<sup>65</sup>, also addresses aspects of strategy and environmental impact in urban areas.

### *Forest Conservation, Fauna and Flora, laws regulating wild animals (T1.2.1.)*

Law No. 12,651/12 (current Brazilian Forestry Code) establishes general rules on the protection of vegetation in permanent preservation areas.

Federal Law No. 6.766/79, on the other hand, dictates the complementary rules on land parcelling, as long as it does not violate the rules present in the Forestry Code.

Law 6.766/79 has as a fundamental requirement a mandatory non-buildable strip of 15 (fifteen) metres on each side, along current and dormant waters, as well as the public domain lanes of highways and railways.

As for the “*non aedificandi*” lanes of the public domain of highways and railways, it is up to the Registrar to observe whether there was such mention when presenting any plant of the property that overlaps with state

63 In Brazil, Environmental Law has, by excellence, a diffuse legal nature, having a transindividual character and aimed at society as a whole. Despite the legislative effort in recent decades to uphold the constitutional and infra-constitutional principles of environmental protection, it is observed that the lack of knowledge of the devices, together with the lack of institutional dialogues allows, at times, that environmental aggression is perpetuated, making corporate interests in profit supersede the intergenerational interest in an ecologically balanced environment. This degrading scenario, therefore, demands strict observance of the environmental protection devices and with that the first step is to know it, which is the objective of this work.

64 [http://www.planalto.gov.br/ccivil\\_03/leis/l6938.htm](http://www.planalto.gov.br/ccivil_03/leis/l6938.htm)

65 [http://www.planalto.gov.br/ccivil\\_03/\\_ato2015-2018/2017/lei/l13465.htm](http://www.planalto.gov.br/ccivil_03/_ato2015-2018/2017/lei/l13465.htm)

and federal roads (or railroads), and, in cases where there is no provision for such a track, to require the correction of the plant in a note of requirement.

On the other hand, the marginal strips of land of flowing waters - including bodies of water - and dormant waters, are considered preservation areas (APP), according to the Forest Code and the Land Parcelling Law, but there is supposed antinomy, generating divergences as to its length n, a possibility long discussed in the Courts.

Fauna Law (law 5,197)<sup>66</sup>, art. 1. Animals of any species, at any stage of their development and which live naturally in the wild, constituting wild fauna, as well as their nests, shelters and natural breeding grounds are State property, and their use, pursuit, destruction, catching or hunting is prohibited or catch. At state level, we can mention: São Paulo State Decree number 63,853, of 2018, which lists the species of wild fauna in the State of São Paulo declared regionally extinct, those threatened with extinction, the almost endangered and those with insufficient data for evaluation, and provides related measures.

National Park Preservation Network, on preservation of national parks (T1.2.2.) SNUC - Law 9,985 - 2000<sup>67</sup>, art. 1 - This Law establishes the National Park Preservation Network - SNUC, establishes criteria and rules for the creation, implementation and management of conservation units. Art. 3 - The National Park Preservation Network - SNUC is made up of the set of federal, state and municipal conservation units, in accordance with the provisions of this Law Art. 11. The National Park has as its basic objective the preservation natural ecosystems of great ecological relevance and scenic beauty, enabling scientific research and the development of environmental education and interpretation activities, recreation in contact with nature and ecological tourism. Environmental Protection Law (law 6938 - 1981)<sup>68</sup>, environmental legislation that created the environmental protection areas in Brazil APP, as well as areas that represent Brazilian ecosystems that must be fully preserved RL, with minor exceptions justified for scientific purposes. We can find different types of Legal Reserve Areas from each biome - 80% on the Amazon Biome, 50% on the *Cerrado (Brazilian savannah)*, and 20% in the *Mata Atlantica*;

### *Policies related to climate, climate change, renewable energy, climate protection plan (T1.2.3.)*

Institutes the National Policy on Climate Change - PNMC (Law 12,187 - 2009)<sup>69</sup> stipulates and defines the issuer of climate change, using emission control, greenhouse gases, impact, mitigation, vulnerability and sensitivity the system as a whole; Decree on Climate - (9.578 / 2018)<sup>70</sup>.

Climate Change and Environmental Conservation: According to article 1, this Law establishes the National Policy on Climate Change - PNMC and establishes its principles, objectives, guidelines and instruments<sup>71</sup>.

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66 [http://www.planalto.gov.br/ccivil\\_03/leis/l5197.htm](http://www.planalto.gov.br/ccivil_03/leis/l5197.htm)

67 [http://www.planalto.gov.br/ccivil\\_03/leis/l9985.htm](http://www.planalto.gov.br/ccivil_03/leis/l9985.htm)

68 [https://www.planalto.gov.br/ccivil\\_03/leis/l6938.htm](https://www.planalto.gov.br/ccivil_03/leis/l6938.htm)

69 [https://www.planalto.gov.br/ccivil\\_03/\\_ato2007-2010/2009/lei/l12187.htm](https://www.planalto.gov.br/ccivil_03/_ato2007-2010/2009/lei/l12187.htm)

70 [http://www.planalto.gov.br/ccivil\\_03/\\_Ato2015-2018/2018/Decreto/D9578.htm](http://www.planalto.gov.br/ccivil_03/_Ato2015-2018/2018/Decreto/D9578.htm)

71 [https://www.planalto.gov.br/ccivil\\_03/\\_ato2007-2010/2009/lei/l12187.htm](https://www.planalto.gov.br/ccivil_03/_ato2007-2010/2009/lei/l12187.htm)

National Climate Change Policy (Law 12.187 - 2009): According to the sole paragraph of the law, a Decree of the Executive Branch will establish, in line with the National Policy on Climate Change, the Sectorial Plans for mitigation and adaptation to climate change aiming at the consolidation of a low carbon economy, in the generation and distribution of electric energy, in urban public transport and in interstate cargo and passenger transportation systems, in the transformation industry and in the durable consumer goods industry, in the fine and base chemical industries, the pulp and paper industry, mining, the construction industry, health services and agriculture, with a view to meeting gradual quantifiable and verifiable anthropogenic emissions reduction targets, considering the specificities of each sector, including through the Clean Development Mechanism - CDM and Nationally Appropriate Mitigation Actions - NAMAs.

Decree Law 9,578 - 2018<sup>72</sup>: According to Article 1 of this Decree, the normative acts issued by the Federal Executive that provide for the National Fund on Climate Change, dealt with in Law No. 12,114 of 9 December 2009 and the National Policy on Climate Change, dealt with in Law No. 12,187 of 29 December 2009, is consolidated in compliance with Complementary Law No. 95 of 26 February 1998 and Decree No. 9,191 of 1 November 2017.

In accordance with Decree 9, 578/2018 Brazil has set ambitious targets on land use and forests, especially as set in article 18:

The projection of national greenhouse gas emissions for the year 2020, which deals with the sole paragraph of Article 12 of Law No. 12,187 of 2009, will be 3,236 million tonCO<sub>2</sub>eq, broken down into projections for the following sectors:

I - land use change – 1,404 million tonCO<sub>2</sub>eq.

III - agriculture - 730 million tonCO<sub>2</sub>eq; And

Art. 19. In order to achieve the voluntary national commitment of Article 12 of Law No. 12,187 of 2009, actions will be implemented to reduce the total emissions as estimated in Art 18 by between 1,168 million tonCO<sub>2</sub>eq and 1,259 million tonnes.

§ 1 - In order to comply with the provisions of the header, the following actions contained in the plans referred to in Art. 17 shall be considered:

I - reduction the annual deforestation rates in the Legal Amazon by eighty per cent in relation to the average between 1996 and 2005.

II - a reduction of the annual deforestation rates in the Cerrado Biome by forty per cent compared to the average between 1999 and 2008;

IV - recovery of 15 million hectares of degraded pastures.

V - expansion of the crop-livestock-forest integration system by 4 million hectares.

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<sup>72</sup> [http://www.planalto.gov.br/ccivil\\_03/\\_Ato2015-2018/2018/Decreto/D9578.htm](http://www.planalto.gov.br/ccivil_03/_Ato2015-2018/2018/Decreto/D9578.htm)

VI - expansion of no-tillage practice in straw by 8 million hectares.

VII - expansion of biological nitrogen fixation in 5.5 million hectares of cultivation areas, replacing the use of nitrogen fertilisers.

VIII - expansion of planted forest by 3 million hectares.

Also the NDC – bound by the UNFCCC – Paris Agreement – in Brazil intends to make a 40% reduction the average deforestation rate in the period between 2006 and 2009, in relation to the average rate of the ten-year reference period used in the Amazon Fund (1996-2005). For each of the next two four-year periods, reach 30% of extra reduction, in relation to the previous period. In the case of the Amazon biome, achieving this specific objective would avoid emissions of around 4.8 billion tons of carbon dioxide between 2006 and 2017, considering a biome carbon stock of 100 tC/ha. This value will be reassessed after the completion of the carbon stock inventory, to be supported by the National Forest Inventory.

ENREDD+ National Strategy for Reducing Greenhouse Gas Emissions From Deforestation and Forest Degradation (DECREE Number 10,144 - 2019)<sup>73</sup>: According to Art. 1 of this law: The National Commission for Reducing Greenhouse Gas Emissions from Deforestation and Forest Degradation, Conservation of Forest Carbon Stocks, Sustainable Management of Forests and Increase of Forest Carbon Stocks - REDD+ is hereby established, with the objective of coordinating, monitoring, monitoring and reviewing the National Strategy for REDD+ and for coordinating the requirements for access to payments for results of REDD+ policies and actions in Brazil, recognised by the United Nations Framework Convention on Climate Change. Sole paragraph. The Ministry of Environment will publish the National Strategy for Reducing Greenhouse Gas Emissions from Deforestation and Forest Degradation, Conservation of Forest Carbon Stocks, Sustainable Management of Forests and Increase of Forest Carbon Stocks - ENREDD+ and its successive reviews. Art. 2 For the purposes set out in this Decree, payments for REDD+ results are payments from multiple sources in recognition of measured, reported and verified reduced emissions from policies, programmes, projects and actions undertaken at multiple scales.

### *State/Subnational legislation*

From the viewpoint of Subnational States:

**AMAPÁ.** Law Project, 2009<sup>74</sup> Stipulates the fight against global climate changes, implementing actions to mitigate emissions of greenhouse gases in the atmosphere;

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<sup>73</sup> [http://www.planalto.gov.br/ccivil\\_03/\\_ato2019-2022/2019/decreto/D10144.htm](http://www.planalto.gov.br/ccivil_03/_ato2019-2022/2019/decreto/D10144.htm)

<sup>74</sup> [https://cetesb.sp.gov.br/proclima/wp-content/uploads/sites/36/2014/08/lei\\_clima\\_ap\\_13set09.pdf](https://cetesb.sp.gov.br/proclima/wp-content/uploads/sites/36/2014/08/lei_clima_ap_13set09.pdf)



**AMAZONAS.** (Law 3,135 - 2007)<sup>75</sup> Established the State Policy on Climate Change, Environmental Conservation and Sustainable Development in Amazonas; **AMAZONAS.** (Decree 28,390 - 2009)<sup>76</sup> Institutes the Amazonian forum on Global climate change, Biodiversity and Environmental services and other measures;

**MARANHÃO.** (Decree 22,735 - 2006)<sup>77</sup> Establishes the Maranhão State Forum on Climate Change Forum, and takes other measures;

**MATO GROSSO.** (Decree 2,197 - 2009 / Law 9.111 - 2009)<sup>78</sup> Establishes the Mato Grosso Forum on Climate Change and other measures; **MATO GROSSO.** (Law 582-2017)<sup>79</sup> Institutes the State Policy on Climate Change; **MATO GROSSO - REDD** (Law 9,878-2013)<sup>80</sup> Creates the State System for Reducing Emissions from Deforestation and Forest Degradation, Conservation, Sustainable Forest Management and Increasing Forest Carbon Stocks - REDD + in the State of Mato Grosso; **PARÁ - State Climate Change politics** (Law 9,048 - 2020)<sup>81</sup>;

**PARÁ.** Decree 254 - 2019<sup>82</sup> Institutes the Pará State Forum on Climate Change and Adaptation and provides other measures;

**RONDÔNIA.** (Law 4,437 -2018)<sup>83</sup> Establishes the State Policy for Climate Governance and Environmental Services - PGSA and creates the State System for Climate Governance and Environmental Services - SGSA, within the scope of the State of Rondônia and makes other provisions takes other measures; **RONDÔNIA -** (Decree 16,232 - 2011)<sup>84</sup> Climate change forum biodiversity and environmental services of Rondônia;

**TOCANTINS.** (Decree 3.007 -2007)<sup>85</sup> Creates the State Forum on Climate Change and Biodiversity.

### *Forest Management, regulation ( T1.3.1)*

Public Forest Management Law (Law 11.284 - 2006)<sup>6</sup>, Art. 1 This Law provides for the management of public forests for sustainable production, institutes the Brazilian Forest Service - SFB, in the structure of the Ministry of the Environment, and creates the National Forest Development Fund - FNDF, National Forest Program: seeks to reconcile use with the preservation of Brazilian forests; Protection of Tropical Forests: former PPG7, in the closing

75 [https://sapl.al.am.leg.br/media/sapl/public/normajuridica/2007/7590/7590\\_texto\\_integral.pdf](https://sapl.al.am.leg.br/media/sapl/public/normajuridica/2007/7590/7590_texto_integral.pdf)

76 [https://cetesb.sp.gov.br/proclima/wp-content/uploads/sites/36/2014/08/decreto\\_28390\\_170209\\_am.pdf](https://cetesb.sp.gov.br/proclima/wp-content/uploads/sites/36/2014/08/decreto_28390_170209_am.pdf)

77 [https://cetesb.sp.gov.br/proclima/wp-content/uploads/sites/36/2014/08/decreto\\_22735forum\\_ma.pdf](https://cetesb.sp.gov.br/proclima/wp-content/uploads/sites/36/2014/08/decreto_22735forum_ma.pdf)

78 <https://www.al.mt.gov.br/storage/webdisco/leis/lei-9111-2009.pdf>

79 <http://app1.sefaz.mt.gov.br/0425762E005567C5/9733A1D3F5BB1AB384256710004D4754/54105124ABB50E4A842580AA005CE79B>

80 <https://www.al.mt.gov.br/storage/webdisco/leis/lei-9878-2013.pdf>

81 <https://www.bombeiros.pa.gov.br/wp-content/uploads/2020/08/LEI-N%C2%B0-9.048-DE-29-DE-ABRIL-DE-2020.pdf>

82 <https://www.semas.pa.gov.br/legislacao/files/pdf/706.pdf>

83 <https://sapl.al.ro.leg.br/media/sapl/public/normajuridica/2018/8761/14437.pdf>

84 <http://ditel.casacivil.ro.gov.br/COTEL/Livros/Files/D16232.pdf>

85 [https://cetesb.sp.gov.br/proclima/wp-content/uploads/sites/36/2014/08/DECRETO-No-3.007-de-18-de-abril-de-2007\\_T0.pdf](https://cetesb.sp.gov.br/proclima/wp-content/uploads/sites/36/2014/08/DECRETO-No-3.007-de-18-de-abril-de-2007_T0.pdf)

phase; **More Ambient**: focused on the environmental regularisation of rural properties according to provisions set out in the Forestry Code; Action Plan for Prevention and Control of Deforestation in the Legal Amazon (**PPCDAM**)<sup>86</sup>.

#### *Forest Management, monitoring (T1.3.2.)*

Law on the Use of Forest Products (Law 12,651 - 2012)<sup>2</sup>, on monitoring, in the law: Art. 29. The Rural Environmental Registry - CAR is created, within the scope of National Environmental Information System - SINIMA, a national electronic public record, mandatory for all rural properties, with the purpose of integrating environmental information on rural properties and possessions, composing a database for control, monitoring, environmental planning and combatting deforestation. **ICMBio** - (Law 11,516 / 07)<sup>87</sup>, Art. 1 - The Chico Mendes Institute for the Conservation of Biodiversity - *Instituto Chico Mendes*, a federal agency with legal personality under public law, administrative and financial autonomy, linked to the Ministry of the Environment, is hereby created. One of the functions of the Chico Mendes Institute to monitor legal reserves. **PPG7** - was one of the most important and boldest initiatives of the Brazilian government, in partnership with the international community and civil society, to test and disseminate innovative strategies for the use and protection of natural resources in tropical forests, with the aim of transforming knowledge generated in the experiences with subsidies for public environmental policies. It was one of the largest environmental programmes implemented in Brazil, since the beginning of the 90s, the Pilot Programme for the Protection of Tropical Forests in Brazil and was discontinued in 2009.

#### *Illegal mining, regulation, waste (T1.4.1)*

Among the various assets protected by the Environmental Law, the illegal extraction of mineral resources is considered a crime in Law (9.605 – 98). In addition to environmental crime, irregular mineral extraction is regarded as a crime of usurpation of public assets, as set out in Art. 2 of Law 8,176 of 1991: It constitutes a crime against property, in the form of usurpation, producing goods or exploring raw materials belonging to the Federal Government, without legal authorisation or in disagreement with the obligations imposed by the authorising title. In the same law, Art. 55, it is stated that: it is a crime to carry out research, mining or extraction of mineral resources without the competent authorisation, permission, concession or licence, or in disagreement with that obtained. Whoever exploits mineral resources is required to recover the degraded environment, according to the technical solution required by the competent public agency, in compliance with the law. The Brazilian Federal Constitution (CF) also addresses the issue. 225 CF - 88, Paragraph 2 Whoever exploits mineral resources is obliged to recover the degraded environment, according to the technical solution required by the competent public agency, in the form of the law. With regard to mining on indigenous lands, the CF addresses this point in art.231, § 7 The provisions of art. 174, paragraphs 3 and 4, with the prohibition of exploration.

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86 [https://www.mma.gov.br/images/arquivo/80120/Anexo%20II%20-%20PLANO%20OPERATIVO%20D0%20PPCDAM%20-%20GPTI%20\\_%20p%20site.pdf](https://www.mma.gov.br/images/arquivo/80120/Anexo%20II%20-%20PLANO%20OPERATIVO%20D0%20PPCDAM%20-%20GPTI%20_%20p%20site.pdf)

87 [http://www.planalto.gov.br/ccivil\\_03/\\_ato2007-2010/2007/lei/l11516.htm](http://www.planalto.gov.br/ccivil_03/_ato2007-2010/2007/lei/l11516.htm)

### *Citizens' rights, native peoples (T1.5.1)*

ILO Convention 196<sup>88</sup> - Ratified by Brazilian legislation. Convention that applies to indigenous peoples in independent countries. The Convention recognises the right to possession and property and provides for measures to be taken to safeguard these rights in relation to the land and territory that traditional communities occupy or use collectively. Law (6,001 – 1973)<sup>89</sup>, provisions on the Statute of the Indigenous Art. 1 - This Law regulates the legal situation of Indigenous or foresters and indigenous communities, with the purpose of preserving their culture and integrating them, progressively and harmoniously, with the national community

### *Citizens rights, access to justice (T1.5.2)*

**Brazil** is not a signatory to the Aarhus Convention, which is a topic of great discussion and interest within the UN. At present, Brazil does not participate in any international treaty on access to information on environmental matters, referred to in the Laws of Public Civil Action and Popular Action. In this regard, one of the most important international instruments related to the environment is the Convention on Biological Diversity (1992), which took place in Rio de Janeiro and was signed by Brazil in the same year and ratified in 1994, together with RIO + 10, RIO + 20 and the ILO. We have treaties for protection, inspection, preservation in environmental matters.

## *Other best practices*

### *Related to policies, environmental action programmes, biodiversity (T2.1.)*

**Environmental monitoring programme for the Brazilian biome.** SISNAMA - National environment system. Brazilian Institute of the Environment and Natural Renewable Resources (IBAMA). Amazon protected area programmes (ARPA): Aims to protect the Amazon rainforest through UCs.

**Bolsa Verde:** Grants benefits to families in extreme poverty who live in areas considered a priority for environmental conservation.

**Sustainable Cerrado:** Aims to promote the conservation and recovery of the Cerrado biome.

**Ecological corridors:** Aims to reduce the fragmentation of forests, promoting ecological connectivity in the Amazon and Atlantic Forest biomes.

88 <http://www.mpf.mp.br/atuacao-tematica/ccr6/documentos-e-publicacoes/legislacao/legislacao-docs/convencoes-internacionais/convencao169.pdf/view>

89 <https://legislacao.presidencia.gov.br/atos/?tipo=Lei&numero=6001&ano=1973&ato=c03g3Yq5EenRVT213>

*Related to Management (T2.2.)*

**Amazon Fund.** The purpose of the Amazon fund is to raise donations for investments in actions to prevent, monitor and combat deforestation in the Amazon. Promotes the conservation of sustainable use of the forest. It also supports the development of control and monitoring systems in the rest of Brazil and in other tropical countries.

**PGPM - Bio** - Biodiversity minimum price guarantee policy: Guarantees minimum prices for Sociobiodiversity products, more than 15 extractive products that help to preserve the environment.

**CRA - Environmental reserve quotas.** These bonds represent an area covered by natural vegetation in a property that can be used to compensate for the lack of Legal Reserve in another in the same biome.

*Related to Standardised Information (T2.3.)*

**CAR - Rural Environmental Registry:** it is an electronic register of national scope, mandatory for all rural properties (Law 12.651 / 2012). Its purpose is to recognise and integrate environmental information on rural properties and possessions, enabling control through a database, monitoring, environmental and economic planning. It has a bias towards fighting deforestation and is an important requirement for government programmes, benefits and special authorisations. CAR registration represents the first step towards achieving environmental regularity, facilitating access to environmental licensing. Geoprocessing Rules. With regard to data geoprocessing, GGEO, from the Amazonas Environmental Protection Institute, can be mentioned. It conducts environmental analysis of the rural property, with the objective of producing georeferenced information, which makes it possible to carry out environmental monitoring, inspection and licensing.

*Related to Social Integration (T2.4.)*

**FBMC Brazilian Forum for Climate Change,** Decree 9,082 / 2017: Art. 1 The Brazilian Forum on Climate Change - FBMC, in this Decree, is hereby established. 2 - The FBMC aims to raise awareness and mobilise society and contribute to the discussion of the necessary actions to face global climate change, in accordance with the provisions of the National Policy on Climate Change and the United Nations Framework Convention on Climate Change and in the international agreements resulting from it, including the Paris Agreement and the Nationally Determined Contributions of Brazil, and under the terms of the legislation in force.

The Brazilian States also presents a significant number of Forums dedicated to social participation and construction of environmental public policies.

### *Related to Funding (T2.5.)*

From the Federal perspective, we can mention the following funds:

#### **Amazon Fund, National Environment Fund - Fnma, Climate Change Fund.**

Through the state bias:

State of Acre: State Fund for Environment and Forests of Acre - FEMAF, State Fund for Environmental Command and Control of the state of Acre - FECCA<sup>90</sup>.

Special Amapá Environmental Resources Fund - **FERMA**<sup>91</sup>.

State Fund for Climate Change, Environmental Conservation and Environmental Services - FEMUCS (State of Amazonas)<sup>92</sup>.

**FEMA** - Special Environmental Fund for the state of Maranhão.<sup>93</sup>

**FEMAM** - State Environmental Fund of the State of Mato Grosso<sup>94</sup>.

**FCA** - Environmental Compensation Fund of the State of Pará<sup>95</sup>.

**FEDARO** - Special Fund for Environmental Development of the State of Rondônia and the Special Forest Replacement Fund of the State of Rondônia<sup>96</sup>.

Special Fund FEMARH / RR - FUNDEMARH / RR (Roraima)<sup>97</sup>.

**FUEMA** (Tocantins State Environmental Fund).

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90 <http://www.al.ac.leg.br/leis/wp-content/uploads/2020/01/Lei3595.pdf>

91 [http://www.al.ap.gov.br/ver\\_texto\\_lei.php?iddocumento=95501](http://www.al.ap.gov.br/ver_texto_lei.php?iddocumento=95501)

92 [https://online.sefaz.am.gov.br/silt/Normas/Legisla%C3%A7%C3%A3o%20Estadual/Decreto%20Estadual/Ano%202019/DE%2040.768\\_19.htm](https://online.sefaz.am.gov.br/silt/Normas/Legisla%C3%A7%C3%A3o%20Estadual/Decreto%20Estadual/Ano%202019/DE%2040.768_19.htm)

93 <http://stc.ma.gov.br/legisla-documento/?id=1823>

94 <http://app1.sefaz.mt.gov.br/sistema/legislacao/LeiComplEstadual.nsf/9e97251be30935ed03256727003d2d92/589a53ac84391cc4042567c-100689c20?OpenDocument>

95 <https://www.sistemas.pa.gov.br/sisleis/legislacao/4861>

96 [http://www.ciflorestas.com.br/arquivos/lei\\_lei\\_5471993\\_4423.pdf](http://www.ciflorestas.com.br/arquivos/lei_lei_5471993_4423.pdf)

97 <https://www.legisweb.com.br/legislacao/?id=249669>

## ■ Review of Results Found

This section is thought to provide a quick overview of all the previous information and also, thanks to the typological classification presented in the table, to facilitate the later comparisons between EU and Brazil legal frameworks. The Table of Results is thus divided into three main vertical vectors and transversal vectors:

### 1. Main legislation

Focused mainly on illegal deforestation, it includes a series of transversal themes: regulation of wood, environmental damage/forest damage, impacts and deforestation strategies, forest preservation, protection of endangered wild animals, protection of environmental parks, policies related to climate, monitoring and regulation of forest management, illegal mining and waste monitoring, citizens' rights - indigenous peoples, riverside population, among other best practices and exemplary cases, access to justice and social responsibility structure),

### 2. Best practices

As explained in the following section, these include the EU and Brazil level, as well as initiatives at national and state level, which are not covered by a binding legal framework. In any case, we have considered necessary to mention and explain them in order to provide a better analysis and later comparison.

### 3. Exemplary cases

Finally, some of the cases mentioned in the previous section, have been also included in the table in order to provide a wide perspective of the principal procedures in each region

## Concepts/Definitions

We would like to provide a series of definitions, to facilitate the understanding of the typologies used to classify all the different policies.

### *Legal/illegal Deforestation*

*Means the legal and/or regulatory provisions that establish a prohibition of, and/or a limitation on, deforestation (native and secondary forests).*

### *Forest Conservation*

*Means the legal and/or regulatory provisions that establish the procedures to nurture, encourage and discipline the conservation of forests.*

### *Forest Management*

*Means the legal and/or regulatory provisions that establish the exploration/management of sustainable forest.*

### *Illegal mining*

*Means the legal and/or regulatory provisions that create a prohibition and/or limitation to the exploration of mining and mineral trade.*

### *Citizen's rights*

*Means the legal and/or regulatory provisions that discipline the rights and duties of the citizens with regard to the access to justice, access to information, participation in public hiring processes and other means of exercising of public and private rights.*

### *Environmental Liability Framework*

*Means the legal and/or regulatory provisions that establish the legal responsibility of the public institutions, the private sector companies, non-governmental organisations and citizens.*

### *Best practices*

*This term means the programmes, projects, actions and other measures adopted that goes behind the legal provisions. Could be in some cases administrative measures and/or administrative programmes/projects that intend to foment and incentivize the adoption of certain practices.*

## Table of results

		Typologies European Union (EU)	Europe			Brazil	
			Spain	Germany	Federal Union	Subnational States	
1. Main Legislation	1.1. Illegal Deforestation	1.1.1. Timber regulation	EU Timber Regulation (EUTR 995/2010)	Countryside Law (43/2003)	Timber Trade Security Act (BKompV)	Art. 225 CF - 88 National environment. Law 6.938 - 1981 Forestry Code ( Low 12,651 -2012) Law 9,605 / 1998 - Environmental Crimes Law Legal Amazon (Law 11,952 - 2009) SNUC- Law 9.985/2000 Forest Grant Law (Complementary Law 140 - 2011)	CADMADEIRADECREE 53,047 - 2008 COMMERCIAL EXPLORATION OF UNDERWATER WOOD IN REPRESENTED WATER (Law 1,300 - 2019) Prohibits the withdrawal, of logs of wood, from the State of Acre, Law 689 - 1979 Law 9.275 - 2009 Provides for the mandatory use of certified wooden materials and environmental protection by state public agencies.
		1.1.2. Punishment and Compensation for Damage	Environmental Crime Directive (2008/99/EC) Environmental liability Directive (2004/35/CE)	Criminal code	Criminal code Federal Compensation Ordinance (BKompV)	Forest Code ( Low 12,651 -2012) Law of Burning and Combatting Deforestation (Law 13,153- 2015) Public Forest Management Law (Law 11,284 - ) Environmental Protection Area (Law 6,902 - 1981) Law 7,347 / 1985 - Law of Public Civil Action Criminal Code	
		1.1.3. Environmental assessment	Environmental Impact Assessment Directive (2014/52/EU) Strategic Environmental Assessment Directive (2001/42/EC)	Environmental Assessment Law (21/2013)		National Environment Policy. Law 6.038- 1981, Art. 9, III CONAMA Resolution 237-199 Rural / Urban Assessment Legislation Urban land regulation law (Law13.465/ 2017)	Licensing State Level Legislations ERP – Environmental Recuperation Plans (associated with CRA – Environmental and Rural Registry)



		Typologies European Union (EU)	Europe			Brazil	
			Spain	Germany	Federal Union	Subnational States	
	1.2. Forest Conservation	1.2.1. Regulation	Habitat Directive (92/43/EEC) Wild Birds Directive (2009/147/EC) Common Agricultural Policy (TFEU)	Natural Heritage and Biodiversity Law (42/2007)	Federal Nature Conservation Act (BNatSchG)	Forest Code ( Low 12,651 -2012) SNUC- Law 9,985/2000	
		1.2.2. Network	Nature 2000 Network	National Parks Network	Federal Nature Conservation Act (BNatSchG)	Art. 225 CF - 88 SNUC - Law 9,985/2000 Forest Code ( Law 12,651 -2012)	
		1.2.3. Climate Related Policies	Energy Union and Climate Action (2018/1999/EU) Renewable Energy Directive (2018/2001/EU)	National Adaptation Plan to Climate Change	Climate Action Plan 2050	Law 18.127/2009 Decree on Climate - 9,758/ 2013	AMAPÁ. Law Project, 2009 AMAZONAS. Law 3,135 - 2007 AMAZONAS. Decree 28,390 - 2009 MARANHÃO. Decree 22,735 - 2006 MATO GROSSO. Decree 2,197 - 2009 MATO GROSSO. Law 582-2017 MATO GROSSO - REDD Law 9,878- 2013 PARÁ - State Climate Change politics Law 9,048 - 2020 PARÁ. Decree 254 - 2019 RONDÔNIA. Law 4,437 -2018 RONDONIA - Decree 16,232 - 2011 TOCANTINS. Decree 3,007 -2007

# JUSTICE AND SOCIO-ENVIRONMENTAL PROTECTION IN THE BRAZILIAN AMAZON

		Typologies European Union (EU)	Europe			Brazil	
			Spain	Germany	Federal Union	Subnational States	
	1.3. Forest Management	1.3.1. Regulation		Countryside Law (43/2003)  Autonomous Communities Legislation	Federal Forest Act (BWaldG)  State Forestry Laws	Law No. 11,284/2006 - Public Forest Management Law National Forest Program: seeks to reconcile use with the preservation of Brazilian forests;  Protection of Tropical Forests: former PPG7, in the closing phase; More Ambient: focused on the environmental regularisation of rural properties according to what determines the Forest Code; Action Plan for Prevention and Control of Deforestation in the Legal Amazon (PPCDAM)	Acre: CEMACT/ CFE Resolution 003-2008  Amazonas: CEMAAN Resolution 30-2018  Pará: COEMA Resolution 96-2011  Rondônia: Decree 23,481-2018  Roraima: Law 986-2015  MATO GROSSO LAW 233/2005 Forest management Decree Nº 2152 of 12/02/2014  Normative Instruction SEMA No. 2 DE 05/07/2018  CIPEM Centre of Wood Producing and Exporting Industries of the State of Mato Grosso  SIPAM Amazon Protection System
		1.3.2. Monitoring	INSPIRE Directive (2007/2/EC)	National Forest Inventory	Forestry Inventory Ordinance  Forestry Environment Monitoring	Law on the Use of Forest Products (Law 12,651 - 2012)  ICMBio - Law 11.516/07  Programme for the Protection of Native Forests (PPG7) National Forest Inventory (IFN)	
	1.4. Illegal Mining	1.4.1. Regulation	Raw Materials Initiative			Art. 225 CF - 88  National Environment. Law 6,938 - 1981  Mining Law Forbidden to carry out mining activities on Indigenous Lands	

		Typologies European Union (EU)	Europe			Brazil	
			Spain	Germany	Federal Union	Subnational States	
	1.5. Citizen's Rights	1.5.1. Indigenous people	Framework Convention for the Protection of National Minorities (CoE 1995)	ILO – Convention 169 Convention Ratified		ILO – Convention 169 - Ratified Under Brazilian Law  Traditional Communities Law (Law 6,938 - 1981)  LAW No. 6,001 - 1973.  ICMBio - Law 11.516/07  Environmental Social Safeguards _ MMA - CONAREDD+ - Resolution No. 8? - SSA - (Here or in the Best Practices)	
		1.5.2. Access to justice	Aarhus Convention Directive on Public access to Environmental Information (2003/4/EC)	Spanish Constitution (Article 28.2)  Treaties and other International Agreements Law (25/2014)	Environmental Information Act (UIG)	DECREE No. 2,652, OF 1 JULY 1998. Promulgates the United Nations Framework Convention on Climate Change, signed in New York on 9 May 1992  Item XXXV of Article 5 of the Brazilian Federal Constitution of 1988  Equality principle, enshrined in Article 7, of the new CPC (Civil Procedure Code) Right of broad defence, and statement by the other side (principle of Audi alteram partem)	

		Typologies European Union (EU)	Europe			Brazil	
			Spain	Germany	Federal Union	Subnational States	
	1.6. Environmental Liability Framework	1.6.1. Legal responsibility procedure	Environmental Liability Directive(2003/4/ EC)  Committee on Petitions of the European Parliament  Article 227 TFEU			Principle of Criminal Responsibility (subjective responsibility) - Individual or Corporate Responsibility No Direct Public responsibility Procedure ( )  Brazilian Federal Constitution of 1988  Art. 22 Art. 23 Art. 24 Art. 30  Absence of an Objective Responsibility Rule on the Environment	

		Typologies European Union (EU)	Europe			Brazil	
			Spain	Germany	Federal Union	Subnational States	
2. Good practices	2.1. Policy related	Environment Action Programme (1386/2013/EU)  EU Biodiversity Strategy	National Strategy on Biological Diversity  Selvans programme	National Strategy on Biological Diversity  Forest Strategy  Union involvement in decision making	PPCDAm and PPCerrado Earth class Project Environmental monitoring programme for the Brazilian biomes Sisnama - National Environment System Brazilian Institute of the Environment and Resources Natural Renewables (Ibama) Amazon Protected Areas Programme (ARPA): aimed at protecting Amazon forests through UCs; Bolsa Verde: grants benefits to families in extreme poverty living in areas considered priority for environmental conservation; Sustainable Cerrado: aims to promote the preservation and recovery of the Cerrado biome; Ecological Corridors: seeks to reduce the fragmentation of forests, promoting ecological connectivity in the Amazon and Atlantic Forest biomes		
	2.2. Management	EU Forest Strategy	Spanish Forestry Strategy  Catalonian public and private consortia		Amazon Fund  PGPM - Bio - Biodiversity minimum price guarantee policy  CRA - Environmental reserve quotas		

# JUSTICE AND SOCIO-ENVIRONMENTAL PROTECTION IN THE BRAZILIAN AMAZON

		Typologies European Union (EU)	Europe			Brazil	
			Spain	Germany	Federal Union	Subnational States	
	2.3. Standardised information		Copernicus Earth Observation programme Climate-ADAPT	Criteria and Indicators for Sustainable Forest Management		Rural Environmental Register (CAR) Resolution 89 - 2019 Jusambiente - Pilot Project/electronic tool	
	2.4. Social integration		LIFE Programme (1293/2013) EIP-AGRI Interreg Programme (1303/2013)	National Strategic Plan on Rural Development Socio-economic Stimulus Plan for the Forestry Sector	Forest Strategy	MC Brazilian Forum for Climate Change - Decree XXX/ 2001 Decree 9,082 - 2017	Decree N° 254 - 2019 Establishes the Pará State Forum on Climate Change and Adaptation Decree 42,368 of 2020 Reforms Amazon Forum on Climate Change, Biodiversity and Environmental Services
	2.5. Funding		Action Plan for Nature, People and the Economy Rural Development Programmes (1303/2013) LIFE Programme (1293/2013) Interreg Programme (1303/2013)	National Rural Development Framework Socio-economic Stimulus Plan for the Forestry Sector	Forestry Damage Compensation Act (ForstSchAusgl)	Amazon Fund National Environment Fund - Fnma Climate Change Fund	Decree 40,768 - 2019 Municipalities' funds
3. Exemplary cases	3.1. Related to protected areas		Failure of a Member State to fulfil obligations: C-209/02, C-141/14, C-304/05, C-308/08, C-117/00, C-334/04, C-535/07, C-97/17, C-441/17 Action for annulment: T-136/04			Criminal action: 0006360-90.2017.4.01.3200; Public Civil Action98: 0008588402018 8140053 Popular Action99: 0001714-95.2014.4.03.6139	
	3.2. Related to impact assessments		Failure of a Member State to fulfil obligations: C-261/18, C-392/96, C-404/09			Guarulhos - Case – André Franco Montoro International Airport100 PL 3.823/2019	
	3.3. Timber Regulation and others		Letter of formal notice to Romania Failure of a Member State to fulfil obligations: C-282/02, C-135/05				

98 <https://www2.mppa.mp.br/sistemas/gcsubsites/upload/37/Movimentacao%20PJE%20-%20Processo%20SEI.pdf>

99 <http://web.trf3.jus.br/acordaos/Acordao/BuscarDocumentoGedpro/6573473>

100 [http://www.mpsp.mp.br/portal/page/portal/procuradoria\\_interesses\\_difusos\\_coletivos/Noticias/TJ%20acolhe%20recurso%20do%20MP%20e%20reconhece%20impacto%20ambiental%20produzido%20por%20avi%C3%B5es%20no%20Aeroporto%20de%20Cumbica](http://www.mpsp.mp.br/portal/page/portal/procuradoria_interesses_difusos_coletivos/Noticias/TJ%20acolhe%20recurso%20do%20MP%20e%20reconhece%20impacto%20ambiental%20produzido%20por%20avi%C3%B5es%20no%20Aeroporto%20de%20Cumbica)

### **Data Structure from Brazilian Judicial Framework**

According to tables and graphs produced by the CNJ, referring to environmental order processes, we have the following data (See Table 1):

From 1986 to 2020 an average of 88,566 lawsuits were registered, as follows:

24,171 were cases involving environmental damage cases;

16,073 were crimes against the flora;

11,208 were requests for revocation or cancellation of fines;

23 were cases of management of public forest/environmental damage;

807 were cases involving preservation of natural resources.

Of the processes computed:

11,617 are Public Civil Action Lawsuits (see Table 2),

8,907 were environmental crimes,

194 settlements of judgements by common procedure.

There were 2,631 special appeals and 1,115 compliments of sentences.

These cases are divided among the following courts of the states related to Legal Amazon:

TJPA (19,651), TJMT (12,034), TJRO (6,101), TJAM (4,534), TJMA (2,643), TJAP (1,136), TJTO (937), TJAC (81), 34,615 in TRF1 and 5458 in STJ (See table 3).

With regard to degree, cases are divided into first and second degree, higher courts and special courts.

Table 1

Court	Total of environmental cases per Court
TRF1	34,615
TJPA	19,651
TJMT	12,034
TJRO	6,101
STJ	5,458
TJAM	4,534
TJMA	2,643
TJAP	1,376
TJRR	1,136
TJTO	937
TJAC	81
<b>Total</b>	<b>88,566</b>

Table 2

Types of lawsuits	Total
Civil public lawsuit ( <i>Ação civil pública</i> )	11,617
Criminal action	10,266
Environmental action	8,907
Civil appeal	7,985
Civil common procedure	7,791
Bankruptcy action	5,080
Restitution of values in bankruptcy action	4,462
Not specified	3,611
Appeal to the interlocutory decision ( <i>Agravo de Instrumento</i> )	3,306
Criminal action - brief procedure ( <i>procedimento sumaríssimo</i> )	3,291
Special Appeal (STJ)	2,631
Execution of the Criminal Punishment	2,408
Appeal to the Special Appeal	2,382
Tax execution	2,032
Civil Injunction ( <i>Mandado de Segurança Cível</i> )	1,769
Criminal action - brief procedure ( <i>procedimento sumário</i> )	1,512
Brief procedure	1,286
Execution of the sentence	1,115
Civil special court procedure	1,076



On the types of ACP cases, Popular Action and appeals (see Table 6), where the total of 11,617 Public Action Lawsuits can be confirmed.

The following data emerges from the description of the cases:

Table 6 shows that the states with the highest number of cases, in descending order, are Mato Grosso, Pará, Amazonas, Roraima, Maranhão, Tocantins, Amapá, Roraima and Acre,

**Table 3**

State	Cases by State
Pará	22,501
Mato Grosso	13,673
Rondônia	8,877
Amazonas	5,917
Maranhão	3,696
Amapá	1,841
Roraima	1,638
Tocantins	1,369
Acre	589
Piauí	1

**Table 4**

Main theme of the lawsuit	Total
Environmental damage	24,171
Crimes against the flora	16,073
Revocation of environmental fines	11,208
Pollution	6,837
Environmental damage indemnity	4,628
Revocation of environmental license	4,595
Fishing	3,033
Flora	2,857
Crime against the fauna	2,725
Mineral resources	1,939
Permanent preservation area	1,487
Fauna	932
Nature Preservation Unit	807
Legal reserve	659
Pollution	631
Pesticides	549

## Preliminary suggestion of a Business Intelligence Panel

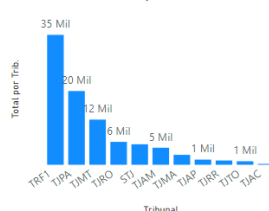
Environmental cases

88 Mil

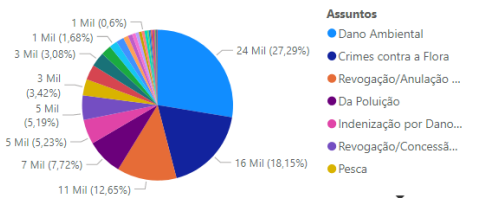
Georeferenced map of cases



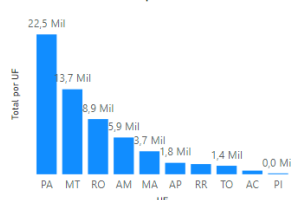
Number of lawsuits per Court



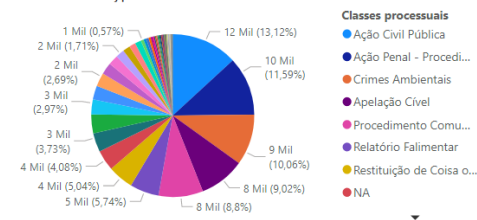
Most recurrent theme



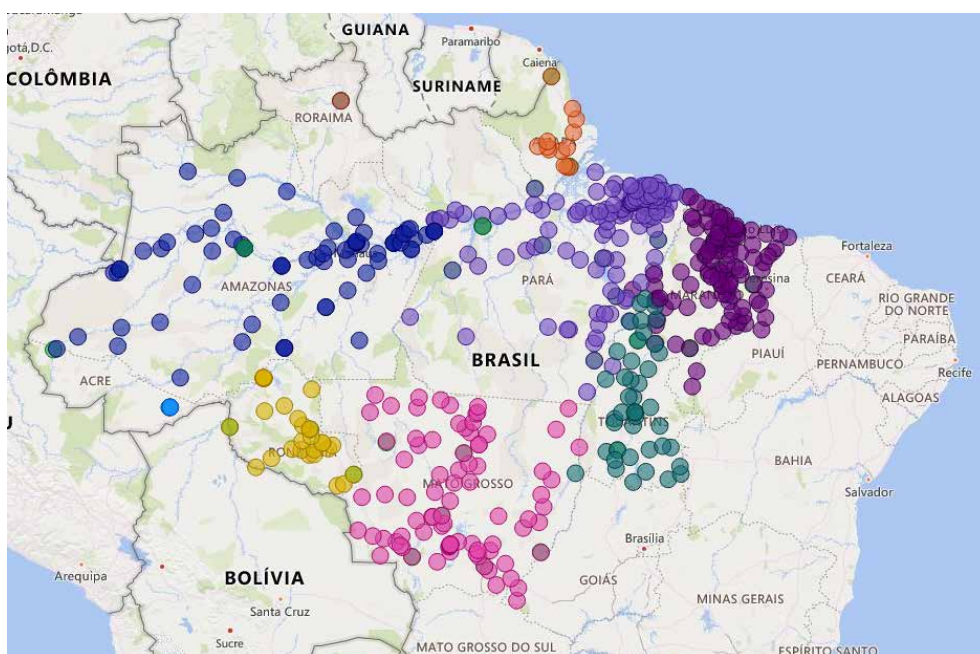
Number of lawsuits per Member State



Most recurrent types of lawsuits



## Georeferenced Map of Judicial Cases about the Environment



Preliminary suggestion of a Business Intelligence panel

## Environmental cases

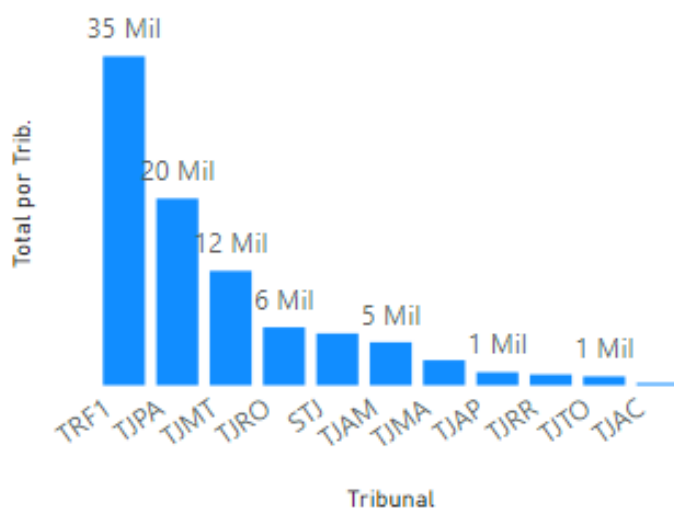
# 88 Mil

Georeferenced map of cases

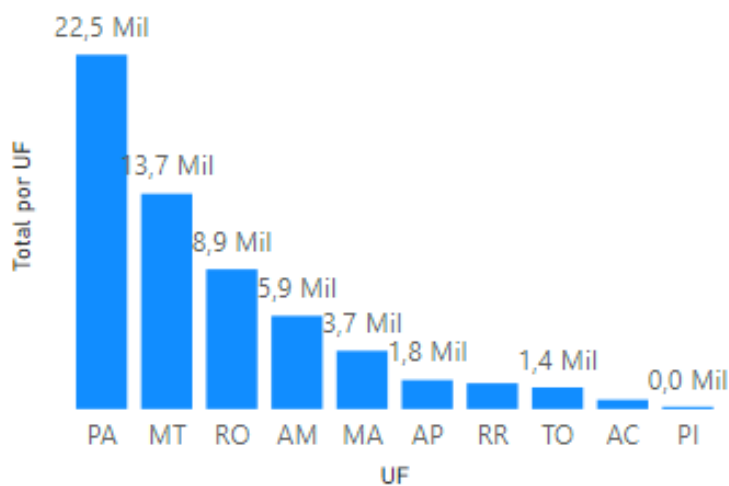


## Preliminary Suggestion of a Business Intelligence Panel

### Number of lawsuits per Court

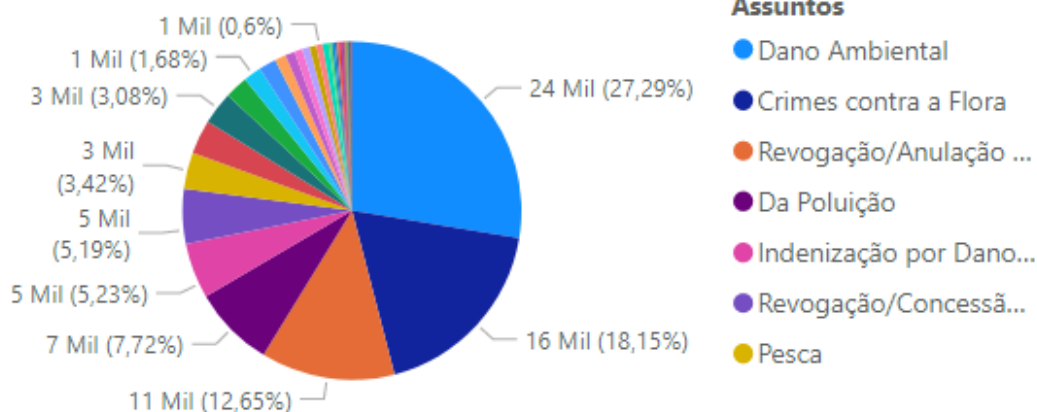


### Number of lawsuits per Member State

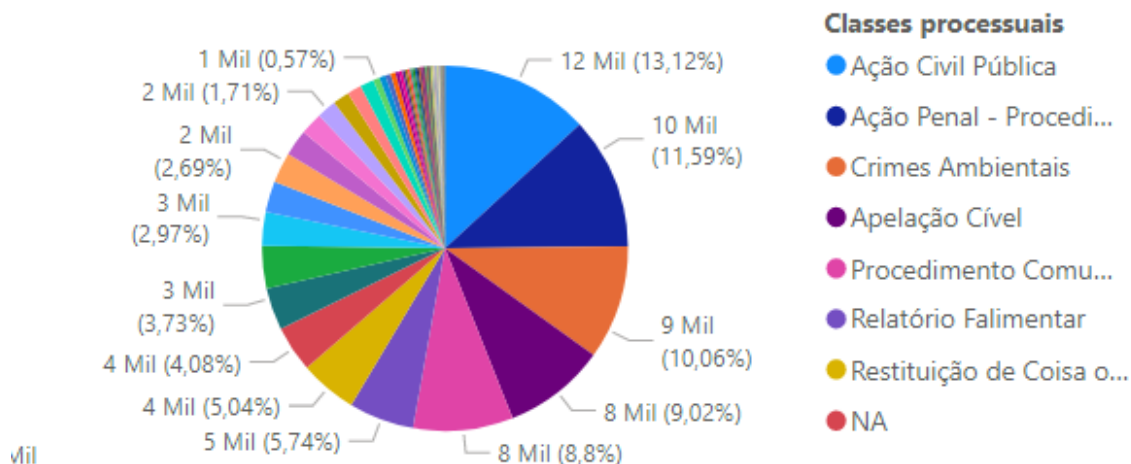


## Preliminary suggestion of a Business Intelligence panel

### Most recurrent theme



### Most recurrent types of lawsuits



## 6. COMPARATIVE ANALYSIS

### ■ COMPARATIVE CHART

Main subject	Typologies	European Union	Federal Union of Brazil
1. Main Legislation	1.1. <i>Illegal Deforestation</i>	1.1.1. Timber regulation	Yes
		1.1.2. Punishment and damage compensation	Yes
		1.1.3. Environmental assessment	Yes, in protected areas and at Member State level Mainly in urban and industrial areas, also in rural areas used as hydroelectric plants, mining and others Licensing in Rural Areas – States Competence
	1.2. <i>Forest Preservation</i>	1.2.1. Regulation	Yes
		1.2.2. Network	Yes
		1.2.3. Climate change	Yes
	1.3. <i>Forest Management</i>	1.3.1. Regulation	Only in Member States (subnational level mainly) Yes – Both Federal Level and State Level – detailed and extensive laws and regulations
		1.3.2. Monitoring	Yes
	1.4. <i>Illegal Mining</i>	1.4.1. Minerals regulation	Yes, albeit related to contamination rather than deforestation Yes
	1.5. <i>Citizen rights</i>	1.5.1. Indigenous people	Yes – At Constitutional and National Level
		1.5.2. Access to justice	No total support to accuser
	1.6. <i>Environmental liability framework</i>	1.6.1. Legal responsibility procedure	Member States can fail to fulfil obligations – direct action from citizen to the European Commission Federal Rules don't allow the Union to take direct action against the States and Municipalities Constitutional Legal Framework is based on the common competence on environmental issues– Articles 23/24 of the Brazilian Federal Constitution (CF)
2. Best Practices	2.1. <i>Policy related</i>		Yes, mainly horizontal plans Yes
	2.2. <i>Management</i>		Yes, guidelines Yes
	2.3. <i>Monitoring</i>		Yes, mainly remote sensing Yes
	2.4. <i>Social integration</i>		Yes, including research, innovation and communication activities Yes, mainly focused on social participation in committees and Forums
	2.5. <i>Funding</i>		Yes, focused on rural development Yes focused on environmental protection

## ■ Main conclusions from the comparative chart

The main conclusion that could be reached from the extracted from the comparison between the European Union and Brazilian legal frameworks is that we share common ground in what refers to legal environmental conceptions. There are of course great differences that have to be recognised in such comparison in relation to the environmental and socio-economic context. However, from a wider perspective, interesting lessons could be learnt.

Among these “**green**” similarities there is a common strong timber regulation (T1.1.1.). In the EU, this regulation goes beyond its own Member States and directly affects commercial agreements with Brazil and other countries, while the latter has to deal mainly with internal deforestation. and internal market; in the end, both share a hard legal control of timber extraction, origin and trade. Moreover, in both regions, timber regulation is supported by a tough criminal code based on strong liability principles, and similar conceptions of compensation and restoration measures (T1.1.2.).

In relation to preservation, we could find similar frameworks of regulation protect forest ecosystems, with a high degree of detail in the Brazilian system in what concerns to the legal reserve instrument that creates an obligation to the rural producer to maintain intact (prohibition to deforest) 80% of the area in the Amazon biome (only 20% of the area is allowed to be potentially used for production – submitted to previous licensing authorisation) – other biomes (*Cerrado* 50%/50% and (*Mata Atlântica* 20%/80%). (T1.2.3.). Although similar in their conception, again Europe looks beyond its boundaries while Brazil is affected by similar external policies and agreements from around the globe. Forest monitoring programmes (T1.3.2.), supported by the European Space Agency, have been the crown jewel of European remote sensing initiatives. Nevertheless, Brazil has been developing, acquiring and applying state of the art systems for forest monitoring and, in the last few decades, have been implementing georeferencing and territorial monitoring systems (INPE).

The mineral extraction and trade policies (T1.4.1.) follow a similar comparative paradigm than those related to timber, since extraction within the EU usually follows environmental standards and therefore the regulations are more concerned about policies in the countries of origin. In any case, Brazil shows similar levels of regulation than Europe within its borders.

In the case of indigenous people's rights (T1.5.1.), although both regions share the same basic standards, Brazil legislation is even more detailed and wider in scope. This is in part logical, since the number of recognised indigenous people inside EU Member States is too low.

Finally, when analysing best practices outside the legal frameworks, which include not only society based actions but also governmental programmes and plans, both regions share great interest and innovation capacity. Both the EU and Brazil show initiatives for improving preservation (T2.1.) related policies (such as environmental programmes, biodiversity strategies and Payment for Ecosystem Services initiatives), forest management



(T2.2.) activities (including international and national guidelines and owners' associations), standardised information (T2.3.) efforts (in order to ease land classification and ownership, the use of indicators, etc.), and rural development through funding (T2.5.), both at EU and National and State levels.

In any event, we have also identified **"orange"** typologies where considerable differences arise. For example, one of the most useful tools to control environmental crimes in the EU is the obligation to perform preliminary environmental assessments prior to any kind of action and infrastructure development implying a risk of environmental degradation (T1.1.3.). At the European level, such assessments are mandatory inside protected areas of the Natura 2000 network. In addition, many national legal frameworks include this kind of preliminary actions before forest damage all -over the territory, even on private land. However, in Brazil we find similar figures although not as powerful. For example, licensing simple permits is necessary previously to deforestation on private land, but those do not imply the more sophisticated analyses of an EIA (EIA are mainly applied in Brazil in urban and industrial areas).

There are also differences that are embarrassing for the EU territory, as the lack of any binding document in relation to forest management at the European level (T1.3.1.). While the legislation and regulation for forest management are very restrictive in Brazil (both at National and State Level), the EU only shows plans and recommendations. It is worth stressing, in any case, that many EU Member States properly regulate such management, especially at the intra-regional level (Autonomous Communities in the case of Spain and Federal States in the case of Germany).

Coming back to the lessons that the EU can offer to Brazil, the former shows a complex and rooted system of environmental integration (T2.4.). European citizens are conscious and aware of the benefits and needs that the environment provides, while the protection of the environment is proudly recognised as one of the main concerns of the EU. This feeling does not come free and it is based on a constant offer of research and innovation calls and communication campaigns, supported by different programmes and directed to many kinds of sectors and publics. Brazil shows increasing efforts along these lines that should be better supported and maintained.

Finally, important divergences also arise when comparing rights of access to justice (T1.5.2.), where the EU displays the fully structured and constantly improved Aarhus Convention. Although both regions show concrete laws to guarantee the access to environmental information, the mentioned Convention goes way beyond that, including total access to justice for EU citizens and NGOs and to exercise it safely. Moreover, it is possible for EU citizens to directly access the CJEU if they consider that their country is not correctly fulfilling its obligations in relation to environmental legislation. Such qualitative break in the line of command highly reduces the time between crime and punishment or restoring action and eases the implementation of justice. In Brazil a similar track exists but on the judicial side with the "Class Action" (*Ação Popular*) that allows the citizens and non-governmental organisations to go directly to the Supreme Court, This "Class action" nevertheless is fundamentally different from the European procedure once in one the track goes from the European Commission (executive power) and European Parliament (legislative power) and in Brazil through the Supreme Court of Justice (judicial power).



In fact, this last characteristic of the EU justice system guides us to the major “**red**” difference between the two regimes that we have identified, related to legal procedure responsibility (T1.6.1.). Thanks to the process described, where citizens and NGOs can bring their countries to EC attention through its system for receiving complaints, the CJEU can initiate infringement procedures directly to a Member State failing to fulfil its obligations under EU law. In the end, if the country is not able to solve the problem properly, it would be the same Member State that should bear the cost of the corresponding fee and those of the environmental damage restoration. . This instrumental and fast track procedure where the European Commission can act directly (in response to a specific and concrete issue) that could be raised from one single citizen allows the executive power to apply direct measures to the member state that have “failed to act”. On the contrary, in Brazil the distribution of competences and the mutual legal responsibility, especially between the union and the states (arising from article 24 of the Federal Constitution) in most cases creates a grey and diffuse zone of responsibility .



## 7. RECOMMENDATIONS

This section will list the recommendations considering the results of the previous sections, and especially with the focus on the following items:

### *1. Suggestions directed to public policies based on the identification of Brazilian and European best practices on the subject:*

#### **Access to justice instruments:**

**Incremental instruments and policies** to facilitate concrete, real and effective access to justice and the ability to obtain agile decisions will be critical to be implemented and monitored in the Brazilian legal and regulatory framework.

#### **Direct legal procedures:**

**Direct legal infringement tools** – the adoption of direct fast-track infringement instruments that diminish the distance between the final decision maker and/or decision rule/institution could bring a higher degree of efficiency. In addition, the implementation of tools that allows the analyses of specific and concrete issues (in opposite to broader and abstract policy noncompliance actions) allows a quick and more efficient and focused answer to the concrete environmental impacts. The ability to impose directly to a member state the responsibility of the “failure of action” on the protection of environment is a powerful tool

### *2. Proposal of normative instruments that could be enacted by the National Justice Council:*

**Regulation procedures on the land registry “notarial registry”:** these allow the full implementation of the principles of transparency, monitoring and compliance with the Forest Code and other land use legal framework in Brazil. Inclusion of the diverse status of the land title (including judicial and non-judicial temporary and/or permanent decisions on administrative or judicial entities. This strategy can be implemented in conjunction with the geo-referenced map of environmental lawsuits.

The Judiciary Branch, through the National Council of Justice, may also act with the purpose of facilitate the unification of databases and registration information of producers and owners of lands in Amazon Region and promote unification of other systems which interest and affect rural producers, such as SIGEF, SICAR, SNCR, CCIR and ADA. There is a working group within the Ministry of Agriculture for this specific purpose. This measure could

improve the legal certainty of rural land registration and provide more information to support public policies in the Amazon region.

**The potential adoption, approval and enforcement of other similar international conventions and legal instruments like the Aarhus Convention and The “Regional agreement on access to information, public participation and access to justice in environmental matters in Latin America and the Caribbean”** as it is called, could bring a significant and robust contribution to the right to environmental information, compliance and access to justice.

Regarding the implementation of international legal conventions and instruments, and national regulation on environmental services and carbon, there is still the possibility for the Judiciary to study its role in regulation from a technical and regulatory point of view the environmental services and/or carbon emission as part of the land title registry and its component attributes.

### *3. Proposal of a Taxonomy creation and harmonisation Methodology:*

**Geo-referenced procedures:** It's critical to be able to identify the geo-localisation of the judicial cases, not only considering the identification of the court but also in what respects to the real geo-localisation of the environmental damage, in this sense is recommendable that CNJ could adopt taxonomic procedure that with a mandatory regulation creates the obligation to input and harmonize the latitude and longitude of the environmental damages (since the initial notice of the case until the final decision level). This strategy can be a tool to facilitate the regulation of the notarial registry of lands in the Amazon region.

**Quantitative data:** It is also critical to understand the real extension in hectares of the damage and consequently the remedies that will/have been adopted to indemnify and/or recuperate the area and the environmental protected goods. In that sense is recommendable that a taxonomic procedure should be implemented to create a procedure to identify the size/number of hectares (type of biome) of the damaged area. In addition, it will be value aggregated to include specific taxonomic procedures that allow the identification of the remedies applied to the specific cases: recuperation, compensation, financial penalties and/or other alternative measures, and its effective implementation.

## 8. CONCLUSIONS AND KEY MESSAGES

In conclusion, we must point out that we are dealing with two of the most important, huge and significant territories of the world with significant differences regarding land use and forest management, that need specific legal, regulatory and administrative instruments to address their own challenges. Nevertheless, we found significant common ground and similarities on many of the thematic issues addressed, such as:

1.1. Illegal Deforestation; 1.1.1. Timber regulation; 1.1.2. Punishment and damage compensation , 1.1.3. Environmental assessment, 1.2. Forest Conservation, 1.2.1. Regulation, 1.2.2. Network, 1.2.3. Climate change, 1.3. Forest Management, 1.3.1. Regulation, 1.3.2. Monitoring, 1.4. Illegal Mining, 1.4.1. Minerals regulation, 1.5. Citizen rights, 1.5.1. Indigenous people, 1.5.2. Access to justice, 1.6. Environmental liability framework, 1.6.1. Legal responsibility procedure, 2.1. Policy-related, 2.2. Management, 2.3. Monitoring, 2.4. Social integration and 2.5. Funding.

Illegal deforestation presents a common concern in both jurisdictions in terms of legal and regulatory framework, with administrative and judicial instruments at the service of the protection of environment and legal/judicial action against infractions. In both territories, forest preservation includes significant and robust legalisation and administrative tools that address the common objective of maintaining forest cover (and, especially in Brazil, native forest cover), highlighting the Brazilian legislation that requires the setting aside of 80% of legal reserve un the Amazon biome (even in areas that could be destined to agriculture and cattle ranching production).

Forest Management arises as areas of mutual interest with the slightest increase in detailed legal framework in forest management in Brazil at the national and subnational levels, revealing huge attention to the monitoring and control of transactions in the internal market.

Illegal mining reflects almost a unanimous restrictive procedure and legal framework with detailed legal and regulatory framework, something highlighted in Brazil being the prohibition of mining in indigenous lands.

About Citizen's Rights and access to justice, both systems present instruments that allow access to information and to justice, with slight differences between Brazil and Europe in what concerns to the signature of the Aarhus Convention. Brazil has made a huge effort to create instruments that could allow full acknowledgement and assurance of individual and collective rights and also access to the judicial systems (by consecrating in article 5 of its constitution the right to access justice, and creating legal and judicial instruments like the Civil Action and the People Class Action, but there is the lack of other direct legal environmental responsibility (direct infringement tools) just like the "direct infringement action" that the European citizens can enact to the European Commission allowing the fast and direct tracking between the specific environmental damage with the ability to make responsible the state member by is "failure to act". The effective implementation of measures for access to citizen's rights and to justice, especially to assure the security of citizens and other institutions for the exercise

and use of the justice instruments, that could result in an important and practical way to progress on the road to full enforcement of those rights.

On social integration: social integration is clearly the importance of permanent investment in educational, research and communication programmes related to environmental protection, and a similar pathway is being taken in some parts of Brazil.

Direct infringement instruments assure an agile and more efficient means to call the attention of the citizens and other institutional organisations of society while assuring more efficiency in the protection against deforestation and environmental degradation.

Last but not least, this study has made it possible, through comparison, to bring several recommendations that have the potential to increase the agility, robustness, accuracy and efficiency of the judicial system in Brazil, with regard to the environmental and social protection of the Amazon region its people, culture and environmental wealth.

## 9. APPENDICES

### APPENDIX I. REFERENCES

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## APPENDIX II. LEGISLATION

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National System of Nature Conservation Units (Law 9,985 - 2000)

DECREE No. 5,975 of 30 NOVEMBER 2006. Regulates the terms of Law 4,771 of 15 September 1965 and Law 10,650 of 16 April 2003. Establishes guidelines for the Sustainable Forest Handling Plan (PMFS) and the standards for transport and storage of forest products and by-products.

IBAMA Execution Standard No. 2, of 24 April 2007. Implements the Simplified Manual for Analysis of Logger's Plan in Amazonia, with the aim of providing grounds for the analysis of Sustainable Forest Handling Plans – PMFS.

CONAMA RESOLUTION 406 OF 2 FEBRUARY 2009. Sets technical parameters for preparation, presentation, execution, and technical assessment of the Sustainable Forest Handling Plans – PMFS, with wood extraction purposes, for native forests and their means of succession in the Amazonian Biome, which should be applied at any level of competence, by the organisations that make up the National Environment System – SISNAMA.

DECREE 6,874 OF 5 JUNE 2009. Implements, within the scope of the Brazilian Ministries for the Environment and for Agrarian Development, the Federal Programme for Community Forest Management – PMCF, with the aim of organising actions for management and nurturing of sustainable management in forests that are objects of use by Family agriculturalists, people settled by agrarian reform, and traditional communities.

DECREE 8,375 OF 11 DECEMBER 2014. Establishes the Agricultural Policy for Planted Forests. Establishes principles and goals of the Agricultural Policy for Planted Forests, with regard to activities for production, processing, and commercialisation of products, by-products, derived products, services, and supplies, with regard to planted forests. *lantadas*.

### *Subnational Laws in Brazil*

AMAPÁ. Law Project of 15 September 2009. It institutes the State Climate Change Policy and establishes other measures.

AMAZONAS. Law 3,135 of 5 June 2007. It institutes the State Policy on Climate Change, Environmental Preservation and Sustainable Development of Amazonas, and establishes other measures.

AMAZONAS. Decree 28,390 of 17 February 2009. Creates the Amazonian forum on Global Climate Change, Biodiversity and Environmental Services, and provides other measures.

MARANHÃO. Decree 22,735 of 29 November 2006. Creates the Maranhense Climate Change Forum, and provides other measures.

MATO GROSSO. Decree 2,197 of 22 October 2009. Creates for the composition of the Mato Grosso Forum on Climate Change, linked to the Secretariat of the Environment and provides other measures.

MATO GROSSO. Law 9,111 of 15 April 2009. Creates the Mato Grosso Forum on Climate Change and provides other measures.

MATO GROSSO. Law 582/2017, State Climate Change Policy of Mato Grosso. Implements the State Climate Change Policy of Mato Grosso.

MATO GROSSO – REDD Law - Law 9,878 of 2013

PARÁ. - Pará State Climate Change Policy Law - Law 9,048 of 29 April 2020

PARÁ. Decree 1,900 of 22 September 22. It establishes the Paraense Climate Change Forum and provides other measures.

RONDÔNIA. Decree 16,232, of 4 October 2011. It establishes the Forum of Climate Change, Biodiversity and Environmental Services of Rondônia.

RONDÔNIA. Law 4,437, 17 DECEMBER 2018. - Establishes the State Policy for Climate Governance and Environmental Services - PGSA and creates the State System of Climate Governance and Environmental Services - SGSA, within the state of Rondônia and provides other measures.

TOCANTINS. Law 1,917 of 17 April 2008. Establishes the State Policy on Climate Change, Environmental Conservation and Sustainable Development of Tocantins, and adopts other measures.

TOCANTINS. Decree 3,007 of 18 April 2007. Creates the State Forum on Climate Change and Biodiversity.

TOCANTINS – Draft Climate Change and Environmental Services Law - under discussion

### *Brazilian Administrative Acts*

MMA NORMATIVE INSTRUCTION Nº 08, DE 24 DE AGOSTO DE 2004 Dispõe sobre o plantio, a condução e comercialização de espécies florestais, nativas ou exóticas; Revoga a Instrução normativa nº 1, de 10/5/2001.

MMA NORMATIVE INSTRUCTION Nº 112, DE 21 DE AGOSTO DE 2006 Institui e regulamenta o Documento de Origem Florestal (DOF).

MMA NORMATIVE INSTRUCTION Nº 04, DE 11 DE DEZEMBRO DE 2006 Dispõe sobre autorização prévia à análise técnica de Plano de Manejo Florestal Sustentável (Apat) e dá outras providências.

MMA NORMATIVE INSTRUCTION No. 5, OF 11 DECEMBER 2006. Establishes the technical procedures for the preparation, presentation, execution and assessment of the technical procedures for Sustainable Forest Management Plans (PMFSs) in virgin forests and their forms of succession within the legally established Amazonia region.

NORMATIVE INSTRUCTION No. 65 OF 27 DECEMBER 2020. Sets criteria and procedures for the activities of Sustainable Forest management in Settlement Projects. The purpose of this Instruction is that of standardising the administrative procedures and procedural instructions for requests for authorisation of forest handling

requests in Agrarian Reform Settlement Projects, and also the setting of parameters to make sure of multiple and sustainable use of the forest in settlement projects.

NORMATIVE INSTRUCTION NO. 16 OF 4 AUGUST 2001. Regulates, within the scope of the Chico Mendes Institute, the guidelines and administrative procedures for the approval of the community Sustainable Forest Management Plan (PMFS) for the exploitation of wood resources within the Extractivist Reserve, Sustainable Development Reserve, and National Forest.

NORMATIVE INSTRUCTION No. 21 OF 24 DECEMBER 2014. Implements the National System for Control of Origin of Forest Products – Sinaflor, in compliance with the terms set forth in Article 35 of Law 12,651 of 2012, in order to control the origin of wood, coal, and other forest products and by-products and also integrate the respective data from different institutes within the Federation.

NORMATIVE INSTRUCTION No. 1 – 12 FEBRUARY 2015. Addresses the approval of Sustainable Forest Management Plans – PMFS and their respective Annual Operational Plans – POA.





