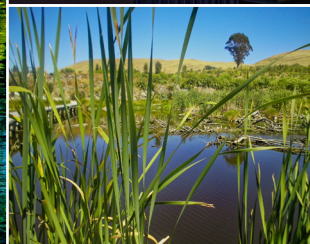




# Measuring the effectiveness of environmental law through legal indicators and quality analyses

Jérôme Fromageau, Ayman Cherkaoui and Roberto Coll  
Editors



IUCN Environmental Policy and Law Paper No. 91





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# Preface

In 2021, the IUCN World Conservation Congress in Marseille adopted Resolution 50: *Measuring the effectiveness of environmental law using legal indicators*. The first of the Resolution's four operative paragraphs "CALLS ON World Commission on Environmental Law (WCEL) and its members (...) to develop experiments and training in the creation of legal indicators on nature conservation, with the participation of law professors, lawyers, judges, prosecutors and the administrative services responsible for the enforcement of environmental law".

As part of this mandate, IUCN WCEL organised its 2nd World Environmental Law Congress European regional event under the topic "Measuring the effectiveness of environmental law through legal indicators" in Paris, University of Paris Saclay, on 16 and 17 December 2021. The Congress attracted the participation of an international audience, consisting of law professors, scholars, legal practitioners, students, and judges.

This publication draws together legal ideas presented at the Congress and showcases ongoing work on environmental legal indicators carried out by WCEL and its partners, including the *Institute of Public Law Studies (IEDP)*, *Centre International de Droit Comparé de l'Environnement (CIDCE)*, *Société Française pour le Droit de l'Environnement (SFDE)* and the *Normandie Chair of Excellence for Peace (CNP)* – to all of whom we would like to express our sincere gratitude for long-standing and fruitful cooperation.

Efforts to assess the effectiveness of environmental law through legal indicators are indispensable at a time when environmental law and its effective implementation and enforcement are crucial in the global transformation towards a sustainable society. Environmental law plays a core role in addressing a multitude of environmental challenges at all levels and scales; amounting to the planetary crises of climate change, biodiversity loss and pollution.

At the same time, we are witnessing tendencies towards legal regressions; undermining already achieved levels of protection. To avoid this, environmental law requires tools which allow governments and society in general to accurately measure and inform about the extent to which the law is being correctly and effectively applied. This is important in order to know whether the law is working towards its defined goals and purposes – or whether adjustments and changes are needed.

Environmental legal indicators, with their corresponding methodological compliance steps, provide this needed accuracy to measure the effectiveness of the law. Indicators, therefore, make it possible for decision-makers and civil society to assess the progress, challenges, and regressions in order to take the correct measures for the proper implementation of law.

This publication will hopefully serve as a guide and inspiration for lawyers, judges, negotiators, decision-makers, scholars, students, and environmental activists who wish to further explore the implementation of this crucial tool in environmental legal accountability.

My personal thanks go to Anni Lukács at the IUCN Environmental Law Centre for the editorial support, to WCEL Deputy Chair, Ayman Cherkaoui, for the excellent organisation of the 2nd European Environmental Law Congress in Paris, and to IUCN WCEL Executive Officer, Roberto Coll, for overseeing the coming-together of this publication.

*Prof. Dr. Christina Voigt*  
*Chair, IUCN World Commission on Environmental Law*



# Foreword

It is at the Jean Monnet Faculty of Paris-Saclay University that was held, in hybrid format, on 16 and 17 December 2021, as part of the 2nd Congress on International Environmental Law, the Symposium *Measuring the effectiveness of environmental law by legal indicators*, of which the transcript of most of the interventions can be found in this publication. These two days were jointly designed by the International Centre for Comparative Environmental Law (CIDCE, as per its acronym in French) and the IUCN World Commission on Environmental Law.

The law is essential to address environmental threats from pollution, biodiversity loss and global warming. However, environmental laws, both domestic and international, are only useful if they are effectively applied.

Yet, until now, governments have not considered setting up legal indicators. States, particularly authoritarian States, are too often reluctant to address the crucial issue of the effectiveness of standards, especially in the areas of prevention, the fight against pollution and the protection of biodiversity.

The creation of environmental legal indicators would contribute to better monitoring public policies and governance. These indicators first respond to the accusation of ineffectiveness of environmental law, which is not or poorly applied. It is also necessary to take into account the time of the effectiveness of the law and the principle of non-regression. Very often, adaptations are needed in many areas. Many texts were adopted about twenty years ago and are no longer adapted, which all too often justifies “simplifying the law” under the pretext of making it more effective!

The creation of legal indicators is also an opportunity to give civil society better information on the merits of texts allowing better participation for good governance, in line with the environmental rule of law, which is hardly possible in the absence of a social consensus.

Legal indicators will make environmental law more intelligible. They can help, in the future, to make it more operational, to alert on drifts, to identify possible resistances and bottlenecks and to correct them by precisely identifying obstacles while improving the visibility and legitimacy of the texts. This will allow parliaments and governments to no longer reform blindly, but to be able to identify strengths and weaknesses in the application of the rules of law to better target the needs and content of the reforms to be undertaken, provide a decision support tool and continuous improvement of protection measures.

It is in this spirit that, in 2021, the IUCN World Conservation Congress in Marseille approved Resolution 50 “*Measuring the effectiveness of environmental law using legal indicators*”. This Resolution was voted by 83 States and 474 NGOs, which hopefully suggests a future generalization of the use of legal indicators. It is therefore in the continuation of the Marseille Congress and the work of the international team gathered by CIDCE, under the chairmanship of Professor Michel Prieur, that the Proceedings of the Sceaux Symposium are, very appropriately, being published.

Jérôme Fromageau

Honorary Dean of the Jean Monnet Faculty (Université Paris-Saclay)

President of the French Society for Environmental Law



## Acknowledgements

The Symposium was organised, in the Georges Vedel conference room of the Jean Monnet Faculty, by the IUCN World Commission on Environmental Law, the International Centre for Comparative Environmental Law, the French Society for Environmental Law and its Ile-de-France section, the Institute for Public Law Studies of the University Paris-Saclay, the French Committee of IUCN, the Normandy Chair of Excellence for Peace CNRS University of Caen with the support of the French National Commission of UNESCO and Plan Bleu.

Special thanks to Professor Michel Prieur and Professor Christina Voigt, who were the main forces behind this event, to which we associate the members of the Organising Committee of these two study days: Christophe Bastin, Raphaël Brett, Ayman Cherkaoui, Michel Dourousseau, Jérôme Fromageau, Emilie Gaillard, Emily Gaskin, Agnès Michelot, Charles Vautrot-Schwarz, Frédérique Perron-Welch.

We send friendly and very grateful greetings to all the speakers, without forgetting the students of the master's degrees specialising in environmental law from the Universities of Côte d'Azur, Limoges, La Rochelle and Strasbourg.

We also express our gratitude to Christine Rey, Director of the Communication Department, and to the technicians of the Jean Monnet Faculty for the perfect logistics of those two days.

Finally, our warmest thanks to Anni Lukács, Senior Information and Documentation Officer, IUCN Knowledge Management, Learning & Library Team. It is to her that we finally owe the publication of these Proceedings!

*Jérôme Fromageau*

*Honorary Dean of the Jean Monnet Faculty (Université Paris-Saclay)*

*President of the French Society for Environmental Law*



# Acronyms

AFOLU	Agriculture/Forestry/Land Use
BAT	Best Available Technique
BVerfG	Bundesverfassungsgericht (German Federal Constitutional Court)
CAT	Climate Action Tracker
CCC	Climate Change Commission
CDM	Clean Development Mechanism
CONAMA	Conselho Nacional do Meio ambiente (Brazil's National Council for the Environment)
EC	European Community
ECJ	European Court of Justice
ECtHR	European Court of Human Rights
EP	European Parliament
EQO	Environmental Quality Objective
EU	European Union
FEU	Forschungsstelle für Europäisches Umweltrecht (Research Center for European Environmental Law)
GDP	Gross Domestic Product
HDI	Human Development Index
IAM	Integrated Assessment Model
ICJ	International Court of Justice
IDDRI	Institut du Développement Durable et des Relations Internationales (Institute for Sustainable Development and International Relations)
IPCC	Intergovernmental Panel on Climate Change
LULUCF	Land Use, Land Use Change and Forestry
NDC	Nationally Declared Contributions
PA	Paris Agreement
SABCC	Scientific Advisory Board on Climate Change
STJ	Superior Tribunal de Justiça (National High Court of Brazil)
UNFCCC	United Nations Framework Convention on Climate Change
WBGU	Wissenschaftlicher Beirat der Bundesregierung Globale Umweltveränderungen (German Scientific Council of Global Environmental Change)





– translation from French –

# Legal indicators – general presentation

**Michel Prieur**

Ladies and gentlemen, dear friends, dear students from France, Africa, and South America, many of whom follow our work: I would first like to present to you a diagnosis, and then a remedy.

## I. The diagnosis

I have a nerve-racking question to ask: is environmental law of any use? Having devoted my life to environmental law, it is not just a legal or philosophical question: it is a metaphysical question!

Asking such a question in front of an audience of eminent specialists in environmental law is also a provocation. One can doubt the benefits of environmental law if one reads the numerous national, regional, and international reports, published every two or three years, depending on the case, on the “state of the environment”.

These reports, printed on glossy paper featuring beautiful photos and colour diagrams, provide loads of information, with scientific or economic indicators and statistics on the number of endangered species, the rates of decline of air or water pollution, soil degradation surfaces, the increase in the volume of pesticide consumption, the quantity of plastic waste discharged into the sea, etc.

However, there is no information on the role played by international and national laws in these scientific findings, because we can measure everything, except the efficiency of law application.

Environmental lawyers must ask themselves the following question: for 50 years of environmental law, that is to say since Stockholm 1972, has environmental law contributed to environmental remediation and improving biodiversity? To address this question, one must first know whether the law is applied, and how it is applied.

If the state of the environment has not really improved for 50 years, is it because the law has gaps or because, although it exists, it has not been applied? Or is it because of other factors, like economic, social, or cultural issues? It is assumed of course, without scientific evidence, that it is for all these reasons at the same time. It is therefore essential to know the efficient role of the law, when it exists, and when applied.

If you read the final declarations of all the international conferences on the environment and of the conferences of the Parties to the treaties on the environment, you always find the same catchphrase: everything is just fine, Madame la Marquise, except for the fact that environmental law is not applied, or very badly, in the field. The problem does not lie in the written texts of environmental law (there is indeed enough environmental law – there is even too much environmental law), the problem lies in the application of the environmental law, both international and national, since the two are interdependent.

The question then arises: is the poor application or inefficiency of environmental law measurable? Can we scientifically evaluate the legal process, after the adoption of a law or a treaty, which involves

applying these texts? This process is long and complex: it ranges from the adoption of legal texts which condition the application, to the existence of administrative and judicial controls and the execution of court decisions. It is useless to know that there have been, in such and such a country, 50 arrests in connection with the environment: it is static information. It is necessary to know whether these services have actually been performed.

Theoretically, great and progressive case law is dead case law until implemented.

Brazilian judge Antonio Benjamin, honorary president of the World Commission on Environmental Law, will speak to us specifically on the role of the judge.

EFFICIENCY is at the heart of legal indicators creation; this is why several speakers will talk about effectiveness in international law and national environmental law: Agnès Michelot, Yann Aguila, Francis Haumont, and Laurent Fonbaustier.

## II. The remedy

The creation of legal indicators will respond to the crying need for law effectivity. We will first distinguish between effectiveness and efficiency, then we will retrace the history of legal indicators.

### 1. Effectiveness and efficiency

According to Principle 11 of the Rio Declaration of 1992,<sup>1</sup> “States shall enact EFFECTIVE environmental legislation” – one could also add “and adopt efficient treaties”.

The word “efficient” was chosen for the official translation of the expression “efficient environmental legislation”. Oddly enough, in English, “efficient” does not always mean “efficient”, but also “effective”, or both. This creates great confusion from a linguistic perspective. If we look for “efficiency” in English, we find the double translation, depending on the case: efficient or effective.

This is why Principle 11 must be construed with a double meaning:

- An efficient law or an efficient treaty is one that achieves its objectives: less pollution, and more biodiversity. It is then a question of the efficiency of the law or the treaty.
- But for a law to be efficient, the text of the law must be efficiently applied. An effective law or treaty is one that is implemented by respecting all the stages of the legal process of its application.

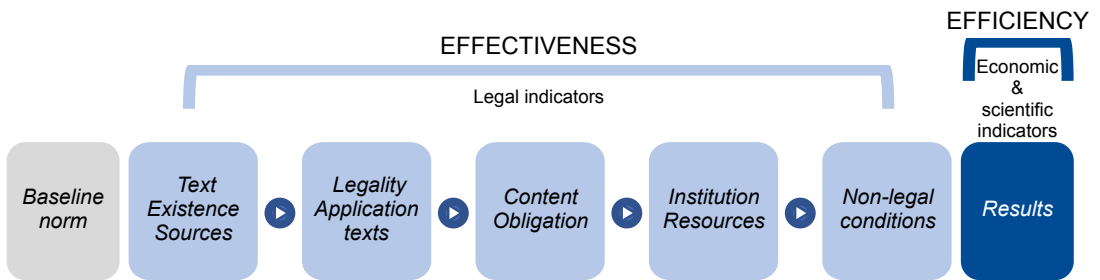
In other words, EFFICIENCY (the result) is conditioned by EFFECTIVENESS (the legal implementation). Decision 27/9 of 2013<sup>2</sup> of the United Nations Environment Programme (UNEP) is very explicit in this regard by referring to “effectiveness of the law”:

*“combat noncompliance with environmental laws, including, inter alia, measures to increase the effectiveness of administrative, civil and criminal enforcement mechanisms, institutions and laws in the field of environment” (para. 5).”*

---

1 Rio Declaration on Environment and Development, <https://www.un.org/french/events/rio92/rio-fp.htm>

2 UNEP Governing Council Decision 27/9 (2013), [Advancing justice, governance, and law for environmental sustainability](#)



**Figure 1 Effectiveness and efficiency in law**

Source: Author

The legal indicators of the effectiveness of the law will make it possible to make an X-ray of the legal stages of law application.

Law implementation is conditioned by the crossing of six stages which are as many legal indicators:

1. Existential indicators – the sources of applicable law
2. Applicability indicators – the conditions of legality, including constitutionality
3. Substantial indicators – on the content of the legal standard
4. Organic and institutional indicators – institutions and financial means to enforce the law
5. Enforcement indicators – administrative, jurisdictional, and societal controls
6. Extra-legal indicators – which condition the application of the law, including its readability, dissemination, corruption, education, etc.

To study the effective application of a given treaty or law on water or waste, a questionnaire is drawn up for each of the six families of indicators with a group of multidisciplinary experts, the majority of whom are lawyers majoring in environmental law (professors, lawyers, and magistrates).

This questionnaire is submitted to a panel of actors concerned by the application of the text studied, then the answers to this questionnaire are processed mathematically, as will be shown by the engineer Christophe Bastin who accompanied us in this adventure.

## 2. History of legal indicators

Over the past five years, there has been a growing demand for legal indicators. The historical origin of this request comes from African environmental lawyers as part of the Francophonie institutions and the International Union for Conservation of Nature (IUCN).

During environmental law colloquia in Abidjan in 2013 and in Rabat in 2016, the late Professor Stéphane Doumbé-Billé and our friend Yacouba Savadogo from Burkina Faso present here adopted final declarations calling for legal indicators to know why the environmental law is not applied or is poorly applied, in Africa and in the world. This request for doctrine led the Institut de la Francophonie pour le développement durable (IFDD), an agency of the Organisation Internationale de la Francophonie (OIF), to launch a study in 2017 in order to propose a methodology for creating these new indicators. In Yaoundé

in February 2018, this method was validated by IUCN, UNEP, the International Centre for Comparative Environmental Law (CIDCE), and the Economic Community of West African States (ECOWAS).<sup>3</sup>

As early as 2001, the Stockholm Convention on Persistent Organic Pollutants had its Article 16 entitled “Effectiveness evaluation”. It is a mix of several indicators for the scientific evaluation of effectiveness, environmental evaluation, economic evaluation, and also the evaluation of *non-compliance*, that is, the non-legal compliance that involves purely legal data. During COP6 in 2013, the Parties adopted guidelines for the evaluation of the effectiveness of the Convention (reviewed in 2019 at COP9), with the creation of a committee to assess the effectiveness of the Agreement separate from the *Compliance Committee* (Committee to monitor compliance with the provisions) which has still not been set up. Alas, the selected indicators are only quantitative: the number of Parties having taken such a measure, without trying to find out the legal process for applying these measures. In 2013, they were still complaining about the lack of information on whether the States were respecting their obligations. In September 2017, the first initiative of doctrinal reflection took place with Professor Richard Laster of the Faculty of Law of Jerusalem, national correspondent of the CIDCE in Israel.

At the political and legal level, several events can be mentioned:

- 2017 – G7 in Bologna: “developing new indicators” – as there are only scientific indicators, this means calling for legal indicators;
- 2017 – UNEA-3 (3rd United Nations Environment Assembly) in Nairobi: implement more multidisciplinary indicators;
- 2018 – Escazú Agreement,<sup>4</sup> Art 6-8: common indicators to assess “effectiveness, efficiency and progress” (the two words are used distinctly in Spanish, French, English [efficiency and effectiveness] and in Portuguese [eficacia and efetividade]) in compliance with the commitments of international law and national law;
- 2018 – Conference of the Contracting Parties to the Ramsar Convention in Dubai: the CIDCE presented, with Emilie Gaillard, a parallel event to the COP on legal indicators;
- 2019 – Approval in Nairobi of UNEP’s Fifth Montevideo Programme for the Development and Periodic Review of Environmental Law (the Montevideo Programme V): it calls for indicators “to apply environmental law efficiently”;
- 2019 – COP21 of the Barcelona Convention for the protection of the marine environment and the Mediterranean coast: for the first time in a COP, we will “develop legal indicators” – we will see with Plan Bleu and Mr. Guillaume Sainteny the test performed in 2021 in three Mediterranean States (France, Tunisia, and Turkey).

Finally, we can mention three major events in international doctrine:

- 2019 – UNEP *Environmental Rule of Law* report suggests the use of legal indicators to assess the state of environmental law (p. 236);

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3 See the book *Legal Indicators* (2018) on the <https://www.ifdd.francophonie.org/>

4 United Nations, Treaty Series, Vol. 3397. [https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg\\_no=XXVII-18&chapter=27&clang=en](https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XXVII-18&chapter=27&clang=en)

- 2020 – the Kyoto Conference of the International Law Association adopts guidelines on the role of international law for the management of natural resources (calling, in § 5-3, for the creation of legal indicators);
- 2021 – the work published by the CIDCE at Peter Lang editions with the support of the Normandy Chair for Peace is an update of the work *Measuring the Effectivity of Environmental Law – Legal Indicators for Sustainable Development* (2021), written by Michel Prieur and Christophe Bastin with the collaboration of Mohamed Ali Mékouar. This book will be presented by Emilie Gaillard. It is available in French, English, and Spanish.

## Conclusion

Thanks to IUCN and its World Commission on Environmental Law, this symposium organised at the Faculty of Law of Sceaux by the French Society for Environmental Law (SFDE) is devoted to the launch of legal indicators as a new tool for evaluating the effectiveness of environmental law. In crisis amidst numerous regressions in national law, environmental law needs new tools to inform governments and civil society to what extent the law is applied and why it is poorly applied.

The IUCN World Congress in Marseille in September 2021 adopted Resolution 50<sup>5</sup> on legal indicators. This Resolution was proposed by CIDCE, an international NGO Member of IUCN. It obtained a favourable vote from 83 States and 474 NGOs.

Resolution 50 sets out four objectives. This symposium will illustrate these four objectives.

1) This symposium first responds to the first objective: to develop training in the development of legal indicators, with two groups of students. This is how we will report on the training work initiated by the CIDCE with the University of Strasbourg and the Strasbourg students of the Environmental Law master's degree. They will present their work performed under the direction of Michel Dourousseau on the Ramsar Convention on wetlands. Students from the University of Nice will then present their work on the Barcelona Convention protocol on critical situations, carried out under the direction of Grégoire Leray and Jean-Christophe Martin.

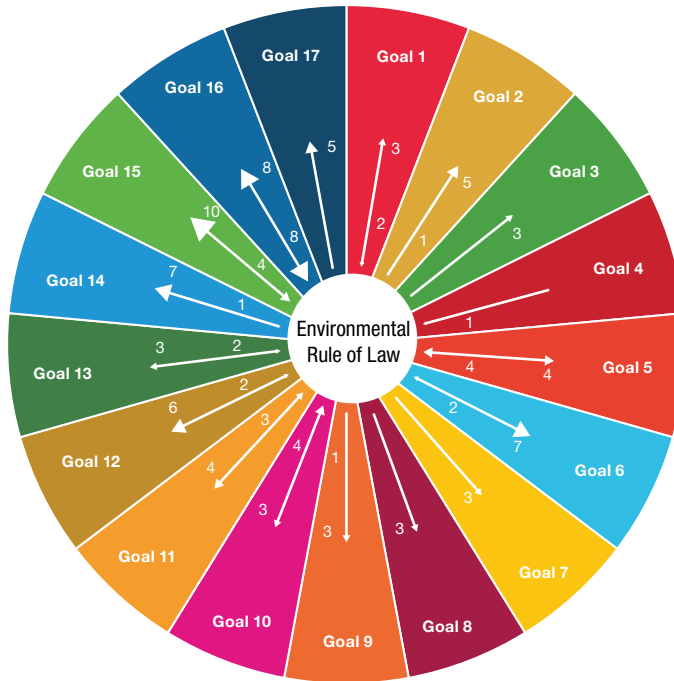
2) It is then a question of “developing experiments”. As such, we will present work carried out since 2019 as part of the Normandy Chair for Peace in Caen with the unlimited and benevolent support of Emilie Gaillard. This work relates to the creation of legal indicators to assess the effectiveness of a protected area: in Argentina with Gonzalo Sozzo, in Brazil with Fernanda Cavedon Capdeville, in Portugal with Alexandra Aragao, and in Tunisia with Afef Hammami Marrakchi. Then, owing to the support of Plan Bleu, work performed in 2021 on the effectiveness of the Barcelona Convention will be presented on Turkey by Professor Ibrahim Kaboglu.

3) IUCN has set another target relating to the Sustainable Development Goals (SDGs), based on the worrying observation that while the 17 SDGs are accompanied by 231 indicators, there are practically no real legal indicators. Why? Because these indicators were developed by the UN Statistical Commission, which is composed solely of statisticians: no lawyer is present in this commission! For lawyers, the SDGs, not being a treaty, are not legally binding but are part of the *soft law* of international law. Does this mean that we can apply the SDGs without the law?

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5 Resolution 50, IUCN World Conservation Congress 2021, *Measuring the effectiveness of environmental law using legal indicators*, <https://portals.iucn.org/library/node/49189>

Of course not. The above-mentioned UNEP book, *Environmental Rule of Law*, demonstrates in a diagram (Figure 6-1) that the SDGs obviously cannot be implemented without environmental law.



**Figure 2 Relationship between the SDGs and the environmental rule of law**

Source: United Nations Environment Programme (2019). *Environmental Rule of Law. First Global Report*, p. 227

<b>Goal 1</b>	No poverty
<b>Goal 2</b>	Zero hunger
<b>Goal 3</b>	Good health an well-being
<b>Goal 4</b>	Quality education
<b>Goal 5</b>	Gender equality
<b>Goal 6</b>	Clean water and sanitation
<b>Goal 7</b>	Affordable and clean energy
<b>Goal 8</b>	Decent work and economic growth
<b>Goal 9</b>	Industry, innovation and infrastructure

<b>Goal 10</b>	Reduced inequalities
<b>Goal 11</b>	Sustainable cities and communities
<b>Goal 12</b>	Responsible consumption and production
<b>Goal 13</b>	Climate action
<b>Goal 14</b>	Life below water
<b>Goal 15</b>	Life on land
<b>Goal 16</b>	Peace, justice and strong institutions
<b>Goal 17</b>	Partnerships for the goals

On an experimental basis, Alexandra Aragao will also present how SDG 14 on the oceans can be effective in Portugal.

4) Finally, the IUCN Resolution invites States Members to universal environmental conventions to introduce legal indicators to facilitate the evaluation of State reports. Yacouba Savadogo will present the first state-level initiative in response to the IUCN Resolution, with Burkina Faso's plan for the 2022 Ramsar COP. During the 1st special session of the United Nations Environment Assembly in Nairobi in March 2022, States approved a political declaration (UNEP/EA.SS.1/4<sup>6</sup>). The text repeats several times the need for an effective application of the law, like a nagging refrain. States are aware of the lack of enforcement of environmental law. They call for the “[strengthening of] the implementation of existing obligations and commitments concerning international environmental law” (§4) and “the effective implementation of international environmental law [...] in accordance with the national legal systems” (§15). Legal indicators are essential tools for understanding why the law is poorly applied and how to reform the processes necessary for its implementation.

**Keywords:** environmental law–evaluation–efficiency–legal indicators–mathematical measurement.

## References

International Union for Conservation of Nature (IUCN), Members' Assembly (2020). *Measuring the effectiveness of environmental law using legal indicators*, WCC 2020 Res 050. [https://portals.iucn.org/library/sites/library/files/resrecfiles/WCC\\_2020\\_RES\\_050\\_EN.pdf](https://portals.iucn.org/library/sites/library/files/resrecfiles/WCC_2020_RES_050_EN.pdf)

Prieur, M. (2018). *Legal indicators – Tools for evaluating the environmental law effectivity*. Organisation internationale de la francophonie. <https://www.ifdd.francophonie.org/publications/les-indicateurs-juridiques/>

Prieur, M., Bastin, C., & Mekouar, A. (2021). *Measuring the Effectivity of Environmental Law – Legal Indicators for Sustainable Development*. Brussels: Peter Lang. <http://www.peterlang.com/document/1114411>

United Nations Environment Assembly of the United Nations Environment Programme (2022). *Political declaration of the special session of the United Nations Environment Assembly to commemorate the fiftieth anniversary of the establishment of the United Nations Environment Programme*. <https://wedocs.unep.org/bitstream/handle/20.500.11822/39801/UNEP.EA.SS.1.4%20-%20English.pdf?sequence=1&isAllowed=y>

United Nations (2001). Stockholm Convention on Persistent Organic Pollutants, *Treaty Series*, Col. 2256, p. 119. <https://treaties.un.org/doc/Publication/UNTS/Volume%202256/v2256.pdf>

United Nations (2018). Regional Agreement on Access to Information, Public Participation and Access to Justice in Environmental Issues in Latin America and the Caribbean, *Treaty Series*, Vol. 3397. <https://treaties.un.org/doc/Treaties/2018/03/20180312%2003-04%20PM/CTC-XXVII-18.pdf>

United Nations Environment Program (2019). *Environmental Rule of Law: First Global Report*. Nairobi. <https://www.unep.org/resources/assessment/environmental-rule-law-first-global-report>

United Nations Environment Programme, Governing Council (2013). Decision 27/9: *Promoting justice, governance, and law for environmental sustainability*.

6 Doc. UNEP/EA.SS.1/4, *Political declaration of the special session of the United Nations Environment Assembly to commemorate the fiftieth anniversary of the establishment of the United Nations Environment Programme*. <https://wedocs.unep.org/bitstream/handle/20.500.11822/39802/UNEP.EA.SS.1.4%20-%20English.pdf?sequence=1&isAllowed=y>

## About the author

**Michel Prieur** is Professor Emeritus at the University of Limoges, Honorary Dean of the Faculty of Law and Economics, and President of the International Centre for Comparative Environmental Law, an international NGO Member of IUCN. Author of numerous articles and books on French and international environmental law, he founded the French Society for Environmental Law (SFDE) and the Environmental Law Review.



– translation from French –

# Why can legal indicators measure the effectivity of environmental law, and how?

Christophe Bastin

## Abstract

Measuring effectivity aims to enhance the application of the law by identifying targets for improvement. This makes it possible to help decision-makers to better reform the texts and to enlighten the stakeholders on the benefits of the law.

Measuring the law effectivity requires the necessity to abide legal and mathematical principles. The lessons learned from the experiences confirm three needs for implementing the method: training, adaptation to the context, and identification of legal actors for the panel.

Measuring effectivity is a team effort based on four best practices:

- structuring legal and scientific skills,
- arranging committees of lawyers and scientists,
- controlling the answer subjectivity,
- mastering the measurement.

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From a mathematical perspective, the effectivity measurement is based on a simple “algorithm”: the transformation of qualitative data into a quantified level of the law effectivity over time.

Based on the definition that an algorithm relies on information from the past to predict the future, the effectivity measurement must be a tool for improving the application of the law and decision-making process.

It seems obvious once said!

But...

**“In mathematics, ‘obvious’ is the most dangerous word.”<sup>1</sup>**

To create a legal indicator, it is necessary to associate the measurement of a legal criterion and its comparison with other criteria.

**Identifying** the correct measurement of a legal criterion and comparing it to other comparable criteria makes it possible to obtain **a usable legal indicator**.

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1 Quote by Eric Temple Bell, 1883-1960, mathematician and writer.

## I. What to identify?

**A good measurement**, when it is subjective when performed several times, acquires its objective dimension.<sup>2</sup>

**A good comparison**, when it brings together several legal criteria when experienced several times, establishes a relation of language between these criteria.

**A good indicator**, when it relates to a legal state when experienced several times, expresses the real trend of effectivity.

**Identifying the effectivity measurement** is, therefore, a necessity to **create language elements for governance**.

For example, the concordance effectivity and efficiency measurements helps to understand the interactions between the implementation of law enforcement processes and the results of law enforcement.

**The intention of measuring effectivity** is not limited to the satisfaction of having properly implemented the law. It means being able to **enhance the application of the law** to better protect the environment **by scientifically identifying priority targets for improving legal areas**.

It is to **help political decision-makers** to better reform existing texts and to enlighten stakeholders on the benefits of the law.

To measure the environmental law effectivity, it is first necessary to define a reference describing:

- The legal principles:
  1. **Inventory of areas of application of the law** establishing the scope of the law subject to the measure;
  2. **Development of legal questionnaires** to identify the conditions for the law effectivity;
- The mathematical principles:
  1. **Data qualification**, allowing the formatting of the answers of the questionnaire into qualitative data that can be used and compared with each other;
  2. **Data quantification**, allowing the conversion of a response (qualitative data) into a value (quantitative data);
  3. **Data aggregation**, allowing mathematical and statistical combinations of data between them to **establish legal indicators**;
  4. **Measurement operation**, allowing the search for trends and correlations on **the sources of improvement or reinforcement of effectiveness**; it is important to **express them as simply as possible by responding to objectives** to characterize effectivity;
  5. **Measurement representativity**, ensuring **the objectivity of the measurement**, by establishing and respecting **a reference system to frame the measurement process**, ensuring **the representativity of a panel of legal actors** answering the questionnaire and by exercising **a consistency check of the responses**;

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<sup>2</sup> Inspired by the quote "It is insofar as it is subjectivity, insofar as it is lived, that an event acquires its real dimension." Martel, J.-P. (1973). *The complete works of Marguerite T. De Bané*, Montreal: Cercle du Livre de France.

6. Measurement representation, establishing the visual translation of data processing in the form of a set of coherent visual information that facilitates understanding of the situation and decision-making by covering the situation globally and focusing on the efficiency items;
7. Statistical effectivity monitoring, i.e. the measurement of the effectivity evolution, the progression, or the regression of the law over time; for the governance of the law, its progression, and its non-regression, it is the need to compare the same areas of application of the law over time, experienced by different actors.

These methodological principles are described in the book entitled “Measuring the environmental law effectivity – legal indicators at the service of sustainable development”.<sup>3</sup>

Following the methodological tests, **the feedback from the experiences** brought added value mainly in the **interest and benefits of the approach** by the experts and the involved panellists from different states (Brazil, France, Portugal, Tunisia, and Turkey).

The effectivity measurement tests have made it possible to learn lessons and confirm three fundamental needs for implementing the method:

1. **Training in legal indicators** before starting the process;
2. **The contextual adaptation of the method** to the measurement scope specifics;
3. **The census of legal actors** (parent population) to build the panels.

## II. Methodological inspiration

It was, therefore, important to identify areas of activity where this notion of measuring effectivity applies, where process control is the only guarantee of conformity expected from the use of the product: the aerospace industry being one of these.

The analogy is not obvious. The law like the aerospace industry cannot guarantee the result of their product *a priori*. It is always *a posteriori* that we know that a rocket achieves its objective and, in a similar way, that the law yields the expected effect.

In the aerospace industry, efforts to ensure that the product works properly focus on controlling the processes, from design to commissioning. In law, efforts to ensure its proper application must focus on implementing the law application.

The industry applies different methods to control these processes. The most widespread method that has proven itself is the statistical control of processes, known as MSP,<sup>4</sup> from which we drew inspiration to elaborate on the method for measuring the effectivity of environmental law.

## III. How to measure

The effectivity measurement is **multidisciplinary teamwork** involving good practices in terms of execution of the effectivity measurement.

3 Prieur, M., Bastin, C. & Mekouar, A. (2021). *Measuring the Effectivity of Environmental Law – Legal Indicators for Sustainable Development*. Brussels: Peter Lang. <http://www.peterlang.com/document/1114411>

4 Pillet, M. (2005). *Applying Statistical Mastery of MSP/SPC Processes* (6<sup>th</sup> ed.). Paris: Eyrolles. Bergeret, F. & Mercier, S. (2011). *Statistical process control. Principles and industrial cases*. Paris: Dunod, The New Factory. Duclos, E. (2008). *Statistical MSP/SPC process control*. Doussard, Emmanuel Duclos Consulting.

The first good practice involves structuring the skills since the willingness to implement the effectivity measurement requires a fourfold skill – legal, sociological, mathematical, and statistical:

- **legal**, since the criteria measured must respond to a factual state of the law enforcement process;
- **sociological**, since these criteria must provide exhaustively reflect the performance of all actors through the application of the law;
- **mathematical**, since these same criteria will have to be aggregated together to produce legal effectivity indicators;
- **statistics**, since these same criteria will be monitored over time to measure the evolution of progress in terms of sustainable development.

Measuring the law effectivity is therefore a complex thing, and so is its implementation.

**The second best practice is to get organised:**

- **in committees of lawyers**, to design the rules of the measurement system (scope, criteria, etc.);
- **in committees of scientists**, to design the processing of the measurement system (indicator, panel, graphic representation, etc.).

**The third good practice involves controlling the subjectivity of the answers** by controlling the representativity of the people interviewed. This involves controlling the panel of people involved, the sampling plan, by defining:

- sample size;
- sampling mode;
- sample representativity;
- performing a comprehensive investigation.

**The last good practice consists in mastering the measurement** thanks to the analysis of:

- the form of dispersion (sources of variations) of the effectivity measurement;
- controlling these sources of variation (variability);
- control of the measurement results (capability of measuring effectivity);
- control of the effectivity measurement (compliance with measurement rules).

## Conclusion

Performing the effectivity measurement requires methodological compliance with the steps to be able to establish effective statistical monitoring. On the other hand, if we want the measurement to be usable, it is important to generate a statistical follow-up of the said measurement to translate the trends in the application of the law (progress, stagnation, or regression) into a report of governance objectives. It is teamwork through which lawyers and scientists need to learn from each other.

To quote Eric Temple Bell, the word “obvious” is dangerous.

The effectivity measurement represents **a continuous measurement, interdependent of other measurements**, which makes it possible to express language elements.

It is therefore essential to control its implementation.

The big trap would be to stay satisfied with a measurement of the past and to analyse the effectivity results to “predict” the level of achievement of governance objectives.

The effectivity measurement uses mathematics applied to the field of law **to serve the governance of law** and **not to govern law**. These are the conditions that make the effectivity measurement a pillar of the non-regression of law.

**Keywords:** legal indicator – effectivity measurement – source of improvement – decision support – governance.

## References

Bergeret, F. & Mercier, S. (2011). *Statistical process control. Principles and industrial cases*. Paris: Dunod, The New Factory.

Duclos, E. (2008). *Statistical MSP/SPC process control*. Doussard, Emmanuel Duclos Consulting.

Pillet, M. (2005). *Applying Statistical Mastery of MSP/SPC Processes* (6<sup>th</sup> ed.). Paris: Eyrolles.

Prieur, M., Bastin, C., & Mekouar, A. (2021). *Measuring the Effectivity of Environmental Law – Legal Indicators for Sustainable Development*. Brussels: Peter Lang. <http://www.peterlang.com/document/1114411>

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**Christophe Bastin** chairs the engineering and consulting company SIC Nouvelle-Aquitaine. Designer of the mathematical measurement of environmental law effectivity since August 2017, he is co-author of the book “Measuring the environmental law effectivity – Legal indicators at the service of sustainable development”.



– translation from French –

# The efficiency of international environmental law

Yann Aguila

## Abstract

Through the eyes of a Martian who came to Earth to observe the reactions of humans to the destruction of their planet, one thing is certain: the process of making international environmental law is not efficient. The regulatory system function is poorly ensured, both from the point of view of *drafting* texts, as shown by the failure of ambitious projects such as the Global Pact for the Environment, and from that of their *application*, such as the illustration of the difficulties of implementing the Paris Agreement. The causes of this inefficiency are matrix-based: the system rests on old concepts, poorly adapted to contemporary requirements. The notion of sovereignty must therefore be re-read. The establishment of new world governance will go through a return to values and a strengthening of international organisations. International democracy will prove the major challenge of the 21<sup>st</sup> century. Finally, starting today, the national judge can become the guardian of the promises of the States.

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Dear friends,

First of all, I would like to sincerely thank the people behind the organisation of this symposium. I am very happy and honoured to take part in it. It seems to me that the global theme that you have chosen – legal indicators – contains the significant potential for “putting pressure” on States to better protect the planet. This reminds me a bit of what happened in the economic field with the annual rankings of countries by the World Bank. Every year, in its *Doing Business*<sup>1</sup> report, the World Bank ranks countries according to the *economic* efficiency of their legal systems. Recently, France was upset to discover that it was often poorly ranked: as a general rule, the legal systems of Anglo-Saxon countries were better ranked, being presumed to be more business-friendly. I would dream, and it’s almost an invitation to all our research friends and all research centres, of a *Doing Business* report on the environment (“*Doing Green*”?) which would draw up a ranking of States each year according to the *environmental* efficiency of their legal systems, with laurels on one side and dunce caps on the other... This could be a good way to encourage them to act, through the technique of *name and shame*. If one of the ultimate objectives of this still embryonic research on legal indicators is to lead to this type of classification someday, I applaud with both hands!

This brings me to my subject, which is the efficiency (or effectiveness?) of international environmental law.

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1 World Bank (2020). *Doing Business 2020*. Washington, DC. This publication has been suspended since 2020 due to methodological criticism.

Preliminarily, as a precaution, I would say that the legitimacy to address this subject remains modest: in reality, I am no specialist in international law. I understood that there was a great academic distinction between internists and internationalists. I'm more of an internist. In addition, for my part, even though I teach public law at Sciences Po, I am first and foremost a practitioner, former judge, and now a lawyer.

It is true, however, that two experiences can legitimize my few words on the subject. The first dates back to 2015: it is the report of the Environment Commission of the Lawyers Club on the efficiency of international environmental law.<sup>2</sup> I also remember that we had great debates at the time on the point of knowing whether it was better to use the word “efficiency” or “effectiveness”. What was the purpose behind the creation of this report? It was at the time of COP21. We were then most proud to host such a major international summit in France, which aimed to adopt an international climate treaty. Suddenly, however, the question that could legitimately be asked was: are the treaties really efficient? Are they really effective? Is it really useful to adopt a new treaty? This was the question at the origin of this report, which provides a diagnosis of the state of international environmental law and formulates several proposals, including the adoption of a Global Pact for the Environment.

My second experience is related precisely to the Global Pact for the Environment project, which we conducted with a large number of lawyers, some of whom are present in the room. Our idea has also joined other projects since Professor Michel Prieur had also drafted, which is also extremely interesting, a draft International Pact “on environmental rights”. The purpose of this Pact would be to enshrine environmental rights and duties in an international text: right to a healthy environment, right to air, right to water, right to environmental information, etc.

This is how I had the opportunity to follow the diplomatic negotiations on the draft Pact for several years. In two words, it's like a Netflix series: there were several seasons. The first season is that of the “*success story*”, with the adoption of a resolution of the United Nations General Assembly, in 2018, in New York, which kicked off the negotiations. The title of this resolution was exactly our proposal: “*Towards a Global Pact for the Environment*”.<sup>3</sup> For us, who had launched the idea of a Pact, it was incredible! We were full of hope back then... Unfortunately, the second season is one of failure: the diplomatic negotiations failed in Nairobi, at the headquarters of the United Nations Environment Program (UNEP), mainly because of the joint opposition of several large countries – including the United States and Russia... Two countries that are often allied against environmental treaties. But today, a third season is underway, and everything is still possible. As you may know, in Geneva, the Human Rights Council adopted in October 2021 a resolution on the right to a healthy environment,<sup>4</sup> which is a kind of extension of the Pact. Now the ball is back in New York, in the court of the United Nations General Assembly (UNGA): the same draft resolution on the right to a healthy environment could be adopted by the UNGA. And later there could be a fourth season: this resolution could one day be transformed into a real international treaty, with binding legal value... i.e. a form of Global Pact for the Environment.

2 The Lawyers Club, Environment Commission (2015). *Enhancing the efficiency of international environmental law: duties of States, rights of individuals*. [https://www.leclubdesjuristes.com/wp-content/uploads/2015/11/CDJ\\_Rapport\\_Renforcer-lefficacit%C3%A9\\_Nov.2015\\_FR.pdf](https://www.leclubdesjuristes.com/wp-content/uploads/2015/11/CDJ_Rapport_Renforcer-lefficacit%C3%A9_Nov.2015_FR.pdf)

3 United Nations General Assembly (2018). Resolution 72/277: *Towards a Global Pact for the Environment*. [https://globalpactenvironment.org/uploads/CDJ\\_Rapports\\_Increasing-the-effectiveness\\_Nov.2015\\_UK.pdf](https://globalpactenvironment.org/uploads/CDJ_Rapports_Increasing-the-effectiveness_Nov.2015_UK.pdf)

4 United Nations, Human Rights Council (2021). Resolution 48/13: *The human right to a clean, healthy, and sustainable environment*. <https://digitallibrary.un.org/record/3945636?ln=fr>



This experience of the Pact has therefore allowed me to learn some lessons about our global environmental governance system. I drew an article from it, co-written with Marie-Cécile de Bellis, a member of the Pact team.

This article is a small parable, a sort of fable entitled “*A Martian at the United Nations or naive reflection on global environmental governance*”.<sup>5</sup> It is easily accessible online and is also available in English.

Why a Martian? Because we imagined, with what it can be naive, a Martian who would have come with his flying saucer in 2015 in Paris at the time of the COP21. We could also imagine it in 2021 in Glasgow at the time of COP26, in the same way, because unfortunately all the COPs follow each other and look alike... And you can already see my somewhat critical, pessimistic, worried diagnosis on the international environmental law effectiveness...

This Martian was fond of Earth: it was his favorite planet, green and blue... And in 2015, at the time of COP21, he had an observation and a question. The conclusion is that the Earthlings are destroying their planet, which was an extraordinary gift. Everywhere, one could observe pollution, plastic in the oceans, the destruction of biodiversity, and the climate degradation... So, the Martian wonders: but what are the Earthlings doing to act? We know that it is imperative, and urgent to act: so what are they doing?

So... these little Earthlings gather at 200 States, all sovereign, like roosters in their little territory. They sit around a table, and they discuss, and they discuss, and they discuss, and they discuss... And it's always the same scenario; it's like a movie, the end of which we know at the very beginning: “Are we going to save the planet? Who will win? Each time, it's “the last chance COP” and until the last day, until the last night, we tell ourselves that we are not going to make it, that there will be no agreement. And indeed, in 2015, on the last day, Friday, there was no agreement... So we added an extra day, Saturday. And we met all night. And in the morning, President Laurent Fabius, his eyes darkened, raised his little green gavel and pronounced the magic words: “*We have a deal!*”. Everyone applauded in excitement: we had reached an agreement!

Let's take a step back: is it serious? Is this mode of the decision-making process rational? Given the seriousness of the stakes, is our process of adopting an international law efficient? Probably not...

So the Martian decides to meet the Secretary-General of the United Nations, in his office, and he gives him a report with proposals to improve global governance of the environment... The Martian then leaves the Secretary-General's office, to go back to his planet. He gets up, he walks towards the door... And there, he stops and turns around, and he says to the Secretary-General, like uttering his last message: “However, your planet is beautiful... Seen from the sky, it has no borders...”

I know how utopian, and naive this Martian gaze can be. The problem is, however, that the day the Martian returns, in a few years, he may not have much to admire. It may be utopian, but it is also a “*realistic utopia*” as Mireille Delmas-Marty would say. The realistic utopia is that of the absolute necessity of changing the game rules.

Because, yes, and this will be my **first observation**, international environmental law is in fact neither efficient nor effective. My **second observation** will then concern the causes of the problem: for

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5 Aguilu, Y. & de Bellis, M.-C. (2021). “A Martian at the United Nations or naive thoughts on global environmental governance”, *European Law Review*, issue 2, p. 113-123. <https://legrandcontinent.eu/fr/2021/03/14/un-martien-aux-nations-unies>

the most part, global governance today is based on the absolute sovereignty of States, which is no longer adapted to today's world. And the **third observation**: what solutions can we come up with? Besides, I'm being optimistic: I know that we will not escape the reform, by force of circumstance. Because the day we have submerged cities and disappearing islands, we will end up establishing this new form of global governance. It would simply be good not to wait too long either.

## I. First observation: international law is neither efficient nor effective

Of course, we can always see the glass half full or half empty... If we see it half full, if we take a look at the positive side, international environmental law has been expanding rapidly since 1972. Many international conventions have been adopted ever since. Still, if we judge a tree *by its fruits*, if we measure the results in terms of protecting the planet, the data is catastrophic – and the word is not excessive – whether it is a question of global warming or the state of biodiversity: greenhouse gas emissions continue to increase, and animal populations continue to fall. Above all, if we look in detail, many draft international conventions have failed or have not been adopted. And when conventions have been adopted, either they are not ambitious or they are not applied. It is certain that we experience great difficulty in “manufacturing” international law. The fabric of law is not efficient, and international environmental law poorly fulfils its “regulatory function”.

The examples of failures are numerous. One can observe a double failure in the text elaboration as well as in its application. Surely we can think of the proposed Global Pact for the Environment, which is coming up against significant resistance from major States. We could also speak of the failure of the World Environment Organisation, of the fact that we still do not have an International Court of the Environment, of the failure of Rafael Correa's project to create a fund to protect Yasuni Park in the Amazon, etc. Unfortunately, the list of failures is extremely long.

Therefore, there is first a failure in the elaboration of the texts, then a failure in their *application*. There are many examples of it as well. If we take the example of biodiversity, we can refer to the “Aichi targets”.<sup>6</sup> These were 20 ambitious goals to be achieved over 10 years, adopted in 2010. A report was published in 2020 by the Secretary-General of the United Nations: it revealed that almost none of these objectives had been achieved.

As for climate, I will simply summarize the state of the situation with the closing image of COP26: British Minister Alok Sharma who apologized with tears in his eyes. And these tears make me think of other tears: a friend of mine who was a teacher and who told me that she had given a course at the university presenting the state of the climate and the latest IPCC report... At the end of the course, two female students came to see her crying. Forgive me for being a little excessive, but I believe this subject deserves it. Because when it is young people who are concerned, and when we explain to them what awaits them by 2040/2050, it is their own life that is at stake, it is their life that will be affected. So yes, obviously, international environmental law is not efficient, and there is no doubt about that.

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6 Convention on Biological Diversity, Conference of the Parties (2010). Decision X/2: *Strategic Plan 2011-2020 and Aichi Biodiversity Targets*. <https://www.cbd.int/doc/decisions/cop-10/cop-10-dec-02-en.pdf>

## II. Second observation: what are the causes of this inefficiency?

I believe that the causes are profound, that they are due to the very conception of the international order. The mode of governance, and, above all, the international law-making process is based on old concepts, which date back to at least the 19<sup>th</sup> century, with an *absolute* conception of sovereignty in particular, which no longer corresponds to today's world.

I think the problem is matrix-based. I don't have the time here, nor indeed the skill, to go much further, but I refer to an excellent article published by Eyal Benvenisti from 2013, "Sovereigns as trustees of humanity",<sup>7</sup> which uses an eloquent image. He says that we have gone from a world of scattered villas to a world that resembles an apartment building. International law was conceived at a time when States were like people who lived in individual houses, located far from each other. In today's world, however, all the States reside in the same large apartment building... And suddenly, that changes everything, because each State has an impact on its neighbour. If I play the piano late at night in a building, my neighbour will hear me: here, it's exactly the same thing. We have common parts (the airspace, the moon, Antarctica, deep waters, the Amazon, and the atmosphere, to name a few), and whatever a State does will have an impact on the other ones. Obviously, this leads to a review of the notion of sovereignty. Sovereignty is important, but it cannot be absolute. We must move from a solitary sovereignty to a united sovereignty, to use the formula of Mireille Delmas-Marty. Many lawyers have been trying to tell the States this for years but apparently have not yet been heard.

## III. Some thoughts and/or solutions

First, **the return to values**. It seems to me that, for 50 years, we have had an overly technical approach to international environmental law. The treaties we have adopted are very technical: these deal with greenhouse gas emissions, chemicals, ozone, and so on. When we have this fragmented, sectoral approach to international law, sector by sector, we end up forgetting values.

Values, however, are essential. They are the fundamental pillars of a legal system. It's a bit like in a couple: one day or another, we end up having difficulties. It's the same thing for States when they sign a treaty: one day or another, they end up having difficulties. Some then risk breaking their promise, or even leaving the treaty: this is how Canada left the Kyoto Protocol, or how Donald Trump's United States withdrew from the Paris Agreement.

But when you encounter difficulties in a relationship, you have to remember the values, you have to remember "why" we love each other. And it's the same for States. Let's reread the Charter of the United Nations,<sup>8</sup> adopted in 1945 in the aftermath of the Second World War. It begins with these formidable words: "*We, the peoples of the United Nations*". What height of view, what breath! By contrast, when we observe today's procrastination of States with extremely technical treaties, we wonder whether we should not return to values. This was the whole purpose of the Global Pact for the Environment. Rights and general principles of law are essential, these form the basis of a legal system. This is the first step.

7 Benvenisti, E. (2013). "Sovereigns as trustees of humanity: on the accountability of states to foreign stakeholders", *The American Journal of International Law*, 107(2), 295-333. <https://doi.org/10.5305/amerjintelaw.107.2.0295>

8 United Nations (1945). *United Nations Charter*. <https://www.un.org/en/about-us/un-charter/full-text>

The second step is the **reinforcement of international organisations**. It is necessary to maintain strong international organisations that raise **global public concern**.<sup>9</sup> Here, the model of the European Union is very useful for our reflection: it is the Commission that raises the common European concern, distinct from the particular concern of each State. We must develop the “non-state” dimension of our international organisations. This undoubtedly presupposes two axes of reform: first, *in relation to their powers*, they must be given real normative power, so that the resolutions they adopt are binding and can be invoked in the internal order; and secondly, and as a consequence, *in relation to their organisation*, we must reflect on their democratic aspect, so that the standards they issue are more legitimate and therefore better accepted and better applied. **International democracy** is an immense subject, which is entirely before us, without doubt, “the” great subject of the 21<sup>st</sup> century.

The last step focuses on *domestic* law. I believe that **domestic courts play an essential role** in enhancing international law efficiency. Since there is currently no efficient international court, since at the international level, justice is only an option, I believe that domestic courts fit best in ensuring compliance by States with international treaties.

In this respect, the *Commune de Grande-Synthe* judgment of the State Council<sup>10</sup> is very interesting since it is based in particular on the Paris Agreement: based on this agreement, it urges the French Government to strengthen its climate policy. And it takes further action by an interesting reasoning considering that, on the one hand, of course, the Paris Agreement does not have a direct effect but that, on the other hand, it still has a “*interpretative power*”. The Paris Agreement, therefore, enables the Council of State to interpret national law to endow it with a stronger legal scope. It is clear here that the domestic judge takes on the role of guarantor of international environmental law effectiveness.

## Conclusion

In conclusion, I therefore call on all domestic lawyers and, in particular, all domestic courts, to become aware of their power in this area: they can give treaties much more effect. While waiting for the hypothetical reform of environmental governance or the creation of an international court for the environment, it is quite possible, here and now, in a very practical and immediate way, that domestic courts be the guardians of the State promises. States commit: they must then respect their commitments. And the national courts play an essential role in this area.

**Keywords:** efficiency of international environmental law – global pact for the environment – development of international norms – application of international law – regulatory function of international law – sovereignty – international organisations – national implementation of international norms – common values – global public concern.

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9 Aguilá, Y. & de Bellis, M.-C. (2023). The global public interest: a concept for founding a global legal system adapted to our time, in *Journeying with Mireille Delmas-Marty – Open mixtures in honor of Mireille Delmas-Marty*. Mare & Martin. See also: Aguilá, Y. & de Bellis, M.-C. (2022). On the Concept of a Global Public Interest: Some Reflections. *Environmental Policy and Law*, 52(1), pp. 13-20. <https://doi.org/10.3233/EPL-219020>

10 See in particular the first *Grande Synthe Joint decision* of November 19, 2020, followed by the decision of July 1, 2021. The Decision of the Council of State N°. 427301 of November 19, 2020: <https://www.conseil-etat.fr/fr/arianeweb/CE/decision/2020-11-19/427301>. The Decision of the Council of State N°. 427301 of July 1, 2021: <https://www.conseil-etat.fr/fr/arianeweb/CE/decision/2021-07-01/427301>.

## References

- Aguila, Y. & de Bellis, M.-C. (2021). A Martian at the United Nations or naive thoughts on global environmental governance. *European Law Review*, issue 2, p. 113-123. <https://legrandcontinent.eu/fr/2021/03/14/un-martien-aux-nations-unies>
- Aguila, Y. & de Bellis, M.-C. (2022). On the Concept of a Global Public Interest: Some Reflections. *Environmental Policy and Law*, 52(1), pp. 13-20. <https://doi.org/10.3233/EPL-219020>
- Aguila, Y. & de Bellis, M.-C. (2023). The global public concern: a concept for founding a global legal system adapted to our time, in *Journeying with Mireille Delmas-Marty – Open mixtures in honor of Mireille Delmas-Marty*. Mare & Martin.
- Benvenisti, E. (2013). “Sovereigns as trustees of humanity: on the accountability of states to foreign stakeholders”. *The American Journal of International Law*, 107(2), 295-333. <https://doi.org/10.5305/amerjintelaw.107.2.0295>
- Convention on Biological Diversity, Conference of the Parties (2010). Decision X/2: *Strategic Plan 2011-2020 and Aichi Biodiversity Targets*. <https://www.cbd.int/doc/decisions/cop-10/cop-10-dec-02-en.pdf>
- The Lawyers Club, Environment Commission (2015). *Enhancing the efficiency of international environmental law: duties of States, rights of individuals*. [https://globalpactenvironment.org/uploads/CDJ\\_Rapports\\_Increasing-the-effectiveness\\_Nov.2015\\_UK.pdf](https://globalpactenvironment.org/uploads/CDJ_Rapports_Increasing-the-effectiveness_Nov.2015_UK.pdf)
- United Nations, General Assembly (2018). Resolution 72/277: *Towards a Global Pact for the Environment*. <https://digitallibrary.un.org/record/1617171?ln=fr>
- United Nations Human Rights Council (2021). Resolution 48/13: *The human right to a clean, healthy, and sustainable environment*. <https://digitallibrary.un.org/record/3945636?ln=fr>
- World Bank (2020). *Doing Business 2020*. Washington, DC. <https://www.doingbusiness.org/en/reports/global-reports/doing-business-2020>

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– translation from French –

# The effectiveness of European environmental law

Francis Haumont

## Abstract

First of all, the effectiveness of European environmental law of the European Union and the Council of Europe depends on regulation effectiveness. For the Union law, this also involves the transposition of environmental directives into domestic law. This presupposes the respect of deadlines and the conformity of transpositions, but also the adoption of implementing measures. Review will be exercised through the European Commission with referral to the Court of Justice as necessary. This may also be questioned by national courts. The case-law of the Court of Justice is undeniably a means of making environmental law effective, in particular when these decisions are accompanied by periodic penalty payments. The case-law of the European Court of Human Rights further contributes to environmental law effectiveness.

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Even if, by hypothesis, its territorial scope is less than that of international law, the question of the European environmental law effectiveness is a vast subject with multiple facets, *even more so* if, alongside the role of the European Union, the work carried out under the aegis of the Council of Europe is taken into consideration. As part of this contribution, necessarily synthetic, we will be focusing on the elements that seem essential for understanding and assessing the level of effectiveness of European environmental law.

It will be stated that European environmental law is effective if its reality is indisputable and if it produces a real and tangible effect. It is this common thread that leads us to the following thoughts on the environmental law of the European Union and the Council of Europe.

## I. European Union law

### 1. The normative environmental law effectiveness

The positive European environmental law of the European Union is an indisputable reality. The legal arsenal of the European Union is impressive. There is first of all that of the treaties: the Treaty on European Union (TEU) Article 3, § 3 of which recalls that the Union is working for sustainable development based in particular on a high level of protection and improvement of the quality of the environment; the Treaty on the Functioning of the European Union (TFEU), and in particular Article 11 on the principle of integrating environmental concerns into other policies, Article 114 on the harmonization of legislation and Articles 191 to 193 on environmental policy; or even the Charter of Fundamental Rights, and in particular Article 37 on the environment protection. In addition, the Union has equipped itself – and continues to do so – with an abundant panoply of regulations, directives,

decisions, and communications covering a multitude of environmental law aspects. We agree in saying – the European Union itself affirms this – that the Union's environmental law is probably the most complete, the most precise, and the one which imposes the highest standards, even if others believe that the Union does not do enough, often contenting itself with *greenwashing*.

This undeniable effectiveness does not preclude certain notable shortcomings. We will point out, in particular, the failure of the 2006 proposal for a soil protection directive, withdrawn by the decision of the Commission on 21 May 2014<sup>1</sup> on the grounds that this proposal “is no longer relevant” after writing that the framework directive would be the best instrument to ensure the strategy of the European Union.<sup>2</sup> Even if we can welcome the adoption, on 17 November 2021, of the European Union Soil Protection Strategy for Horizon 2030,<sup>3</sup> this is not a binding legislative document.

## 2. Transposition into national law, the key to the EU law effectiveness

The EU environmental law effectiveness largely depends on its transposition into domestic law by the Member States. We are essentially talking here about European directives since the regulations are, with some exceptions,<sup>4</sup> immediately applicable on the territory of the Union, the Member States having only to ensure one or the other practical mode of operation.<sup>5</sup> This is not the case with directives, which constitute indirect legislation binding on any Member State as to the results to be achieved while leaving the national authorities with competence as to form and means (TFEU, art. 249, § 3). Member States are thus required to formally transpose any directive into their national law within the prescribed period.

### 2.1 The terms

As soon as the States are allowed some flexibility in fixing the form and the modalities of the mechanisms decided by a directive, the effectiveness linked to the transposition is susceptible to vary from State to State. However, Member States must follow several transposition rules. This is why the word-for-word copying of a directive is not allowed. In this context, States are not required to use the same vocabulary so long as the result is achieved; the example of environmental assessments illustrates this perfectly since, according to national laws, we will speak of an environmental impact assessment study, an impact study, an environmental report, etc. If national legislation pre-exists a directive and is fully compliant with it, no formal transposition is required. In the majority of cases, however, an adjustment is required.<sup>6</sup>

Whatever the methods selected, the transposition into domestic law must be clear and precise and apply to the entire State territory. This transposition can be done by the adoption of a single law, or

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1 2014/C-153/03.

2 Commission, *Soil Protection – The Story behind the Strategy*, 2006, p. 19.

3 Commission, *EU Soil Strategy 2030 – Reaping the rewards of healthy soils for people, food, nature, and climate*, COM(2021) 699 final.

4 See Regulation (EEC) N°. 1836/93 allowing voluntary participation by companies in the industrial sector in a Community eco-management and audit scheme, better known by its English acronym EMAS.

5 See for example Regulation (EC) N°. 1013/2006, on shipments of waste, which requires Member States to designate competent national authorities and administrations.

6 See for example Directive 85/337 concerning the assessment of the impact of certain public or private projects on the environment, inspired by the French law of July 10, 1976.



of a law and implementing regulations forming a whole, but it can also be done by adjustments of various laws and scattered regulations in domestic law.

To ensure the effectiveness of the transposed law, the transposition must take place through a binding legal vehicle, which excludes transposition through an administrative circular, an administrative practice, or even an interpretation of national law by domestic case-law under the directive,<sup>7</sup> the latter methods being easily reversible.

## 2.2 The deadline

Since the effectiveness of environmental law resulting from European directives is linked to the transposition of the latter, the period within which this transposition must take place is decisive.

- **Deadline setting**

The deadline for transposition available to Member States is set by the directive itself. It is often comfortable, three years for example, except for more specific revisions of certain directives which transposition does not require the adoption of all national legislation.

The deadline is imperative and its exceeding is penalised. The Commission and the Court of Justice of the European Union do not accept any excuse and certainly not those linked to the complex institutional organisation of a Member State with a federal<sup>8</sup> or regional structure.

- **Effects of an untransposed directive**

Failure to comply with the transposition deadline may give rise to litigation as well as penalties (*infra*). That said – and this is a major element in the EU law effectiveness – directives that have not been transposed can still have effects.

The most striking aspect is undoubtedly the direct effect that a directive can have – or more precisely that some of its provisions can have – on the expiry of the transposition period. If a provision is clear, precise, and unconditional (i.e. it does not require any internal enforcement action), it can be invoked directly by an individual against public authorities,<sup>9</sup> as repeatedly recognised by the Court of Justice.<sup>10</sup>

In the absence of direct effect, a directive could, notwithstanding the absence of transposition within the required period, be taken into consideration<sup>11</sup> by leading the latter to adopt an interpretation of national law that is in conformity with the directive,<sup>12</sup> to exclude non-conforming national legislation<sup>13</sup> or to order the national authorities to repair the damage suffered by an applicant as a result of non-

7 CJEU, 3 March 2011, C-50/09, *Commission v. Ireland*, concerning the aforementioned Directive 85/337.

8 For example, the transposition of Directive 96/82 concerning the control of major accident hazards involving dangerous substances (“Seveso”) in Belgium required a federal law, three regional laws, and a cooperation agreement between the Federal State and the three Regions, an agreement which had to be ratified by the four Parliaments, which nevertheless could not justify a delay in the transposition period.

9 Not by a public authority against an individual, nor between individuals.

10 See, for example, CJEU, 25 July 2008, C-237/07, *Janecek v. Freistaat Bayern*, on ambient air quality; CJEU, 21 March 2013, C-244/12, *Salzburger Flughafen GmbH*, regarding Directive 2011/92 on the assessment of the environmental effects of projects.

11 On these effects, see in particular CJCE, 19 September 2000, C-287/98, *Linster et al*, as well as the conclusions of Advocate General Ph. Leger.

12 ECJ, 10 April 1984, C-14/83, *Von Colson and Kamann*.

13 ECJ, 19 September 2000, C-287/98, *Linster et al*.

transposition within the required period.<sup>14</sup> These possibilities of invoking directives not transposed within the deadline contribute to their applicability and therefore to their effectiveness.

Finally, it will be recalled that Article 4, § 3, of the TEU advocates the principle of sincere cooperation, which implies in particular that between the adoption of a directive and the final date of its transposition, the Member States refrain from taking measures that would seriously compromise the results prescribed by the directive.

### 2.3 The transposition quality

- **Principle**

For the measures advocated by a directive to be effective, it is necessary that the transposition performed by the Member States is complete and compliant. Complete transposition assumes that all the provisions of the directive concerned have been transposed, which also includes all the annexes.<sup>15</sup> The transposition conformity is on the other hand a subtle question, as illustrated by numerous judgments of the Court of Justice of the European Union. If the conformity or the non-conformity of a transposition appears clearly for the majority of the provisions of the directives concerned, in other cases, only a rather detailed analysis makes it possible to identify a non-conformity.<sup>16</sup>

- **Member State margin**

As has already been noted, Member States have a margin of freedom as to the means and form of transposition, provided that the results pursued by the directives are achieved through national transposition (TFEU, art. 249, § 3). If we take the example of the environmental assessments imposed by Directive 2011/92, the laws of the 27 Member States differ on a number of points, which does not prevent their general compliance with the directive.

It should also be remembered that the margin available to Member States depends on the legal basis of the directive concerned. Environmental directives are adopted essentially on two bases: that of specific competence in environmental matters (art. 191 to 193 of the TFEU) or that of the harmonization of legislation (art. 114 of the TFEU). The “purely” environmental directives will be based on Article 192, as is the case, for example, of the nature conservation directives (D. 92/43 “Habitats” and D. 2009/147 “Birds”). When the directive intends to impose product standards that respect the environment, it will be based on Article 114, as is, for example, directive 2001/18 on the deliberate release of GMOs. Each directive mentions the legal basis for its adoption. If necessary, a directive will include some provisions based on Article 192 and others on Article 114.<sup>17</sup>

14 CJCE, 19 November 1991, C-6/90 and C-9/90, *Francovich et al.*

15 The legislation section of the Belgian Council of State had therefore pinpointed the incompleteness of the transposition of Directive 2001/42 on the environmental assessment of plans and programmes on the grounds that a footnote in Annex I had not been included in the Walloon legislative project.

16 For example, the conformity of the transposition of Annexes I and II of Directive 2011/92 on the assessment of the effects of certain public or private projects on the environment is regularly addressed before the Court of Justice or national courts. Therefore, in relation to the section relating to airports, Annex I automatically imposes an assessment for those whose runway is 2100 m or more in length. This is also the case in Walloon law. However, it provided for a general exemption from environmental assessment for extensions of existing installations when the extension does not exceed 25%. Consequence: an airport which runway was 1800 m could be extended by 400 m without an environmental assessment being required, which was clearly not in compliance with Directive 2011/92.

17 See for instance Directive 2006/66 on batteries and accumulators and waste batteries and accumulators.

The basis has consequences for the room for manoeuvre available to Member States. A directive based on Article 192 constitutes the minimum standard to be respected, which allows Member States to adopt more stringent transposition measures.<sup>18</sup> On the other hand, the basis of Article 114 leaves no margin to the States: the directive constitutes the standard which must be transposed as is. Nonetheless, §§ 4 and 5 of Article 114 allow, under certain conditions, either for a State to maintain pre-existing legislation that is stricter than what is provided for in the directive,<sup>19</sup> or for a State to adopt more stringent standards based on new scientific evidence after the promulgation of a directive.<sup>20</sup>

All of this is essential for monitoring the EU environmental law effectiveness.

## 2.4 Transposition assistance

In the context of the directive transposition, one can mention the role of the European Union Network for the Implementation and Enforcement of Environmental Law (IMPEL).<sup>21</sup> This is a non-profit association bringing together the authorities in charge of policy in each Member State (currently 50), but also in other countries close to the Union, i.e. 35 countries in total. This network brings together civil servants-inspectors, lawyers, people in charge of drafting administrative authorizations, etc. IMPEL makes it possible to share everyone's experiences, in particular, to help States to reach a quicker compliance with the EU law.

## 3. Checking the national law conformity

The effectiveness of European environmental law involves control measures and, in the event of breaches, penalties to which we will return later.

### 3.1 Obligation to notify the Commission of the transposition measures

In addition to Article 260, § 3, of the TFEU which recalls this obligation and the penalty mechanism associated with it, each directive specifically provides for the obligation to immediately inform the Commission of the transposition measures. In addition, each national legislation must indicate the reference of the directive which is transposed.

The question of what this obligation covers is debated and gives rise to three interpretations.

The first is that only the total absence of communication to the Commission of any transposition measure would be punishable. This thesis, which has the favour of the Member States, is not followed by either the Commission or the Court of Justice<sup>22</sup> since it would suffice for a Member State simply to communicate the measure transposing one or another anecdotal provision of the relevant directive.

The second interpretation consists in considering that the obligation relates to the communication of all the national measures which transpose the whole of the directive, regardless of the transposition

18 The directive itself can recall this, as illustrated in Article 14 of directive 2009/147 "Birds". This is only possible if the stricter national legislation pursues the same objectives as those of the directive by reinforcing the requirements (CJEU, 14 April 2005, C-6/03, Eiterköpfe landfill association).

19 See, for example, CJEU, 9 July 2015, C-360/14P, *Germany v. Commission*.

20 See, for example, TEU, 5 October 2005, T-366/03 et T-235/04, *Province of Upper Austria and Austria v. Commission* (in terms of GMOs); CJEU, 6 Nov. 2008, C-405/05, *Netherlands v. Commission* (diesel engines).

21 European Union Network for the Implementation and the Enforcement of Environmental Law.

22 CJEU, 8 July 2019, C-543/17, *Commission v. Belgium*, point 54.

conformity. This is the Commission's position.<sup>23</sup> In this case, it should be borne in mind that the substantive breaches are governed by the ordinary law provision (art. 258) and not by the accelerated procedure of Article 260, § 3.

The third interpretation implies that the obligation relates to full communication of the transposition measures which must, in substance, comply with the directive. As for the Court of Justice, this thesis cannot be accepted, because this obligation would be too complex to respect.<sup>24</sup> Substantive breaches are therefore controlled through the mechanism outlined in Article 258. Nevertheless, the Court considers that the obligation incumbent on the Member States implies that, for each provision of the directive, the State notifies the provision(s) of national law which transposes it with, if necessary, a correlation table facilitating the review by the Commission.

As a result, the compliance on the merits is controlled *a posteriori* of the transmission, through an infringement procedure (art. 258) or a preliminary question referred to the Court of Justice. We will come back to this. As we have already noted, transposing correctly is not always easy.<sup>25</sup>

### **3.2 Obligation to notify the Commission of the measures implementing the directives**

Beyond the compliant transposition of a directive into domestic law, the effectiveness of its application is clearly observed.

Some directives do not require the adoption of specific measures beyond their transposition. If we take the example of Directive 2010/31 on the energy performance of buildings, it must be transposed and its practical application is done on a case-by-case basis, most often when issuing a building permit. The same goes for the aforementioned directive 2011/92 on the assessment of the environmental impact of projects: it must be transposed and its concrete application is done as part of the instruction of the building permits or that of the environmental permits, for example.

On the other hand, many directives require the adoption of downstream measures, sometimes taken in sequence. Directive 92/43 "Habitats" and Directive 2009/147 "Birds" therefore imply the designation of protected areas, the adoption of ecological corridors, the adoption of conservation and protection measures, including of management and strict species protection measures, or the estimation of the cost of obligations.<sup>26</sup> In addition to their transposition into domestic law, other environmental directives imply the adoption of various measures; this is particularly the case of the 2000/60 framework directive on water, the directive on waste, the directive on the quality of ambient air or even that relating to noise control.

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23 Commission, *EU law: better application for better results*, 2017/C 18/02.

24 CJEU, 8 July 2019, *Commission v. Belgium*, C-543/17, point 59.

25 See note (16) above.

26 To be sent to the Commission (D. 92/43, art. 8).

Beyond the formal transposition of a directive, these obligations imply regular reporting<sup>27</sup> to the Commission on what has been done by each Member State.<sup>28</sup> The absence of communication or even the late notification of these reports can result in the penalisation of the Member States.<sup>29</sup>

The Commission itself publishes reports on the application of individual environmental directives by the Member States. Several directives provide for the periodicity of this publication.<sup>30</sup> Other reports, such as the Natura Barometer,<sup>31</sup> are published by or with the help of the European Environment Agency.

Finally, the environmental law effectiveness implies that the Member States, beyond their obligations to transpose and adopt various decisions, concretely enforce the mechanisms for protecting the environment. The Court of Justice regularly condemns Member States for the non-effectiveness of the measures taken.<sup>32</sup>

It should also be noted that the Member States are required to publish regularly, every four years maximum, a report on the state of the environment in their country,<sup>33</sup> which is also a means for the Commission to verify the environmental protection effectiveness.

### 3.3 Investigations by the Commission

Obviously, the Commission is bombarded with the reports notified to it by the Member States. It can also record the absence of notification. The Commission also receives individual notifications which are all sources of information. Therefore, for instance, the compensation provided for derogations from the restrictions imposed by the “Habitats” directive must be the subject of a prior opinion from the Commission.<sup>34</sup>

The Commission is also bombarded by complaints, filed particularly from individuals. This mechanism is recognised by the Commission as an essential means for it to be informed of possible breaches of EU law and of concrete problems encountered on the ground.<sup>35</sup> For this purpose, the Commission has adopted procedural rules.<sup>36</sup>

27 Directive 92/43 “Habitats” provides for communication every 6 years (art. 17); directive 2009/147 “Birds” every 3 years (art. 10, § 2).

28 Directive 91/692 aimed at the standardization and rationalization of reports relating to the implementation of specific directives concerning the environment has been considered obsolete and has consequently been repealed by the decision of the Parliament and of the Council, which at the same time amends a regulation and several directives (Decision [EU] 2018/853).

29 See, for example, CJEU, 12 December 2000, C-435/99, *Commission v. Portugal*; CJUE, 12 February 2004, C-406/02, *Commission v. Belgium*.

30 The Commission itself is regularly late.

31 This is an essentially quantitative barometer of the number of designated sites and their area.

32 Without obviously being exhaustive, we can cite the gaps in the protection of species (CJEU, 15 July 2010, C-573/08, *Commission v. Italy*, on the protection of birds; CJEU, 30 January 2002, C-103/00, *Commission v. Greece*, in relation to the turtle *Caretta caretta*), in terms of household waste collection (CJEU, 4 March 2010, C-297/08, *Commission v. Italy*) or in terms of discharges into the atmosphere from waste incinerators (ECJ, 18 June 2002, C-60/01, *Commission v. France*; ECJ, 11 July 2002, C-139/00, *Commission v. Spain*).

33 Directive 2003/4 on public access to environmental information, art. 7, § 3.

34 Directive 92/43, art. 6, § 4. These opinions can be consulted on the Commission’s website.

35 Commission, *EU law: better application for better results*, op. cit., p. 10.

36 *Administrative procedures for the management of relations with the complainant in the application of Union law*, an annex to the aforementioned communication. On these complaints, see in particular N. Cariat and O. Torres Rodriguez, “The disputes relating to the compatibility of national standards with

On the other hand, the Commission does not have a body of inspectors empowered to verify on the spot the situation of Member States and the effectiveness of compliance with European environmental law. Only in rare occasions does it make informal visits.<sup>37</sup>

## 4. Judicial review and penalties

Environmental litigation before the Court of Justice of the European Union, and more incidentally before the General Court, is important.

### 4.1 Appeals

Several appeals are provided for by the Treaty on the Functioning of the European Union.

Article 263 allows a Member State, the Parliament, the Council, or the Commission to bring an action for lack of jurisdiction or violation of the Treaties. This is how Spain sued the Council regarding the legal basis of the latter's decision on the protection and sustainable use of the Danube<sup>38</sup> or how the Commission has obtained the annulment of the Council Framework Decision on the protection of the environment through criminal law.<sup>39</sup>

Articles 258 and 259 organise “common law” appeals for failure by a Member State to fulfil one of its obligations under the Treaties. Article 258 allows the Commission to give formal notice to a State, to deliver a reasoned opinion if necessary, and finally, if it deems it necessary, to refer the matter to the Court of Justice. Article 259 enables States to bring a case before the Court against another Member State.

Article 260, § 3, is a complementary mechanism to that of Article 258 since it allows the Commission, which seizes the Court for failure to comply, to request in the same procedure a penalty payment and/or a lump sum to speed up complete directive transposition.<sup>40</sup> This procedure could previously only take place after an “Article 258” procedure.

Finally, Article 267 allows a reference for a preliminary ruling to the Court to rule on the interpretation of the TFEU or the validity and interpretation of an act of one of the institutions of the Union. But it also allows – and this is its most frequent use – a court of a Member State to question the Court on the interpretation of Union law and the conformity of national law with it.

### 4.2 Results

As part of a reflection on the European Union environmental law effectiveness, it is essential to consider the results of litigation before the courts of the Union.<sup>41</sup> The case-law of the Court is

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European Union law” in A. Bailleux (dir.), *European litigation news*, Limal, Anthemis, 2020, especially pages 23-33.

37 We can cite the case of the peninsula of Zakynthos in Greece, the breeding site of the sea turtle *Caretta caretta*, legally protected but without effective protection as on-site inspections have shown (CJEU, 30 January 2001, C-103/00; CJEU, 17 July 2004, C-600/12 and CJEU, 10 November 2016, C-504/14, *Commission v. Greece*).

38 CJUE, 30 January 2001, C-36/98, *Spain v. Council*.

39 CJUE, 13 September 2005, C-176/03, *Commission v. Council*.

40 *Commission, Implementation of Article 260(3), TFEU, 2011/C 12/01*; I. Pingel, “The first application of Article 260, paragraph 3 TFEU by the Court of Justice of the European Union and first lessons”, *RTDEur*, 2019, p. 663-671.

41 See the detailed data in P. Thieffry, *Treaty of European environmental and climate law*, 4<sup>th</sup> ed., Brussels,

quite abundant: if, before the year 2000, there were between 12 and 24 judgments annually, since then between 40 and 50 cases have been decided each year, with nevertheless a decrease in recent years. The Court makes about ten decisions a year in its environmental sphere of competence.

- **Infringement litigation**

Since the early 2000s, there has been an increase in cases brought by the Commission before the Court of Justice.

Litigation over the transposition of directives is unquestionably decreasing, with the major environmental directives peaking between the 1980s and 2000s. It should also be noted that the Commission systematically withdrew proceedings when the Member States concerned had finally complied belatedly with their obligation.<sup>42</sup>

In addition, the Commission can bring litigation in connection with shortcomings in the implementation measures (the designation of Natura 2000 sites, for example) or in the application of Union law for a project (for a failure in connection with the obligation to assess the environmental effects, for example). The origin of this dispute may be, as we have mentioned, a complaint lodged with the Commission, in particular by environmental NGOs.<sup>43</sup>

As P. Thieffry points out, in the vast majority of cases, infringement proceedings brought by the Commission are successful.<sup>44</sup> This shows the serious and meticulous preparation of the Commission which, it should be remembered, bears the burden of proof of the breach.

- **References for a preliminary ruling**

The litigation arising from references for preliminary rulings is undeniably important, particularly in relation to the European Union law effectiveness. Indeed, the Court judgments will enlighten the national court whose decision will have to comply with the teaching of the Court of Justice.

This litigation is nevertheless strongly linked to the perception of the national courts,<sup>45</sup> and this perception is itself linked to the requests of the said courts by the parties to the proceedings. Indeed, even if the court can take the initiative to put a question to the Court, most often this question will be asked directly or indirectly by the applicant or the opposing party. This is how the Belgian courts willingly ask the Court of Justice for a preliminary ruling,<sup>46</sup> as illustrated, for instance, by the dispute over the assessment of the environmental impact of plans and programmes (D. 2001/42). It can be seen that 80% of the judgments of the Court relate to Belgian law. This percentage in no way reflects

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Bruylant, 2020, pp. 231-244.

42 I. Pingel, *op. cit.*, p. 666.

43 See p. 8 above.

44 P. Thieffry, *op. cit.*, p. 157.

45 It should be remembered that the court must ask the question when its decision is not subject to judicial review (art. 267, § 3) except in exceptional cases (see in particular CJEU, 6 October 2021, C-561/19, *Consorzio Italian Management and Catania Multiservizi SpA*).

46 See on this point L. Krämer, "The Belgian environment before the Court of Justice of the European Union" in *The environment, the law and the magistrate – Mixtures in honor of Benoît Jadot*, Brussels, Larcier, 2021, p.p. 427-446. See also N. Cariat, "Digressive inventory of 1.000 Belgian references for preliminary rulings to the Court of Justice of the European Union", *J.D.E.*, 2022, pp. 213-215 which also gives figures for other Member States.



the quality of the transpositions of the directive into federal law or into regional laws;<sup>47</sup> it is linked to the undeniable interest of the parties in the disputes in the scope of the directive.

The reference for a preliminary ruling is also the means for private persons, and in particular environmental protection associations, to appeal to the Court of Justice.<sup>48</sup> However, environmental law effectiveness also depends on the right of citizens to take action before the courts, as the Court of Justice regularly points out with regard to appeals before national courts.

### 4.3 The Court's position

- **Interpretation principles**

The Court systematically refers to the principle of a high level of environmental protection enshrined in Article 3, § 3, of the Treaty on European Union, Articles 114, § 3, and 191, § 2, of the Treaty on the functioning of the Union and Article 37 of the Charter of Fundamental Rights. This leads it to sometimes go beyond what is provided by a directive.<sup>49</sup>

In the same way, the Court regularly refers to the principle of environmental protection effectiveness to interpret such and such a provision of a directive. It is this principle of effectiveness which makes it possible to give meaning to a given provision.

- **Convictions and financial penalties**

It is impossible to relate the condemnations pronounced by the Court against the Member States. We will retain a recent judgment that illustrates the control effectiveness: on 6 October 2021, the Court condemned Italy by listing the 786 Italian agglomerations which did not comply with the obligations arising from Directive 91/271 relating to the treatment of urban water waste.<sup>50</sup>

Until recently, convictions by the Court of Justice were not accompanied by any financial penalty. It was only after a first judgment condemning a Member State for non-compliance that the Court, again seized, delivered a judgment accompanied by a financial condemnation. Since the Treaty of Lisbon, Article 260, § 3, of the TFEU provides for combining the judgment for non-transposition and that of a penalty payment and/or a lump sum in a single judgment.

Given their amounts, monetary penalties clearly have a deterrent effect. Without being exhaustive,<sup>51</sup> far from it, we will point out the first condemnation to a daily fine of €20,000 against Greece for failure

47 Rather, it appears that the Belgian legislation and its application in *concreto* are rather exemplary.

48 Article 263, § 4, constitutes an appeal before the Court against an act only to persons who are the addressees or who are directly and individually concerned.

49 Therefore, in relation to the distinction between disposal and recovery made by Directive 2008/98 on waste but also by Directive 2011/92 on the environmental assessment of projects which aims, in the lists of projects submitted for office to be assessed, “disposal” facilities, the Court considers that the concept of “disposal” within the meaning of Directive 2011/92 also encompasses waste recovery operations (CJEU, November 23, 2006, C-486/04, *Commission v. Italy*). Mention may also be made of the Court’s case-law on the scope of Directive 2001/42 on the environmental assessment of plans and programs which, according to Advocate General J. Kokott herself, goes beyond what the Member States might have thought (see in particular F. Haumont, “The scope of Directive 2001/42/EC relating to the assessment of the effects of certain plans and programs on the environment”, *European Union Law Yearbook 2019*, Paris, Ed. Panthéon-Assas, 2020, pp. 67-89 and ref. cited).

50 CJEU, October 6, 2021, C-668/19, *Commission v. Italy*.

51 See P. Thieffry, *op.cit.*, pp. 236 and following.



to dispose of waste.<sup>52</sup> Spain received an annual fine of €624,150 for the non-compliance of 1% of its inland bathing waters.<sup>53</sup> We can also cite the condemnation of Italy to a quarterly fine of €42,800,000 and a lump sum of €40 million. Recently, after having issued an injunction to Poland to immediately cease the exploitation of the Turów lignite mine on the Czech border by order of 21 May 2021, an order of 20 September 2021 condemned Poland to a daily penalty of €500,000.<sup>54</sup>

- **Emergency measures**

Article 279 TFEU allows the Court to take emergency measures. If we can praise the measures ordered to protect the primary forest of Białowieża<sup>55</sup> in Poland or in the aforementioned case of the Turów coal mine, on the other hand, we are more circumspect on the lifting of the measures taken by Austria to limit certain lorries in the Inn Valley in the application of the ambient air quality guidelines.<sup>56</sup>

## II. The Council of Europe

The effectiveness of environmental law in the sphere of the Council of Europe is an equally vast subject. We will limit ourselves to a few considerations on normative effectiveness and the case-law of the European Court of Human Rights on the right to a healthy environment.

### 1. Normative environmental law effectiveness

The normative effectiveness of environmental law is just as indisputable in the case of the Council of Europe. The latter adopts numerous Conventions with an environmental connotation (Bern, Lugano, Florence, etc.), and the European Convention on Human Rights is at the origin of abundant case-law in favour of the right to a healthy environment.

For the Council of Europe, however, shortcomings can be highlighted. The first is that many environmental Conventions have not entered into force due to a lack of ratifications within the 46 States' Parties (since the withdrawal of Russia). Examples include the 1993 Lugano Convention on environmental liability, which has been ratified by only three States, and that of 1998 on the protection of the environment through criminal law which has been ratified by only one State.

The other shortcoming is that no provision of the European Convention on Human Rights or its protocols formally establishes the human right to a healthy environment. Admittedly, we will come back to this, the European Court of Human Rights recognises this right by means – essentially – of Article 8 of the Convention and the right of everyone to the protection of their private and family life and their home, yet the specificity of this basis does not allow recognition of an extended right to a quality environment since only environmental nuisances can be taken into consideration.<sup>57</sup> Nor does it allow environmental protection NGOs to rely on it, as the latter have no private or family life or home.

52 ECJ, July 5, 2000, C-387/97, *Commission v. Greece*.

53 CJCE, November 25, 2003, C-278/01, *Commission v. Spain*.

54 V. Pres. CJUE, 20 September 2021, C-121/21 R, *Czech Republic v. Poland*.

55 CJUE, 20 November 2017, C-441/17, *Commission v. Poland*.

56 Pres. CJCE, 2 October 2003, C-320/03 R, *Commission v. Austria*; CJCE, 15 November 2005, C-320/03.

57 See in particular ECHR, 22 May 2003, *Kyrtatos v. Greece*, § 52.

## 2. The right to a healthy environment

The major contribution of the case-law of the European Court of Human Rights to the protection of the environment is undeniably the recognition of the human right to a quality environment under the conditions – and therefore the limits – of Article 8 of the Convention.<sup>58</sup> We refer to the abundant literature works on this subject.<sup>59</sup> We will retain certain facets of this case-law<sup>60</sup> which illustrates the Court's desire to ensure that the right to a healthy environment is effective.<sup>61</sup>

### 2.1 Requests admissibility

The effectiveness of the right to a healthy environment depends in particular on the assessment of the admissibility of the requests that are filed. We know that the conditions set by Article 35 of the Convention are strict.<sup>62</sup> Among these is the requirement to have exhausted domestic appeals. On this point, it is observed that, in view of the circumstances, the Court can interpret this condition in favour of the applicants. Therefore, in the *Di Sarno et al v. Italy*<sup>63</sup> regarding the lack of waste management in Campania, the Court admitted the admissibility of the action before it even though no appeal to the domestic courts had been attempted. For the Court, appeals were useless, given the state of justice in this region of Italy. Similarly, the *Agostinho et al* case against 32 States Parties to the Convention on the fight against global warming was an opportunity to admit exemption from the condition of exhaustion of local appeals, a condition that was materially impossible and financially to maintain given the number of States in the cause.<sup>64</sup>

Moreover, only one “victim” is admissible, which implies that he/she must demonstrate the existence of the damage suffered and the causal link between it and the breaches of the State. If the Court can be firm on this point, it is noted that in several environmental cases, the Court admits indirect evidence and presumptions. This point can be illustrated by the case of the pollution emitted by the Ilva iron and steel site in Taranto in Puglia in Italy: if, in the *Smaltini* case, the Court concluded that there was insufficient evidence proving the causal link between this pollution and the Myeloid Leukaemia the applicant suffered from,<sup>65</sup> on the other hand, in the above-mentioned *Cordella* case, the Court considered that the prolongation of a situation of environmental pollution endangered the

58 Other provisions of the Convention and its protocols may be invoked for recognition of damage to the environment, such as in particular the right to life (art. 2) or the right to peaceful enjoyment of one's possessions (Protocol N°1, Article 1; F. Haumont, “Article 1 of Protocol N° 1 to the European Convention on Human Rights and the Protection of the Environment” in *The Environment, Law and the Magistrate*, Brussels, Larcier, 2021, pp. 405-425).

59 Including the publications of the Council of Europe itself and of Court, and in particular: *Handbook on human rights and the environment* (2<sup>nd</sup> ed., 2012, 206 p.), Fact sheet – environment and ECHR, January 2022, 35 p.

60 In January 2022, there were some 300 environmental cases.

61 The Court regularly recalls that the Convention aims to protect “practical and effective” rights (ECHR, 24 June 1993, *Papamichalopoulos et al. v. Greece*, § 43).

62 And even more and more strict since, in the application of Protocol N°15, the six-month period referred to in Article 35, § 1, has been reduced to four months since 1 February 2022. See F. Merloz, “Entry into force of Protocol N°. 15 to the European Convention on Human Rights”, *R.T.D.H.*, 2021, p. 807-827.

63 CEDH, 10 January 2012, *Di Sarno et al v. Italy*, obs. F. Haumont, “The waste crisis in Campania and human rights”, *R.T.D.H.*, 2012, p. 269-285. Along the same lines, ECHR, 24 January 2019, *Cordella et al v. Italy*, §§ 121-127.

64 Application filed on 7 September 2020; order of the Chair of the 4<sup>th</sup> section, 13 October 2020.

65 ECHR (Dec.), 24 March 2015, *Smaltini v. Italy*; the complaint was based on the right to life (art. 2).

health of the applicants, and more generally that of the population residing in the areas at risk and that the application should be granted.

## 2.2 Convictions

The Court has handed down numerous convictions for violation in particular of the right to respect for private and family life and home for environmental pollution. These convictions attest to the Court's willingness to ensure the effectiveness of the right to a healthy environment.

This being the case, the question of the specific penalties arises. Indeed, Article 41 of the Convention allows the Court to grant the injured party, if necessary, such satisfaction as it deems appropriate. The "if necessary" expression allows the Court to consider that the finding of a violation of the protected right constitutes in itself fair satisfaction, which can frustrate the applicants. Nonetheless, the Court regularly awards "fair" financial compensation.<sup>66</sup>

We can also highlight the aforementioned judgment in the *Cordella* case concerning the pollution emanating from the Ilva steelworks in Taranto: although the Court considered that the finding of a violation of Article 8 amounted to fair satisfaction, it ruled in favour of concrete measures likely to put an end to the situation: "the clean-up work of the factory and the territory affected by environmental pollution occupies a primordial and urgent place. The environmental plan approved by the national authorities and containing the indication of the measures and actions necessary to ensure the environmental and health protection of the population must therefore be implemented in the shortest possible time."<sup>67</sup> Even if this injunction is not in the operative part of the judgment, it is unequivocal in what looks like a pilot judgment.<sup>68</sup>

## 2.3 Conviction follow-up

The Convention provides for monitoring of the execution of judgments by the Committee of Ministers (Art. 46) assisted by the Department for the Execution of Judgments of the Court. An annual report is published, as well as thematic sheets such as the one relating to certain environmental affairs.<sup>69</sup> This reflects the legislative, jurisprudential, and administrative progress following the judgments delivered. It should also be noted that the European Court can follow the procedure for the execution of a judgment, as illustrated by the case of the aforementioned *Cordella et al* case, a procedure pending before the Committee of Ministers. The Court notes that in March 2021, the Italian authorities had still not provided precise information pertaining to the effective implementation of the environmental plan.<sup>70</sup>

66 This is how, for example, Mrs. Lopez Ostra obtained around €24,000 (ECHR, 9 December 1994, *L.-O. v. Spain*), Ms. Fadeyva €6,000 (ECHR, 9 June 2005, *F. v. Russia*), Ms. Guerra and her colleagues, each around €7,000 (ECHR, 19 February 1998, *G. v. Italy*), Ms. Giacomelli €12,000 (ECHR, 2 November 2006, *G. v. Italy*).

67 CEDH, 24 January 2019, *Cordella et al v. Italy*, § 182; on this judgment, see the interesting considerations of S. Nadaud and J.-P. Marguenaud, "The European consecration of the right to environmental remediation", *D.*, 2019, p. 674. For a recent example of a quasi-injunction, ECHR, 15v March 2022, *Gluscenco v. Moldova*.

68 Rules of Court, art. 61.

69 Out of 22 judgments, October 2020, 13 p.

70 ECHR, 5 May 2022, *A.A. et al v. Italy*, as well as three others of the same day *Ardimento et al*, *Briganti et al* and *Perelli et al*.

## Conclusion

At the end of this report, depending on the reading that we will make of the information given, we will retain the positive aspects of the advances in European environmental rights, or their shortcomings. Notwithstanding the shortcomings in the regulatory arsenal, overall European environmental law is effective. One could say that its application is much less so, as illustrated by the very existence of case-law. It is breaches or violations of the law that are at the root of it. On the other hand, this case-law construction undoubtedly feeds environmental law and fosters its effectiveness. And this is to be welcomed.

**Keywords:** European Union law – normative effectiveness – national implementations – review by the European Commission – judicial review – Council of Europe law – right to the protection of a healthy environment.

## References

Cariat, N. (2022). Digressive inventory of the 1,000 Belgian references for preliminary rulings to the Court of Justice of the European Union. *Journal of European Law* 289 - 2022/5.

Consolidated versions of the Treaty on European Union and of the Treaty on the Functioning of the European Union. December 13, 2007. *Official Journal C 202 of 06/07/2016* <http://data.europa.eu/eli/treaty/teu/2012/oj>

Council of Europe (2012). Handbook on Human Rights and the Environment (2<sup>nd</sup> ed.).

Council Regulation (EEC) N<sup>o</sup>. 1836/93 of 29 June 1993 allowing voluntary participation by companies in the industrial sector in a Community environmental management and audit scheme. <http://data.europa.eu/eli/reg/1993/1836/oj>

European Commission (2006). *Soil Protection – The Story behind the Strategy*. Luxembourg.

European Commission (2011). *Implementation of Article 260(3) TFEU*. Communication from the Commission 2011/C 12/01. [https://eur-lex.europa.eu/legal-content/FR/TXT/PDF/?uri=CELEX:52011XC0115\(01\)](https://eur-lex.europa.eu/legal-content/FR/TXT/PDF/?uri=CELEX:52011XC0115(01))

European Commission (2016). *EU law: better application for better results*. Communication from the Commission. C/2016/8600.

European Commission (2021). *EU Soil Strategy 2030 – Reaping the rewards of healthy soils for people, food, nature, and climate*. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. COM(2021) 699 final. <https://eur-lex.europa.eu/legal-content/FR/TXT/PDF/?uri=CELEX:52021DC0699>

Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community water-related policy. <http://data.europa.eu/eli/dir/2000/60/oj>

Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 relating to the assessment of the effects of certain plans and programs on the environment. <http://data.europa.eu/eli/dir/2001/42/oj>

Directive 2003/4/EC of the European Parliament and of the Council of January 28, 2003 on public access to environmental information and repealing Council Directive 90/313/EEC. <http://data.europa.eu/eli/dir/2003/4/oj>

*Directive 2006/66/EC of the European Parliament and of the Council of 6 September 2006 on batteries and accumulators and waste batteries and accumulators and repealing Directive 91/157/EEC (Text with relevance for the 'EEA).* <http://data.europa.eu/eli/dir/2006/66/oj>

*Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain directives (Text with EEA relevance).* <http://data.europa.eu/eli/dir/2008/98/oj>

*Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds.* <http://data.europa.eu/eli/dir/2009/147/oj>

*Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment (codified text) (Text with EEA relevance).* <http://data.europa.eu/eli/dir/2011/92/oj>

European Union (1985). *Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment.* <http://data.europa.eu/eli/dir/1985/337/oj>

European Union (1991). *Council Directive 91/692/EEC of 23 December 1991 on the standardization and rationalization of reports relating to the implementation of certain directives concerning the environment.* <http://data.europa.eu/eli/dir/1991/692/oj>

European Union (1992). *Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wildlife and flora.* <http://data.europa.eu/eli/dir/1992/43/oj>

European Union (1996). *Council Directive 96/82/EC of 9 December 1996 on the control of major accident hazards involving dangerous substances.* <https://eur-lex.europa.eu/legal-content/FR/TXT/PDF/?uri=CELEX:31996L0082>

Haumont, F. (2012). The waste crisis in Campania and human rights. *Human Rights Quarterly Review*, 92, 2012, 269-285.

Haumont, F. (2020). "The scope of Directive 2001/42/EC on the assessment of the effects of certain plans and programs on the environment", *European Union Law Yearbook 2019*. Paris: Ed. Pantheon-Assas, pp. 67-89. <https://doi.org/10.3917/epas.bluma.2019.01.0067>

Haumont, F. (2021). Article 1 of Protocol N°. 1 to the European Convention on Human Rights and the Protection of the Environment. *The environment, the law, and the magistrate – Essays in Honor of Benoît Jadot*. Brussels: Larcier.

Krämer, L. (2021). The Belgian environment before the Court of Justice of the European Union. *The environment, the law, and the magistrate – Essays in Honor of Benoît Jadot*. Brussels: Larcier.

Merloz, F. (2021). Entry into force of Protocol N°. 15 to the European Convention on Human Rights: the Protocol of the Era of Subsidiarity. *Quarterly Review of Human Rights*, 128, 807-827. <https://doi.org/10.3917/rtdh.128.0807>

Nadaud, S. & Marguenaud, J.-P. (2019). The European consecration of the right to environmental remediation. *Recueil Dalloz*, p. 674.

Pingel, I. (2019). The first application of Article 260, clause 3 TFEU by the Court of Justice of the European Union and first lessons. *Quarterly Review of European Law*, 2019, 03, pp. 663. <https://shs.hal.science/halshs-02452215>

*Regulation (EC) N°. 1013/2006 of the European Parliament and of the Council of June 14, 2006, on shipments of waste.* <http://data.europa.eu/eli/reg/2006/1013/oj>

Thieffry, P. (2020). *Treaties on European environmental and climate law* (4<sup>th</sup> ed.). Brussels: Bruylant.  
Withdrawal of committee proposals that are no longer relevant. Official Journal N°. 2014/C 153/03.  
<https://eur-lex.europa.eu/legal-content/FR/TXT/PDF/?uri=OJ:C:2014:153:FULL&from=SL>

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– translation from French –

# The Ramsar Convention on the Protection of Wetlands of International Importance

Legal indicators to measure the effectiveness of the Convention implementation by the Parties

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## Abstract

As part of the COP14 of the Ramsar Convention, which took place from 5 to 13 November 2022 in Wuhan and Geneva, a draft Resolution was discussed on the creation of legal indicators. It is in this context that the following study takes place, which presents the results of group work by students of the Master II in Environmental Law, Territories and Risks at the University of Strasbourg, supervised by professors Michel Prieur and Michel Drousseau. This work aims to measure and enhance the legal effectiveness of the implementation of the said Convention by the States Parties. Therefore, it is a question of identifying, on the one hand, the obligations with a legal scope binding the States by evaluating their binding force and, on the other hand, the legal questions in the model of National Reports to propose improvements thanks to the legal indicators.

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*“The draft resolution aims to put in place a new tool to scientifically assess the effective application of the Ramsar Convention [...]. It is an operational response to repeated requests from States and civil society for greater effectiveness in wetlands protection and management.”<sup>1</sup>*

Wetlands are habitats that require special protection due to the richness of the biodiversity they harbour and the many ecological functions they perform. Indeed, wetlands contribute to the natural balance by being “natural sponges” (by storing water or releasing it), by participating in the regulation of the climate, and by allowing the conservation of a large number of animal and plant species.

Wetlands were therefore one of the first areas of international environmental law to be protected. In the context of the genesis of environmental law and on the eve of the Stockholm Conference in 1972, the Convention on Wetlands of International Importance especially as Waterfowl Habitat, also known as the Convention on wetlands or Ramsar Convention, was signed by the first 18 States in 1971, while its entry into force dates from 1975. In 2021, 171 States were Parties to the Convention, underlining the majority approval of States to protect these critical habitats.

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<sup>1</sup> Draft resolution on: „Creating legal indicators to measure the effectiveness of the Ramsar Convention“, presented by Burkina Faso during the first session of the 59<sup>th</sup> Meeting of the Standing Committee, in June 2021.

This international agreement has a historical character because of the principle of interdependence between the environment and man which is declared therein. By recalling the multifunctionality of wetlands and the need to protect waterfowl species, which constitute an “international resource”, the Ramsar Convention enjoins States to make rational use of these habitats.<sup>2</sup> This treaty is short: it comprises only 12 articles and imposes few obligations on States, which may raise questions about the reality of effective protection of wetlands.

Every 3 years, a Session of the Conference of the Contracting Parties (COP) takes place, as provided for in Articles 6 and 7 of the Ramsar Convention. The COP is “the governing body of the Convention”:<sup>3</sup> orientations for the following years based on the examination of National Reports are discussed, and resolutions and recommendations can be adopted. The National Reports completed by the States make it possible to monitor the application of the Convention. The first COP was held in 1980 and last year, from November 5 to 13, 2022, COP14 took place in Wuhan, China, and Geneva, Switzerland. For this occasion, Burkina Faso tabled a draft Resolution entitled “Creating legal indicators to measure the effectiveness of the Ramsar Convention”.<sup>4</sup> According to Article 6.2 f) of the Convention, Resolutions – like Recommendations – are intended to promote the operation of the Convention. More specifically, the creation of legal indicators applicable to the Ramsar Convention will make it possible, where appropriate, to set up a tool to assess the effective protection of wetlands, reflecting on the application of the indicators to the Ramsar Convention, and more generally to the study of its effectiveness and a certain relevance.

Wetlands are defined by Article 1 of the Convention as “*areas of marshes, fens, peat bogs or waters, whether natural or artificial, permanent or temporary, where the water is static or flowing, fresh, brackish or salt water, including areas of marine water, the depth of which at low tide does not exceed six meters*”. The scope of the Convention is therefore very encompassing and targets a precisely determined habitat. Creating legal indicators to protect wetlands aims to enhance the Convention effectiveness. The effectiveness of the law is defined by Professor Prieur as “the law implemented and which should produce effects”.<sup>5</sup> Professor Prieur distinguishes the effectiveness, or the implementation of the law, from the efficiency which aims at the result sought by the law. Unlike scientific and economic indicators that measure efficiency, legal indicators seek better application of the law. Legal indicators can therefore be mobilised to meet the need for better application of the Ramsar Convention, as discussed in the draft resolution by Burkina Faso.

The requirement to enhance wetlands protection led to the preparation of this study, the guideline of which is the following question: how to measure and strengthen the legal effectiveness of the implementation of the Convention by States Parties?

Two thematic working groups were set up. The first group performed an inventory of the legal obligations contained in the Ramsar Convention as well as in the recommendations and resolutions resulting from the COPs, to draft a report entitled “Inventory of the more or less binding legal obligations contained in the resolutions and recommendations of the Conferences of the Parties

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2 See Articles 2.6, 3.1, and 6.2 d) of the Ramsar Convention.

3 See *The Ramsar Convention Handbook*, published by the Ramsar Convention Secretariat in 2006.

4 See document SC59 Doc. 24.3, *Draft resolution on: development of legal indicators to measure the effectiveness of the Ramsar Convention*. [https://www.ramsar.org/sites/default/files/documents/library/sc59\\_24.3\\_dr\\_burkina\\_faso\\_legal\\_indicators\\_e.pdf](https://www.ramsar.org/sites/default/files/documents/library/sc59_24.3_dr_burkina_faso_legal_indicators_e.pdf)

5 Prieur, M., Bastin, C., & Mekouar, A. (2021). *Measuring the Effectivity of Environmental Law – Legal Indicators for Sustainable Development*. Brussels: Peter Lang. <http://www.peterlang.com/document/1114411>



to the Ramsar Convention”. The second group identified legal issues within the National Report template to propose modifications in the context of the legal indicators, to present their findings in a report entitled “Identification of legal issues and proposed changes to the National Report template”.

The inventory of legal obligations was performed thanks to a study of the Ramsar Convention and the recommendations and resolutions adopted by the COPs. This does not cover the analysis of the many appendices appearing in the recommendations and resolutions, which deserve a distinct and elaborated study. In addition, the medium used to propose modifications to the National Reports is the national report template that the States had to submit for COP14.<sup>6</sup> To enhance effectiveness, ecological and scientific indicators have not been used: only legal indicators have been used to propose changes to the drafting of this Report.

This research presented an opportunity to identify and measure the intensity of the legal obligations of States Parties contained in the Ramsar Convention as well as in the resolutions and recommendations established during the COPs (Section I).

On the other hand, this research has made it possible to rethink the legal questions of National Reports by suggesting a source form for proposals for modifications by applying legal indicators which aim to measure and enhance the Convention effectiveness (Section II).

## I. A critical review of Ramsar COPs and inventory of legal obligations

The COP inventory identifies 246 legal obligations for States Parties. The study of the terminologies used has made it possible to distinguish half-tone legal relations, falling under either *soft law* or *hard law*. This gradation implies a variation in the intensity of the demands placed on States’ Parties in achieving the purpose of the Ramsar Convention and of the recommendations and resolutions. The legal relationships are mostly presented as being of low intensity (point 1), although some legal relationships seem to bind the States Parties in a binding manner (point 2).

### 1. The preponderance of obligations with weak legal scope

The work findings reveal that 90% of the legal rules identified<sup>7</sup> contain *soft law*, with a legal intensity that varies according to the terms used. The verbs used and represented in the caption by two stars, such as “calls”, “urges”, “incites” and “requests”, do not have significant binding force. The verbs with the lowest intensity, such as “recommend”, “invite” and “encourage”, have been marked in the legend by a star.

The dictionary of international law, published under the direction of Jean Salmon, defines soft law in these terms: “*rules whose normative value would be limited either because the instruments which contain them would not be legally binding, or because the provisions in question, although appearing in a binding instrument, would not create an obligation of positive law, or would create only weakly binding obligations*”.<sup>8</sup> In addition, according to Dean Carbonnier, by soft law, it is appropriate “*to understand not the absolute vacuum of law but a more or less considerable drop in legal pressure*”.<sup>9</sup>

6 The national report model is available at the following address: <https://www.ramsar.org/fr/document/modele-de-rapport-national-pour-la-cop14-modele-hors-ligne>

7 Rules taken from the text of the Convention and the COPs recommendations and resolutions.

8 Salmon, J. (2001), *Dictionary of Public International Law*. Bruylant.

9 Carbonnier, J. (2001). *Flexible law: For a sociology of law without rigor* (10<sup>th</sup> edition), p. 26. L.G.D.J.

In this case, as part of the Ramsar Convention, *soft law* is used to leave a margin of appreciation to the States, which are moreover not all concerned by the question raised: for example, when these are specific elements that require further study,<sup>10</sup> even if these points remain in the minority. *Soft law* is used mainly to advise States in the Convention application, for example by clarifying the interpretation of the articles of the Convention,<sup>11</sup> or to draw the attention of States to a practice that should be revised. Indeed, the States, on the strength of their experience in the implementation of their obligations, underline the points to be improved during the COPs. For example, with regard to the Ramsar Information Sheets<sup>12</sup>, the States have returned to this practice to encourage new States Parties to provide the sheets of the sites present on their territory after their accession to the Convention,<sup>13</sup> then to invite the States to define more precisely the limits of their Ramsar sites within these same sheets<sup>14</sup> and reaffirm the importance of their regular updating.<sup>15</sup>

The weak binding force is specific to diplomacy, found in the international law of treaties. But the use of *soft law* is also explained by the drafters' intention not to impose an excessive burden on the States Parties which do not all have the same means of action. It also happens that States voluntarily opt for endorsing a practice when the text does not impose it, as is the case with National Reports. Initiated by the States at the first COP to monitor the application of the Convention, this practice was the subject of a recommendation<sup>16</sup> at the second COP, but only encouraged the States to submit their report within a certain deadline so that all National Reports are available at the time of the next COP. Therefore, while the obligation had a relative binding force, the States, aware of the importance of these reports, adopted this practice while respecting the conditions laid down.

The COPs nonetheless seem to be more insistent towards the Contracting Parties, but this only happens on rare occasions, on a case-by-case basis.

## 2. Occasional recourse to high-intensity legal obligations

Despite the preponderance of low-intensity legal obligations adopted at COPs, the analysis of terminology highlights the use of several insistent terms that impose legal obligations on States Parties. The terms which scope seems to be the most restrictive are thus noted, namely formulas such as “requests”, “calls upon”, or even “urges”. The terms “commit”, “pray earnestly, strongly, or firmly” can also be classified among the insistent formulas, but with a lower intensity. These categories were listed in our study in the form of a legend, respectively with three or four stars depending on the intensity of the binding force of each obligation.

10 In this sense, see for example the resolutions aimed at peatlands protection (Resolution XIII.12, Resolution XIII.13 and Resolution XII.11), or the fight against invasive species (Resolution VIII.18.).

11 In this sense, see for example Recommendation 4.10; see also Resolution VIII.20.

12 Ramsar Information Sheets (RIS) are detailed sheets that present the wetlands characteristics of international importance inscribed on the List and which must be regularly updated to follow the evolution of the sites and detect possible changes. The latest updated version of the RIS to be completed by Parties (Resolution XI.8, Annex 1) is available at: <https://www.ramsar.org/sites/default/files/documents/pdf/cop11/res/cop11-res08-f-anx1.pdf>

13 Resolution VI.16.

14 Resolution VIII.21.

15 Resolution XI.4.

16 Recommendation 2.1.

Contrary to a standard of soft law, the *hard law* rule comes to express a command, an authorization or a prohibition for its addressee.<sup>17</sup>

As part of the recommendations and resolutions adopted during the COPs of the Ramsar Convention, *hard law* is mainly used to resolve technical and procedural issues, to adopt guidelines,<sup>18</sup> to harmonize the terminologies adopted by the States<sup>19</sup> or to pose clear definitions to indicate to States the interpretation of the text to be adopted.<sup>20</sup> The use of hard law also made it possible to put in place several tools that later proved useful, such as the continuous monitoring procedure,<sup>21</sup> the Montreux Record,<sup>22</sup> or even management plans for each site listed.<sup>23</sup> *Hard law*, however, is also used to emphasize points considered essential for the protection of wetlands that it would be good to add or modify for the Convention application,<sup>24</sup> as with Recommendation 1.3 which asks States to increase the number of sites listed, whereas Article 2 of the Convention only provides for the obligation to include at least one wetland on the List after the State has joined the Convention.

However, to think that *hard law* only supports the initial text of the Ramsar Convention to fill any gaps and specify the legal obligations of States would be simplistic. In reality, the analysis turns out to be more complex and deserves to be supplemented, because *hard law* is also used by the Parties to support soft law,<sup>25</sup> or even to reinforce the mandatory nature of a *soft law* measure adopted at a previous COP. On these two points, the example of management plans illustrates both the complementary use of *soft law* and *hard law* within the same measure, but also the evolution of the binding force of certain legal obligations along the COPs. First established by Resolution 5.7, States were simply “requested”<sup>26</sup> to make use of management plans for their wetlands of international importance, which corresponds to a low intensity obligation and leaves States free on this point. However, the States that opt for setting up a management plan had to “establish the appropriate legal and administrative structures for the application of these management plans”, which is *hard law*.

17 Cazala, J. (2011). International Soft Law between inspiration and aspiration. *Interdisciplinary Journal of Legal Studies*, Vol. 66, pp. 41-84. <https://doi.org/10.3917/riej.066.0041>

18 In this sense, see for example the guidelines adopted in Resolutions VII.6, VII.7, and VII.8, or the legal frameworks adopted in Resolutions VII.10 and VII.11. However, it should be noted that the content of the guidelines, with all subjects taken together, is mainly *soft law*.

19 In this sense, see for example Resolution IX.1, Annex A, *Conceptual framework for the wise use of wetlands and the maintenance of their ecological character*.

20 In this sense, see for example Resolution VII.10 which defines the terms „ecological character“ and „changes in ecological character“ with reference to the terms of Article 3.2 of the Ramsar Convention and to the Montreux Record.

21 Recommendation 4.7, which provides for formalizing the ongoing monitoring procedure and its operation..

22 Creation of the Montreux Record (Recommendation 4.8) and details on its operation (Resolution 5.4).

23 Resolution 5.7.

24 In this sense, see for example Resolution VI.1, which allows the establishment of early warning systems to detect changes in ecological character and to take action; or even Resolution VII.10 which asks the Parties to take into account the early warning indicators of the monitoring program (Resolution 5.1) in their management plans.

25 For an example of a measure whose application differs according to the type of Ramsar site, see Recommendation 5.3 concerning the extension of the perimeter planned during development projects for the ecological character maintenance, which is only recommended for wetlands (*soft law*), but mandatory for vulnerable sites (*hard law*).

26 Resolution 5.7, “URGES Contracting Parties to establish management plans for each wetland listed on the Ramsar List;...”.

Similarly, the other States had to refer to the guidelines corresponding to this tool when necessary,<sup>27</sup> which again falls under *hard law*. However, as of Recommendation 6.13, the practice of management plans becomes compulsory for all Ramsar sites listed, which will be reaffirmed several times thereafter,<sup>28</sup> until the creation of a registry to consolidate the management plans in the application, the San José Record.<sup>29</sup>

Used on a case-by-case basis depending on the needs for the application of the Convention, *hard law*, therefore, seems to fulfil a defined role. Its use can yield positive consequences: indeed, for the examples cited, the use of *hard law* makes it possible to promote the effective application of the Convention. On the whole, however, the legal rules are presented for the most part as being of low intensity, and even very low. This non-binding nature leaves a certain impact on the effectiveness of wetlands protection: indeed, there may be a risk of ineffectiveness of the Ramsar Convention and the resolutions adopted by the COPs and of missing out on the objective of protecting wetlands.

Therefore, addressing the problem linked to the impact of *soft law* on the effectiveness of wetlands protection, observed in the context of the formation of law at the level of the COPs, invites us to find new tools, intended to strengthen the application of the Ramsar Convention and of the recommendations and resolutions resulting from the COPs at the State level. The improvement of National Reports, by the insertion of legal indicators, can further provide an additional guarantee for monitoring the implementation of the Convention by the States Parties.

## II. A critical review of legal issues in the National Report template and elaboration of proposed changes

Having present the Report and identifying the limits in the light of legal indicators (point 1), the application of legal indicators to the National Report template aims to enhance the legal effectiveness of the Ramsar Convention (point 2).

### 1. The essential role of National Reports in monitoring the application of the Convention

The Ramsar Convention makes implicit reference to National Reports,<sup>30</sup> a feature of the Convention, in Article 3.1. This reference is repeated in a recommendation adopted at the second COP in 1984, which recommends that States submit their detailed reports on monitoring and compliance with the provisions of the Convention at least six months prior to each COP meeting.<sup>31</sup> One of the recommendations of States Parties is therefore to report on the measures they have taken to implement their commitments. As stated in Recommendation 2.1, “the timely submission of detailed national reports is vitally important to ensure the continued monitoring of the implementation of

27 Resolution 5.7, „FINALLY REQUESTS that, where necessary, Contracting Parties apply the “Guidelines for management planning for Ramsar Sites and other wetlands“, annexed to this Resolution;“.

28 Resolution VII.10 aims for the mandatory integration of a new criterion within management plans, the early warning indicators, then Resolution VII.12 strongly encourages the Parties to set up more management plans and to enforce them using an “appropriate oversight regime“.

29 Resolution VIII.15.

30 See the text of the Convention at [https://www.ramsar.org/sites/default/files/documents/library/current\\_convention\\_text\\_e.pdf](https://www.ramsar.org/sites/default/files/documents/library/current_convention_text_e.pdf)

31 Recommendation 2.1, [https://www.ramsar.org/sites/default/files/documents/library/key\\_rec\\_2.01e.pdf](https://www.ramsar.org/sites/default/files/documents/library/key_rec_2.01e.pdf)

the Convention and to share information on the measures taken in the conservation of wetlands, the problems which may have arisen and the appropriate means of addressing them". The Reports facilitate the exchange of information and therefore fulfil a communication function, required for research and for the implementation of the objectives of the Convention. The Reports are official documents of the Convention and are made available to the public on the Convention's website.<sup>32</sup> Indeed, National Reports are intended to: extend information on the Convention implementation and facilitate national planning on a forward-looking basis, while highlighting emerging issues and difficulties encountered by Parties that may require extra attention. The Reports can provide each Party with a tool to assess and monitor its progress in implementing the Convention, as well as to plan future priorities.<sup>33</sup> These Reports reveal certain shortcomings in the monitoring of the Ramsar Convention implementation: the objective of this study was to identify them and to propose relevant amendments.

As the National Report template contains a variety of questions addressed to the States, the first step was to select the legal questions. Our reflection was then based on the aforementioned work by Michel Prieur, Ali Mekouar, and Christophe Bastin, *Measuring the environmental law effectiveness – Legal indicators at the service of sustainable development*, a work which proposes six indicators to assess the effectiveness of environmental law.

The proposed changes have some limitations. First, the difficulty of working on the legal questions formulation when these will sometimes be intended for a non-specialist public, an administrative authority for example, had to be taken into account. Then, the application of the set of six criteria was confronted with the following question: *should the formulation of the questions be precise to guide the States or, on the contrary, be broad so that they are free to consider different directions?* Choices were therefore made with awareness of these limitations, sometimes opting to guide States to obtain precise information, when it seemed necessary, and sometimes leaving questions broad.

To propose modifications to the National Report model, the use of the six criteria made it possible to question each of the legal questions. *"The first criterion is the existential criterion and/or the legal sources of the area of law concerned: in order to be effective, a standard must first come to exist. The second criterion is that of applicability: to be effective, a standard must be legally applicable with greater or lesser force. This is a condition of its opposability, that is to say of the fact that it can be invoked both by the administration and by individuals. The third criterion is the substantive criterion: to be effective, a standard must have more or less precise or general content. The fourth criterion is the organic or institutional criterion: in order to be effective, a standard must be implemented by appropriate institutions with sufficient staff and budget resources"*.<sup>34</sup> For example, the Report could address the following questions: *"Do these institutions exist? At what territorial level? How are they organised? Do they have human, technical, scientific, or financial resources? The fifth criterion is that of application controls: in order to be effective, a standard must be actually applied and its application must be subject to several controls, namely: administrative controls, judicial controls, and public controls. And the sixth criterion is the one reinforcing effectiveness and conditioning it:*

32 The National Report template was adopted by COP14 in 2021 and is available on the Convention's website (see next note).

33 Document SC57 Com.10, *Revised Draft National Report Format for COP14*. [https://www.ramsar.org/sites/default/files/documents/library/sc57\\_com10\\_revised\\_cop14\\_nrform\\_e.pdf](https://www.ramsar.org/sites/default/files/documents/library/sc57_com10_revised_cop14_nrform_e.pdf)

34 Prieur, M., Bastin, C., & Mekouar, A. (2021). *Measuring the Effectivity of Environmental Law – Legal Indicators for Sustainable Development*. Brussels: Peter Lang. <http://www.peterlang.com/document/1114411>

*to be effective, a standard must correspond to economic, social and cultural requirements and data. It is therefore a question of taking into account the influence that these non-legal criteria can have on the law.*<sup>35</sup>

It is against these criteria that the National Report template has been examined. Therefore, out of the 125 issues identified, 70 (i.e. 56% of the Report's total) have a legal dimension. These 70 legal questions are the ones the work was based on.

Once identified, the question was to apply the legal indicators to suggest proposals for modifying the National Reports.

## **2. The application of legal indicators to the National Report format aimed at enhancing the legal effectiveness of the Ramsar Convention**

The main objective was to modify certain legal questions of the Report model to improve the monitoring of the application of the Convention by the States and thus seek better effectiveness of the Ramsar Convention.

From the six criteria for evaluating the effectiveness of environmental law and the selection of legal questions, it was necessary either to develop a proposal for modification or to decide not to make either of the two proposals because the question was relevant in light of these six criteria. In the established Report which proposes modifications, each proposal has been indicated through the letter "C", referring to the term "criterion", followed by the number of the indicator of support that led to such modification to be proposed. Therefore, if the legal indicator used is the first criterion, i.e. the existential criterion, criterion C1 is listed next to the proposed modification. Following the selection of the criterion, a brief justification of the choice made was prepared.

With this work methodology and with the help of the effectiveness criteria, the legal issues of the Report were the subject of 6 proposals for additions and 53 proposals for modifications.

These proposals provided for making at least four observations. First, the proposed additions and changes are intended to facilitate, clarify or improve the drafting of National Reports provided to the Ramsar Convention Secretariat. As a result, the findings of the proposals demonstrate the need to specify the questions listed in the standard report, in particular with the help of suggested examples, in order to further guide the States in their reflection and to have better monitoring of the application. For example, for the question: "What are the five priorities for the application of the Convention?" », the proposal made, using criterion C1, was as follows: "What are the five legal priorities for applying the Convention (for example adopting a law, a decree, a plan, creating an institution, etc.)?" This proposal for modification will make it possible to evaluate the legal development envisaged, by inserting examples that can help the reflection of the recipient of the Report.

The second observation shows the need to simplify the wording of the questions in order to save States time when drafting their National Reports. For example, question 9.6 is: "Has your country formulated any plans or projects supporting and enhancing the role of wetlands in supporting and maintaining viable agricultural systems?" The proposal, based on criteria 1 and 5, was as follows: "Are plans or projects being developed in your State enhancing the role of wetlands for the viability of agricultural systems?". This wording is simpler than the original one and will prevent the preparation of the Report from becoming a time-consuming activity.

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35 *Ibid.*, p. 119.

The third observation is that it has proven necessary to invite the States to justify their answers, in particular concerning the successes and obstacles encountered as well as the priorities identified, by basing their answers on concrete examples in order to account for the evolution of the effectiveness of the Convention. For example, question 5.2 states: “Have the Ramsar Sites Information Service and its tools been used for the national identification of other Ramsar Sites for designation? A=Yes; B=No; D=Planned; Additional information. The proposed change reads: “5.2 Have the Ramsar Sites Information Service and its tools been used for the national identification of other Ramsar Sites for designation? A=Yes; B=No; D=Planned; Justify your answer: If the answer was D = Planned, please briefly justify the answer. Additional information: Is this application mandatory?”

The last observation is a reminder of the importance of establishing controls, sanctions, and remedies to ensure better effectiveness of the Convention. For example, question 9.9 states: “Has your country made efforts to conserve small wetlands in accordance with Resolution XIII.21?” The proposed change reads: “Has your country made efforts to conserve small wetlands in accordance with Resolution XIII.21?” A=Yes; B=No; C=Partially; D=Planned; Justify your answer: If the answer was D = Planned, please briefly justify the answer. 9.9.1. If so, has a legal act been adopted? Are controls and sanctions planned? The proposal aims to monitor the control and sanction systems implemented in the States to enhance the Convention effectiveness.

## Conclusion

The identification and classification of the more or less binding legal obligations in the recommendations and resolutions of the COPs on the one hand, and the elaboration of proposals for modifications to the National Report model on the other hand, lead to the same objective: the reinforcement the legal effectiveness of the Ramsar Convention on wetlands. Although legal indicators play a complementary role in strengthening the application of the Ramsar Convention, the majority of whose provisions are soft law, there are still gaps to be filled. For example, today there is no compliance committee and 50% of listed sites do not have a management plan.

Fifty years after the birth of international environmental law, the relevance of legal indicators is conducive to strengthening its effectiveness. For example, article 6.8 of the regional Escazú Agreement provides for common indicators of effectiveness and progress in respecting national and international commitments. Similarly, as part of the preparation for COP14, which took place from 5 to 13 November 2022, Burkina Faso’s draft resolution on legal indicators was discussed, although this initiative was not adopted.<sup>36</sup> COP15 is expected to prove an opportunity to reflect further on this subject, with the expectation that legal indicators can strengthen the implementation of the Ramsar Convention and set an example to follow in improving environmental law in general.

**Keywords:** wetlands – effectiveness – legal indicators – soft law/hard law – national reports – international law – Conference of Parties.

<sup>36</sup> In this regard, see the Report and Decisions of the resumed session of the 59<sup>th</sup> Meeting of the Standing Committee, item 24.3 of the Agenda, of 24 May 2022. <https://www.ramsar.org/document/report-and-decisions-resumed-session-59th-meeting-standing-committee>



## References

- Carbonnier, J. (2001). *Flexible law: For a sociology of law without rigor* (10<sup>th</sup> edition), p. 26. L.G.D.J. <https://doi.org/10.7202/1059844ar>
- Cazala, J. (2011). International Soft Law between inspiration and aspiration. *Interdisciplinary Journal of Legal Studies*, Vol. 66, pp. 41-84. <https://doi.org/10.3917/riej.066.0041>
- Convention on Wetlands of International Importance especially as Waterfowl Habitat, signed at Ramsar (Iran) on February 2, 1971, United Nations, *Treaty Series*, Vol. 996, No. 14583. <https://treaties.un.org/doc/Publication/UNTS/Volume%20996/volume-996-I-14583-English.pdf>
- Convention on Wetlands, Conference of the Contracting Parties (1984-2018). *Resolutions and Recommendations of the Conference of the Contracting Parties to the Convention on Wetlands*. [https://www.ramsar.org/sites/default/files/documents/library/list\\_resolutions\\_recommendations\\_e.pdf](https://www.ramsar.org/sites/default/files/documents/library/list_resolutions_recommendations_e.pdf)
- Prieur, M., Bastin, C., & Mekouar, A. (2021). *Measuring the Effectivity of Environmental Law – Legal Indicators for Sustainable Development*. Brussels: Peter Lang. <http://www.peterlang.com/document/1114411>
- Salmon, J. (2001), *Dictionary of Public International Law*. Bruylant.
- Secretariat of the Convention on Wetlands (2006). *The Ramsar Convention Handbook: Guide to the Convention on Wetlands* (Ramsar, Iran, 1971), 5<sup>th</sup> edition. Gland, Switzerland. <https://www.ramsar.org/handbooks>
- Secretariat of the Convention on Wetlands (2019). Document SC57 Com.10, *Revised Draft National Report Format for COP14*. <https://www.ramsar.org/document/national-report-form-cop14-offline-version>
- Secretariat of the Convention on Wetlands (2021). Document SC59 Doc. 24.3, *Draft resolution on:development of legal indicators to measure the effectiveness of the Ramsar Convention*. [https://www.ramsar.org/sites/default/files/documents/library/sc59\\_24.3\\_dr\\_burkina\\_faso\\_legal\\_indicators\\_e.pdf](https://www.ramsar.org/sites/default/files/documents/library/sc59_24.3_dr_burkina_faso_legal_indicators_e.pdf)

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– translation from French –

## Example of putting the method of legal indicators into practice

Protocol for cooperation in combating pollution of the Mediterranean Sea by oil and other harmful substances in case of emergency

Lucie Brouwer and Mattéa Armandoni

### Abstract

Through collective reflection, students holding two master's degrees in maritime law and environmental law (legal risk management) from the Faculty of Law and Political Science of the University of Côte d'Azur have applied the method of legal indicators to a text that already had one. New indicators have been proposed. The results of this work confirm in particular the accuracy of the sets of indicators, which spontaneously appeared through the exchanges.

*This publication is the result of a collective work led by students of two masters of the Faculty of Law and Political Science of the University of Côte d'Azur. It aims to present the practical results of applied research work.*

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In support of the reflection led by Professor Prieur on legal indicators, it was decided to apply the method to the “Prevention and critical situations”<sup>1</sup> Protocol of the Barcelona Convention for the protection of the marine environment and the Mediterranean coast. This Protocol focuses on the prevention, readiness, and response to marine pollution from ships in the Mediterranean. It aims to prevent and address threats to the marine and coastal environment in the Mediterranean following accidental spills or the accumulation of discharges of hydrocarbons or other harmful substances. The implementation of the Protocol is supported by the Mediterranean Regional Centre for Emergency Response to Accidental Marine Pollution (REMPEC).<sup>2</sup> As the Protocol is also part of the “Barcelona Convention system”, Article 26 of the Convention applies to it, which establishes a process for monitoring implementation (*compliance reporting*), based on State reports drawn up from an established model.<sup>3</sup>

By breaking away from the pre-existing State report model, the work performed by the master's students aimed to enrich the approach to the implementation of the Protocol, by going beyond, if necessary, the logic at work in the report template. This way, the students developed 117 indicators for the 25 articles of the Protocol. Some articles without indicators in the reporting template in

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1 The «Prevention and Critical Situations» Protocol was adopted on 25 January 2002 in Malta and entered into force on 17 March 2004.

2 [www.rempec.org](http://www.rempec.org)

3 Doc. UNEP(DEPI)/MED IG.23/23, p. 93.

force have been the subject of proposals; others, which already had indicators, have seen them expanded or even renewed. It is not a question of giving an exhaustive account of them in the context of this summary, and only the most representative of the choices made appear in these lines.

To elaborate on new indicators allowing innovation in this area, the team relied on the nomenclature of the six sets identified by the work of Michel Prieur and Christophe Bastin.<sup>4</sup> It would undoubtedly be possible, through a finer analysis grid, to link these indicators to those identified in other existing works.<sup>5</sup> However, no reference to international legal criteria has yet been developed apart from the cited work.

Following the end of this work, two main observations were made. First, a strong resonance was observed between the work performed by the team and the reflections recently made within REMPEC, in particular the recommendations of the Twelfth (Malta, 23-25 May 2017) and Thirteenth (Malta, 11-13 June 2019) Meetings of REMPEC Focal Points on synergies between databases and their interconnection. The observation gets all the more remarkable in that the indicators proposed were first proposed spontaneously, by students who were uninformed of the compliance reporting mechanism of the Barcelona Convention. Second, the students have developed indicators that fit perfectly into the categories developed by the theoretical work of Mr. Prieur. Each of the six sets of indicators identified<sup>6</sup> is present in the proposals for indicators formulated for the “critical situations” Protocol, except for the sixth on extra-legal indicators, which was difficult to understand and implement in the context of this Protocol.

A selection of the most relevant indicators compared to those pre-existing in the State report model is proposed here. These can be grouped into three categories, examples of which will be given. Some indicators were first added to articles that previously lacked them (Section I). Others were then developed for items with criteria in the State report template (Section II). Finally, indicators have been defined to enhance the regulatory force of a provision (Section III).

## I. Indicator creation

Article 3 of the Protocol, formulated in general terms, establishes an obligation to cooperate with several consequences. In the current State report template matrix, there is no indicator for the provision. However, the potential scope of Article 3 is such that it makes it appropriate to add indicators. To ensure optimal text application, it is relevant to add such tools, in particular to two provisions of the said text.

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4 Prieur, M., Bastin, C., & Mekouar, A. (2021). *Measuring the Effectivity of Environmental Law – Legal Indicators for Sustainable Development*. Brussels: Peter Lang. <http://www.peterlang.com/document/1114411>

5 Betaille, J. (2012). The legal conditions for the efficiency of the standard in domestic public law: illustrations in town planning law and environmental law. *Legal Review of the Environment*, N° 2, 2013. p. 381. [www.persee.fr/doc/rjenv\\_0397-0299\\_2013\\_num\\_38\\_2\\_5856\\_t18\\_0381\\_0000\\_1](http://www.persee.fr/doc/rjenv_0397-0299_2013_num_38_2_5856_t18_0381_0000_1) The author identified 127 indicators.

6 Prieur, M., Bastin, C., & Mekouar, A. (2021). *Measuring the environmental law efficiency*, op. cit., v. p. 154 et seq.

The first provision concerned is as follows:

*“1. The Parties shall cooperate:*

*a) to implement international regulations to prevent, reduce and control pollution of the marine environment from ships; and*

*b) to take all necessary measures in cases of pollution incidents.”*

*The following indicators have been proposed:*

- Does the State maintain a database of relevant international regulations?
  - In terms of binding international rules?
  - In terms of recommendations and guidelines?
- Does the State Party have an established procedure for dealing with a pollution incident (cf. Art. 4 § 1) that incorporates an international cooperation dimension?

The second provision reads as follows:

*“2. In cooperating, the Parties should take into account as appropriate the participation of local authorities, non-governmental organizations and socio-economic actors.”*

Despite the tone of its formulation, this provision can give rise to a legal indicator. The following indicator is proposed:

- Has the State identified the relevant stakeholders in order to prepare the response to a pollution event?

Article 3 highlights the international cooperation between the different States Parties to the Protocol. To identify the legal reality of the means implemented, the proposed indicators relate to two of the six sets of indicators in the catalogue established by Professor Prieur’s research group. They first fall within the third set, “Substantial criterion”<sup>7</sup>, insofar as the principle of cooperation is its very essence. This obligation of cooperation also has a purely normative scope since it implies that an up-to-date database of international regulations is established within each State.

Moreover, these criteria also share much in common with the fourth set, “Organic or institutional criterion”<sup>8</sup>, since they are also based on the means implemented by the States to “*prevent, reduce, and control pollution of the marine environment by ships*”.

## II. Enhancing existing indicators

Article 9 of the Protocol, regulating the “reporting procedure” in relation to the risk of pollution events in the Mediterranean, offers a relevant field of study with regard to international cooperation. In fact, the text contains two categories of propositions. The former aims for cooperation between States by establishing a notification procedure, and the latter calls on the Parties to take measures on an individual basis.

<sup>7</sup> Ibid. p. 147 et seq. and spec. p. 155.

<sup>8</sup> Ibid. spec. p. 156.

The first part of the text, therefore, gives rise to an obligation for the signatory States to give instructions to the masters of ships and pilots of aircraft observing pollution or risk of pollution to report it. The provision reads as follows:

*“1. Each Party **shall issue** instructions to masters or other persons having charge of ships flying its flag and to the pilots of aircraft registered in its territory to **report by the most rapid and adequate channels in the circumstances**, following reporting procedures to the extent required by, and in accordance with, the applicable provisions of the relevant international agreements, to the nearest coastal State and to this Party:*

*a) all **incidents** which result or may result in a discharge of oil or hazardous and noxious substances;*  
*b) the **presence, characteristics and extent of spillages of oil or hazardous and noxious substances**, including hazardous and noxious substances in packaged form, observed at sea which pose or are likely to pose a threat to the marine environment or to the coast or related interests of one or more of the Parties.”*

Given these initial asserted ambitions of the text, the following indicators could be inserted into the State report model:

- Has the State given instructions to ship masters:
  - By legislative measures?
  - By regulatory measures?
  - By other measures? If so, which ones?
- Has the State established reporting procedures that may be required:
  - For events?
  - For presence, characteristics, and extent?
- Are the fastest and most appropriate channels to report identified?
- Has the State ever reported:
  - Events?
  - The presence, characteristics, and extent of oil spills or harmful substances?

The second part of the text requires States to bind masters of ships to the obligations of clause 1, allows the assistance of the Regional Centre (REMPEC) to be requested, and provides for an obligation to provide information:

*“(2) Without prejudice to the provisions of Article 20 of the Protocol, each Party **shall take appropriate measures** with a view to ensuring that the master of every ship sailing in its territorial waters complies with the obligations under (a) and (b) of paragraph 1 and may **request assistance from the Regional Centre in this respect. It shall inform the International Maritime Organization** of the measures taken.”*

To ensure compliance with these provisions, the following indicators are proposed:

- Has the State requested assistance from the Regional Centre?
- Has the State informed the IMO of the measures taken?
- If new provisions have been adopted, has the State informed the IMO of it?

A similar reporting obligation is addressed to port authorities by Article 9:

*“3. Each Party **shall also issue instructions to persons having charge of sea ports or handling facilities under its jurisdiction to report to it, in accordance with applicable laws, all incidents which result or may result in a discharge of oil or hazardous and noxious substances.**”*

To ensure the application of this obligation, the following indicator could be added:

- Has the State received any reports of an event?

Article 9 also includes an imperative of speed in the fulfilment of the obligations arising therefrom:

*“7. The information collected in accordance with paragraphs 1, 3 and 4 **shall be immediately communicated** to the other Parties likely to be affected by a pollution incident.”*

A subjective indicator is proposed to estimate compliance with this requirement:

- Does the State consider that it did not immediately receive the information?

Finally, the text recommends that signatory States use a standard reporting document:

*“8. The Parties shall use a mutually agreed **standard form** proposed by the Regional Centre for the reporting of pollution incidents as required under paragraphs 6 and 7 of this Article.”*

If this formality is not taken into consideration by the State, the following indicator will make it possible to realise this:

- Does the State already use a format other than the standard form proposed by REMPEC?

Article 9, which is one of the longest in the Protocol, highlights the reporting procedure between States in the event of a pollution, which is a central element of the text. It is here the fourth set of indicators, “Organic or institutional criterion”, which offers support for reflection, insofar as, in the extension of Article 3, the Protocol calls for rapid notification between signatory States as soon as a pollution event occurs. The indicators here underline the transpositions required by the Protocol in the various domestic laws.

In addition, one of the indicators goes beyond the logic of implementation monitoring reports by asking:

- Does the State consider that it did not immediately receive the information?

Here we are at the heart of one of the difficulties in researching the Protocol: the diplomacy required for the development of a questionnaire while emphasizing the possible practical efficiency of the provisions.

### III. Reinforcement of the degree of constraint of an article by the implementation of global indicators

Article 12 “Assistance” is based on the principle of cooperation. The provisions of this article yield little normative value. Their wording is resolutely that of obligations of means for the Parties to make “all possible efforts to extend their assistance”. Nonetheless, it seemed appropriate to broaden the scope of the obligations of this article through indicators that would make it possible to enhance the efficiency and effectiveness of the Protocol. While the State report model offered only one indicator, several were imagined.

*“1. Any Party requiring assistance to deal with a pollution incident may **call for assistance** from other Parties, either directly or through the Regional Centre, starting with the Parties which appear likely to be affected by the pollution. This assistance may comprise, **in particular, expert advice and the supply** to or placing at **the disposal** of the Party concerned of the required specialized personnel, products, equipment and nautical facilities. Parties so requested shall use **their best endeavours** to render this assistance.”*

To enhance the strength attached to the scope of the text, several indicators are proposed:

- Does the State keep an up-to-date list of experts who can be called upon in the event of a critical situation?
  - How many experts are identified by the State?
  - How many are identified by relevant area of expertise?
  - Is there an expert selection procedure?
- Is there an administrative and legal framework providing for the mobilisation of experts in the event of a critical situation? If so, what is the timeframe?

While there is no doubt that the first clause sets out an obligation of means, the establishment of indicators could make it possible to enhance the efficiency and effectiveness of its implementation. The “soft” formulation of the provision has thus made it possible to update a multitude of indicators, in particular concerning “experts” and the “supply” part.

Indeed, by proposing “inventory” indicators of the human and material resources required for the implementation of the provisions, we measure the involvement of the States in the implementation of the assistance, and therefore in their cooperation efficiency.

As such, the approach has partially freed itself from the reference method, followed until then, given that it involves a quantified response. However, the method of formulating indicators proposed by Michel Prieur in principle only allowed questions with closed answers (yes/no).

*“3. In accordance with applicable international agreements, each Party shall take the necessary legal and administrative measures to facilitate:*

*(a) the arrival and utilization in and departure from its territory of ships, aircraft and other modes of transport engaged in responding to a pollution incident or transporting personnel, cargoes, materials and equipment required to deal with such an incident; and*

*(b) the expeditious movement into, through and out of its territory of the personnel, cargoes, materials and equipment referred to in subparagraph (a).”*

The following indicators are proposed:

- Are specific administrative regulations in force to facilitate the arrival and utilization of its territory, as well as the departure of ships and aircraft in such a case?
  - How much time is saved by this procedure?
  - How many administrative steps are eliminated due to this procedure?
- Are specific administrative regulations in place to facilitate the expeditious movement of personnel, cargo, products, and equipment referred to in subclause (a)?
  - How much time is saved by this procedure?
  - How many administrative steps are eliminated due to this procedure?

The last clause of this article only includes indicators leading to an encrypted response. Cooperation between States is evaluated here in relation to the reaction time of the various States: a fluid chain of information must indeed be put in place.

This obligation of cooperation has a purely normative scope since it implies that an up-to-date database of international regulations is established within each State.

In addition, taking into consideration the six sets of indicators set out in Professor Michel Prieur's work on legal indicators, this article falls within the third set, "Substantial criterion", insofar as the principle of cooperation is its very essence.

## Conclusion

In conclusion, this study was conducted taking into consideration that legal indicators should contribute to filling a gap relating to ignorance or underestimation by States of the positive role of environmental law in society (for example, these provide for enhancing report-making means on the state of the environment).

The work of developing the indicators presented has also made it possible to measure their importance as a tool for governance and the evaluation of public policies. This tool aims to scientifically assess the conditions for the efficiency of environmental law by identifying the different phases of the legal process that condition the implementation of the law in a questionnaire. It is indeed a question of objectifying the evaluation by mathematical measurement of the administrative, institutional, and jurisdictional conditions of the application of environmental law in a particular area (here the national application of the "Prevention and critical situation" Protocol of the Barcelona Convention).

The indicators thus allow public authorities and citizens to acquire knowledge and visibility of the progress, difficulties, gaps, or even regressions of the law, to take the measures of implementation, or to perform the necessary and adapted reforms.

**Keywords:** application of the indicator method – Barcelona Convention – pollution – law of the sea – compliance reporting.

## References

Bétaille, J. (2012). The legal conditions for the efficiency of the standard in domestic public law: illustrations in town planning law and environmental law. *Legal Review of the Environment*, No 2, 2013. p. 381. [www.persee.fr/doc/rjenv\\_0397-0299\\_2013\\_num\\_38\\_2\\_5856\\_t18\\_0381\\_0000\\_1](http://www.persee.fr/doc/rjenv_0397-0299_2013_num_38_2_5856_t18_0381_0000_1)

Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (2002). *Protocol relating to cooperation in preventing pollution from ships and, in case of emergency, combating pollution of the Mediterranean Sea*. <https://www.unep.org/unepmap/fr/who-we-are/contracting-parties/emergency-protocol-prevention-and-emergency-protocol>

Prieur, M., Bastin, C., & Mekouar, A. (2021). *Measuring the Effectivity of Environmental Law – Legal Indicators for Sustainable Development*. Brussels: Peter Lang. <http://www.peterlang.com/document/1114411>

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# Indicators for the implementation of international climate protection law

Gerd Winter

## Abstract

This article strives to contribute to the study of implementation of international environmental law. The case presented is climate change mitigation as propounded by the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Agreement. Considering the structure of indicator analysis guiding this book, I will discuss indicators for both the effectivity and effectiveness of those international treaties. As the number of imaginable indicators is huge, some choice must be made. Mine is to focus on the substance of the law rather than the organizational framework of its implementation. In more detail the process how the sometimes vague phrasing of the treaties is successively concretised and put into practice shall be described, with a particular attention to the influence of climate science and science based policy proposals.

The analysis starts with examining the bindingness of the treaties as being a major precondition of a treaty's influence on climate protection. It goes on identifying the level of acceptable or non-acceptable harm propounded by the treaties. Further on, the efforts required to mitigate climate change and the principles of effort sharing are reconstructed. Finally, methods of predicting greenhouse gas emissions are explored and measured against allowable emissions budgets. Finally, considering the enormous challenge posed by the budget approach a more practicable approach is suggested that requires states to "bottom up" explore and take all measures that are technically and economically possible.

## I. Bindingness of the treaties

The Framework Convention on Climate Change (UNFCCC) and the Paris Agreement (PA) will be the core object my study. Of particular interest are those provisions that define the level of climate protection and the sharing of efforts to maintain such levels. This means that the technical instruments offered by the treaties, in particular monitoring and reporting duties, are left aside. Before the relevant provisions are explained in more detail, I shall summarise to what extent they have become binding law.

Bindingness of a treaty as such must be distinguished from bindingness of its content. An international treaty, which is formally binding because ratified by the contracting parties may only have programmatic or indeterminate content. But even such content can have informal importance on the making and interpretation of law (Preston, 2021, p. 14). Inversely, an international non-binding agreement may be formulated in rather precise and demanding language and as such have considerable influence on state practices (Birnie, Boyle, & Redgwell, 2009, pp. 35-38). This means that resolutions agreed at Conferences of Parties may be referred to when interpreting binding but substantively open provisions.

According to ruling opinion, the PA while formally binding does not have much prescriptive value in substance. It is considered to advocate a bottom-up concept leaving wide discretion to the

contracting states and rather guide them by procedural tools such as the declaration of pledges, reporting duties and global stock takes. This understanding often refers to the negotiations at the past conferences of parties to the UNFCCC. However, historical reasoning through references to the so-called *travaux préparatoires* is only an auxiliary instrument of interpretation.<sup>1</sup> Treaty interpretation is basically “objective”, “textual”. This means it must start from the text and look at its telos and systemic context. In addition, interpretation shall be dynamic, meaning that not the time of adoption but of the application of the treaty guides the understanding.<sup>2</sup> This will, for instance, be the case, if terms have adopted a new meaning in the light of new scientific evidence. There are thus legitimate interpretative tools that may excavate more substantive value of the PA.

Insofar as some binding substance is identified, it is to be clarified how that interacts with domestic legal orders. “Monist” states accept treaties as directly applicable, some even conceding them higher rank in relation to domestic laws. “Dualist” states accept applicability only if the relevant treaty provision was by legal act transposed into national law. The EU, for instance, conceives its relation with international treaties as monist<sup>3</sup>, and the UK, for further instance, as dualist.<sup>4</sup> Some “dualist” states nevertheless accept direct applicability, if the provision is ‘self-executing’ which means if it is aimed at creating legal relationships involving individuals and formulated in precise and unconditional terms. Vice versa, monists states deny direct applicability of an international provision that is vague or conditional.<sup>5</sup> Therefore, one can speak of a trend to convergence of the two basic approaches (Preston, 2021, p. 7). An additional facet of convergence is that both the monist and dualist approaches recognize that domestic law which leaves room for different interpretations should be interpreted in the light of international law.

All this means that the UNFCCC and PA must be examined as to their textual preciseness and unconditionality.

## II. Concretising the level of (un)acceptable harm

A rule normally has a conditional structure, or ‘if A then B’, meaning in relation to climate change: if a level of acceptable harm will be or is already exceeded, those responsible must take measures such as to prevent damage, reduce further aggravation, or make good past damages. As will be shown this structure is more or less explicitly also embedded in the relevant international rules. While the current legal-scientific discourse rather focusses on the second aspect, i.e. the obligation to take measures, I will nevertheless also sketch out the first because this better structures the interpretation and application of the relevant law. The first step therefore is to identify the level of acceptable or

1 Art. 32 Vienna Convention on the Law of Treaties.

2 ICJ 1970: “[...] an international instrument has to be interpreted and applied within the framework of the entire legal system, prevailing at the time of the interpretation. In the domain to which the present proceedings relate, [...] the *corpus iuris gentium* has been considerably enriched, and this the Court, if it is faithfully to discharge its function, may not ignore.” See further Dallier, Forteau & Pellet, p. 287, who propose to apply retrospection to technical terms and prospection to conceptual or generic terms.

3 More precisely, a treaty provision must be precise and unconditional to be directly applicable. See ECJ C-265/03 (Simutenkov) para. 21.

4 See, in relation to the Paris Agreement, UK Supreme Court in *Friend of the Earth/Plan B v Heathrow Airport*, judgment of 16 December 2020, [2020] UKSC 52, at para 108.

5 An example of an international agreement not considered to be directly applicable is the GATT, see ECJ C-280/93 (Banana import regulation) para 106.

unacceptable harm, and the second to determine the amount and sharing of measures. Both steps help to concretise broadly framed provisions.

There are two ways how to define (un)acceptable harm: by pointing to damages caused in the real world, or by representing damage through abstract indicators.

The first route can be found in Art. 1 UNFCCC which sets a standard at the ‘stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.’ Considering the wealth of knowledge about damage caused already at the present time, it must be acknowledged that ‘dangerous anthropogenic interference’ is already a fact.

It is important to note that whether dangerous interference is given must be separated from whether the interference can be justified by weighing against other concerns. Science sometimes overlooks this, such as in the suggestion of the IPCC to define dangerous interference as a ‘complex task’ requiring, the balancing of the risks of climate change (risks of gradual change and of extreme events, risk of irreversible change of the climate, including risks for food security, ecosystems and sustainable development) against the risk of response measures that may threaten economic sustainability.<sup>6</sup> This must be rejected. “Dangerous anthropogenic interference” clearly points to the effects of climate change, not of mitigation measures. The costs of measures may only be considered at the second step when reasons to justify interferences are tested.

In intermediate conclusion, it must be acknowledged that the real-world threshold of damage as established by Art. 1 UNFCCC has already been transgressed. This understanding of harm as real-world damage is also supported by the customary no-harm rule. According to this rule “a state must use all means at its disposal to prevent significant damage caused in another state from activities originating in its territory and for which the state is responsible.”<sup>7</sup> “Significant damage” obviously points to realities, not to abstract parameters.<sup>8</sup>

The second route was taken by the PA in its Art. 2. It can be understood to define the level of unacceptable harm abstractly by globally averaged temperature ceilings that shall not be exceeded. Art. 2 PA reads as follows:

‘This Agreement, in enhancing the implementation of the Convention, including its objective, aims to strengthen the global response to the threat of climate change, in the context of sustainable development and efforts to eradicate poverty, including by:

- (a) Holding the increase in the global average temperature to well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change;’
- (b) ...

The ceilings ‘well below 2°C, and ‘efforts to limit [...] to 1.5°C’ are formal treaty law binding the contracting parties. Concerning its prescriptive content, however, legal scholars have seldomly

6 IPCC AR 4 WG 3.

7 ICJ Nuclear Weapons 1996, 242, para. 29.

8 The no-harm rule was not overridden by the PA, as low-lying nations have declared as a condition of joining the PA. See UN Treaty Collection, Ch. XXVII, 7.d, available at: [https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg\\_no=XXVII-7-d&chapter=27&clang=en#EndDec](https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XXVII-7-d&chapter=27&clang=en#EndDec).

discussed this with scrutiny. Most of them just mention the ceilings to be there and immediately turn to discussing the obligations of mitigation, adaptation and financial assistance highlighting that the hard law of the PA is rather procedural when requiring nationally declared contributions (NDCs) (Bodansky, 2016; Thorgeirsson, 2017; Birnie, Boyle, & Redgwell, 2021; Voigt & Ferreira, 2016). Those authors who do discuss the binding value of the ceilings conceive them as aims that give general direction to national contributions (Franzius & Kling, 2021, p. 203; Rajamani & Werksman, 2018). In contrast, binding force has, for instance, been suggested by Preston (Preston, 2021, p. 21).

It is true that the chapeau of the article starts with somewhat weak language ('aims to strengthen the global response'). It however becomes prescriptive when postulating that the global response shall be strengthened by '(H)olding the increase [...] well below 2°C [...] and to pursue efforts to limit [...]'. This is clear and indicative language not relativised by any other concern. The warming limits hence are ceilings that shall not be exceeded. The prescriptive character can also be explained by considering the history of the limits. 2°C was proposed as a so-called *Leitplanke* (guard rails) by the German Scientific Council of Global Environmental Change (WBGU) in 1995 when the Conference of Parties of the UNFCCC met in Berlin (Schlacke, 2014; WBGU, 2009). At that time, the warming still was at well below 1.5°C so that 2°C provided ample space for taking action. Hence, 2°C as a limit was not contested at subsequent COPs which were rather dominated by increasing evidence and discussions about risks accruing already from 1.5°C warming.

Asking what the qualification "well below" 2°C means some information about confidence levels is useful. When UNFCCC decisions from 2010 suggested to hold warming 'below 2°C' they assumed a likely chance of 66% to in reality stay below 2°C, with a remaining 33% likelihood that the limit would be exceeded. The 'well below' was meant to be a strengthening of the likelihood of staying below 2°C up to a likelihood of more than 90%. This means in the terminology of the IPCC that 'below 2°C' means a 'likely' limit and 'well below 2°C' means 'very likely' (Schleussner, Ganti, & Rogelij, 2022, p. 3). If assessed in terms of the precautionary principle (which advises that the more serious the effects are the higher the likelihood of prevention must be (Wiener, 2018, p. 608)), the catastrophic effects of warming up to 2°C demand that a probability of 98% must be required to stay below the level of 'real' 2°C. Remarkably, this equals the ceiling of 1.5°C if that is calculated with (only) 50% likelihood.<sup>9</sup>

One more argument opposing the substantial bindingness of the well below 2°C ceiling has been taken from Art. 4 (1) PA which provides that parties are to "achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century". This poses the problem that the budgets derived from the ceiling may have been spent before the second half of the century so that if emissions continue the ceiling will be exceeded. Some authors opine that Art. 4 (1) PA by allowing spending later accepts such overshoot (Franzius & Kling, 2021, p. 203). However, I believe if the temperature limit is a ceiling Art. 4 (1) PA can only be understood to require that the budgets must be spent without overshooting. If nevertheless some net emissions shall be acceptable after 2050 this can only be allowed if drastic immediate cuts are implemented that leave some small amounts to be stretched until later.<sup>10</sup> Overshoots may have to be accepted as

9 Schleussner et al., 2016; similar the CAT at <https://climateactiontracker.org/methodology/paris-temperature-goal/>

10 See the statement of the UK Committee on Climate Change: "The Paris Agreement aims to limit warming to well below 2°C and to pursue efforts to limit it to 1.5°C. To achieve this aim, the Agreement additionally sets a target for net zero global emissions in the second half of this century." The "additionally" implies that no overshooting is accepted. The statement was cited in and approved by High Court Case No

a factor of determining probability intervals. But they cannot be accepted as a planned component of policies. In particular, free rides are not allowed that calculate with massive but yet unknown removal techniques. This disregards the fact that once elevated temperatures set trajectories in motion which cannot be stopped by decreased temperatures (Baur et al., 2021), and it ignores tipping points (Schleussner et al., 2016).

The bindingness of the 2°C limit has also been approved by many courts, including the UK Court of Appeal<sup>11</sup>; the Federal Constitutional Court of Germany<sup>12</sup>; the Land and Environment Court, New South Wales<sup>13</sup>; and the Supreme Court of the Netherlands.<sup>14</sup> Some courts have interpreted the ‘well below’ to mean some degree between 2°C and 1.5°C. The BVerfG, for instance, found 1.75°C appropriate.<sup>15</sup> Moreover, many states have based their climate legislation on the temperature limits<sup>16</sup>, and many more states which submitted NDCs have referred to them.<sup>17</sup> It thus appears that a general practice has evolved among states qualifying as a “subsequent practice” that fortifies a more stringent interpretation.<sup>18</sup> This interpretation also corresponds to the ‘object and purpose’<sup>19</sup> of the PA which is to ‘strengthen the global response’ (Art. 2 (1)). It is also supported by the internationally recognized principle that treaties shall be interpreted so that they are given ‘effet utile’.<sup>20</sup>

While concerning 2°C the PA strictly demands to ‘holding the increase [...] below’, there is more leeway concerning 1.5°C (‘pursue efforts to limit’). It is unclear if this can be understood to accept a likelihood of only 50% for that limit. The knowledge collected by the IPCC 1.5°C report and the presently almost daily evidence of extreme weather events speak against such assumption, as does the Glasgow Climate Pact that was adopted in 2021. It lays out that the Conference serving as the Meeting of Parties to the Paris Agreement:<sup>21</sup>

21. Recognizes that the impacts of climate change will be much lower at the temperature increase of 1.5°C compared with 2°C and resolves to pursue efforts to limit the temperature increase to 1.5°C;

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CO/16/2018 (Plan B Earth et al v. Secretary of State for Business etc., [2018] EWHC 1892 (Admin), paras 21, 30.

- 11 Court of Appeal judgement of 27 February Case C1/2019/1053 (Plan B Earth v Secretary of State for Transport) [2019] EWHC 1070 (Admin) para 185.
- 12 BVerfG Case No 1 BvR 2656/18, 78/20, 96/20 and 288/20, BVerfGE 157, 30 para 159. More precisely, the court opined that the government was constitutionally enabled to incorporate the ceiling into national law.
- 13 Land and Environment Court New South Wales, Order of 8 February 2018, Case [2019] NSWLEC 7 (Gloucester Resources Ltd v Minister for Planning, paras 441, 697.
- 14 Hoge Raad, judgment of 20 December 2019, Case 19/00135 (State of the Netherlands v Urgenda) ECLI:NL:HR:2019:2007, para 7.2.8.
- 15 BVerfGE 157, 30 para 219.
- 16 See, for instance, Regulation (EU) 2021/1119 of the EP and Council, Art. 1 (2).
- 17 Rajamani et al. (2021) counted 127 states (representing 76% of NDCs) that referred to the temperature limits in their NDCs.
- 18 See Art. 31 (3) (b) Vienna Convention which accepts as a legitimate basis for the interpretation of treaties ‘any subsequent practice in the application of the treaty which establishes the agreement of the parties regarding its interpretation’. ‘Agreement’ is meant as some kind of consensus, not as a formal treaty. See ICJ (The Corfu Channel case) ICJRep. 1949, 25.
- 19 Cf Art. 31 (1) Vienna Convention.
- 20 ICJ (The Corfu Channel Case) ICJRep. 1949, 24. For more references to ICJ-cases see Daillier/Forteau/Pellet (2009) para. 169.
- 21 FCCC/PA/CMA/2021/10/Add.1, Decision 1/CMA.3 Glasgow Climate Pact.

22. Recognizes that limiting global warming to 1.5°C requires rapid, deep and sustained reductions in global greenhouse gas emissions, including reducing global carbon dioxide emissions by 45 per cent by 2030 relative to the 2010 level and to net zero around mid-century as well as deep reductions in other greenhouse gases.

This justifies to postulate that even 1.5°C must be held as a limit, and with a likelihood higher than 50%.

As a result, the two routes of determining the level of (un)acceptable harm come to different conclusions. According to the FCCC harm is already there, while according to the PA it will only occur in future. As the UNFCCC is the mother convention and its intention is supported by customary law it can be argued that it prevails. This means that the PA temperature limits cannot anymore be interpreted to mark the acceptable level of damage. Instead, however, they can be maintained as yardsticks if reinterpreted as an emergency reserve that is as a strategy agreed by the community of states but must never be exceeded.

### III. Effort determination and sharing

The conception of an emergency reserve serves as a basis for the determination of efforts. Such efforts can first of all be elaborated on a global level and then scaled down to national levels. The method how that is made transparent is the budget approach. Global emissions budgets are compiled and distributed among states. They serve as yardstick against which the emissions reduction measures are assessed.

Different steps and related parameters have been proposed how such analysis can be conducted. First of all, as said, the global budget must be calculated. The same must then be distributed among states. This is done by applying two criteria, equity and feasibility. Finally, it must be examined if the predicted factual emissions meet or exceed the respective national budget of a state. These steps have been elaborated by the Intergovernmental Panel on Climate Change (IPCC) and further tailored by the Climate Action Tracker (CAT). They will now be explained in more detail.

#### 1. Determining the overall effort

Climate science in general, including the CAT and its cradle, the IPCC, has investigated the necessary effort, or the available emissions budget, on a global scale. As already explained, the global budgets are derived from assumed warming limits. Their amount greatly depends on the likelihood that a given budget will ensure that the limit is kept. The higher the requested likelihood the smaller the budget will be, and vice versa. The CAT assumes a likelihood of 67% for the 2°C limit and 50% for the 1.5°C limit. This leads to budgets in 2020 of 1150 Gt CO<sub>2</sub> for a 2°C warming limit and 500 GtCO<sub>2</sub> for a 1.5°C warming limit.<sup>22</sup> This scientific information must be evaluated in legal terms. Just 67% likelihood of success or fatal 33% of failure appears as intolerable considering the catastrophic effects if 2°C is really reached. A higher percentage must be postulated such as above 90%, all the more so if the precautionary principle is applied. On that background and as explained above the 'well below' 2°C can be understood to coincide with a 50% likelihood to stay within 1.5°C.

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22 IPCC AR6 Synthesis Report p. 46.

A question to be separated from the calculation of the budget is how the budget shall be spent. There are three possibilities: spend now and save later ('convex'), save now and spend later ('concave'), or linear degression. Normally linear degression is chosen, such as in EU climate law. This raises the question of allowing overshooting the assumed trajectory due to an actual need of fossil energy supply. This may be tolerated if the excess is made good by later extra reductions. More problematic is whether overshooting can also be tolerated concerning the entire budget, or, in other words, the temperature limit from which it was derived. For instance, the CAT suggests to allow overshooting 1.5°C of the related budget if this is subsequently compensated by carbon removal from the atmosphere.<sup>23</sup> I believe this is not compatible with a strict understanding of the warming limits because higher temperatures set dangerous causalities in action that cannot be stopped later on. For instance, once melted ice cannot timely be refrozen.

## 2. Principles of effort sharing

The budget derived from each of the temperature limits can be illustrated as being like a house within which the states have agreed to live. The living space must be shared without an enlargement of the house being allowed. How much room the individual states shall be able to occupy is a question of appropriate allocation principles.

According to Art. 2 (3) PA 'This agreement [viz. the PA] will be implemented to reflect equity and the principles of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances.' Art. 4 (3) PA repeats them adding 'highest possible ambition' when addressing second round nationally determined contributions.<sup>24</sup>

In addition, all or some of these principles are also set out or alluded to in the preamble to the PA as well as in Art. 4 (1), Art. 4 (4), and Art. 4 (19) of the PA. They are flanked by principles concretising needs of developing states, such as eradication of poverty (Art. 4 (1)), the obligation to support their mitigation actions (Art. 4 (5), Art. 9) and the possibility for them to peak their emissions later and go slower (Art. 4 (1) and (6)).

When exploring the binding character of these principles, it should be noted that they are set out in indicative form ("This Agreement will be implemented"). The future tense does not change this. "Will" does not mean "is wished to" but is a promise to do something in future. This means the principles are binding not only in form but also in content. Still, there is no indication of priorities between them leaving room for states to make a choice.

A thread that runs through all of the principles is that they are open for differentiation, designing the responsibility to be 'differentiated', capabilities to be 'respective', and 'national circumstances' to be 'different' (Voigt & Ferreira, 2016). However, the possibility of choice and differentiation does not concede limitless discretion of states. There are two outer limits: first, grandfathering cannot be defended on equity grounds because it one-sidedly privileges those who have early on captured a major slice of the budget (Dooley et al., 2021, p. 302). And second, the community of states must as an entirety respect the set temperature limits. This means, by implication, that the individual state must keep the overall limits in mind when regulating its GHG emissions.<sup>25</sup>

23 <https://climateactiontracker.org/methodology/paris-temperature-goal/>

24 On the tightening of obligations for second round NDC's see Winkler, 2017, p. 148; Voigt & Ferreira, 2016; Nash et al., 2021, p. 1113.

25 It has been argued that because the provision does not mention the contracting parties as addressees



More criteria than those laid out by Art. 2 (3) PA have been suggested but I believe they can be subsumed to the said list. In particular, the right to development which is alluded to in Art. 4 (1), (4)-(6) PA can be regarded as covered by ‘differentiated responsibility’ and ‘respective capabilities’.

### 3. Principles of effort sharing applied

Climate science including the CAT have structured the principles as suggesting two approaches: one based on equity criteria and the other on feasibility of measures. The CAT, together with other authors, calls the equity based approach ‘fair shares’ and the feasibility based one ‘modelled domestic pathways’. I shall treat the two in turn.

#### 3.1 Fair shares

The CAT differentiates the equity criteria into responsibility, capability/need, equality, equal cumulative per capita, and responsibility/capability/need. These criteria can also be staged, moving from less to more ambitious ones. In terms of the PA principles the CAT criteria can be subsumed as follows: equality for equity, responsibility and need for common but differentiated responsibility, and capability for differentiated capabilities. Equal cumulative per capita resorts both to responsibility and equal per capita. Concerning staged approaches each particular stage corresponds to the respective principle.

I will now explain the implications of the individual principles the CAT applies. ‘Equal per capita’ puts pressure on developed states because their population is used to much higher yearly emissions than the population of states with lower living standards. Per capita has been criticised for ignoring ‘the inequalities in people’s needs, their level of development, internal economic stratification and access to other sources of energy’ (Dooley et al., 2021). But this objection cannot succeed. The welfare of people is highly dependent on the availability of energy, and if there are inequalities of the level of development it can be assumed that the poorer citizens aspire to improve their life conditions.

Of course, a major determinant of equal per capita is the time from which it shall count. The more it is located in the past the more emissions allowances will be deducted from the budgets of states, and in particular the industrialised ones (Robiou du Pont, 2023). The CAT indeed factors in past emissions naming the criterion responsibility. In terms of the Paris Agreement, the pertinent principle would be equity and/or common but differentiated responsibility. When identifying an appropriate time of departure, the start of industrialisation in the 19th century has often been referred to. But from a legal perspective, responsibility presupposes that an actor is aware of the damage it causes – which cannot be assumed for the early industrialisation. Taking awareness of a problem as the starting point one should rather choose 1992, the year of conclusion of the UNFCCC when all states agreed that urgent action was needed.

Concerning capability, the CAT interprets this to mean a country’s ability to pay for measures of emissions reduction, the metric being GDP per person.<sup>26</sup> This implies that the higher the GDP is the

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it is not prescriptive (Mayer, 2021; Rajamani & Werksman, 2018). However, the ceiling mirrors the sum of emissions from all contracting parties so that the entirety of parties bears the obligation. This does not hinder the provision to be prescriptive. It just addresses all states that have become contracting parties. In addition, Mayer (Mayer, 2021, p. 569) argues that an obligation holder must be a legal person which is not the case with the PA contracting parties. But, for instance, the civil law partnership is not a legal person and can nevertheless bear obligations which are then obligations of each individual member.

26 Actually, the CAT offers an alternative which is capability/need and capability/costs. In both cases the



more a country is expected to invest in emission reduction. Although this indicator is a rough one it appears to be reasonable in terms of fairness of effort sharing.<sup>27</sup>

'Need' appears to relate to the right to development and is captured by the Human Development Index (HDI) which refers to levels of education, life expectancy and income per capita. While it legitimately works in favour of allowing developing countries a greater share in the emissions budget, it would need to be critically discussed for its incentivising of resource consumption (WWF, 2014).

As the different criteria result in different national budgets, the question arises what criterion should be applied.

National courts such as the German Federal Constitutional Court have chosen present equal per capita which is easy to apply because the global budget must only be divided according to the population size of a country.<sup>28</sup>

In contrast, the CAT proposes that multiple criteria should be applied. The calculation is as follows: for each criterion and for each individual state, the allowable emissions are compiled. This generates ranges of emissions per state with high quantities arising from criteria that are benign for the states, down to low quantities arising from ambitious criteria. Once these so-called fair share ranges of countries are identified, the lowest emissions of all states are summed up as well as the highest emissions of them.<sup>29</sup> This yields a worldwide equity best case scenario and a global equity worst case scenario (Wachsmuth et al., 2019). The impacts of the lowest and highest emissions aggregates on global warming are then evaluated applying the 1.5°C and 2°C limits. This results in three categories: below 1.5°, 1.5° to 2°, and above 2°C.

As it is to be expected that the highest aggregate (or the least effort of all states combined) will reach much beyond 2°C, the entire package needs to be compressed in order to be compliant with the 2° and possibly 1.5°C limits. The reduction percentages necessary to reduce the package are applied equally to each state rather than differentiating according to equity criteria, considering that equity criteria already determined the fair share range of the individual states. The calculation starts at the top end of each state's fair share range and descends along the range until the aggregate over all states reach the emission level that is consistent with a targeted temperature level (Rajamani et al., 2021, p. 16).

As a result of this process, fair share ranges for each country's three temperature categories—<1.5°, 1.5° - 2°, and >2°—are established, with the >2° category further subdivided into <3°, <4°, and >4°C. Each of these six categories corresponds to the temperature outcomes that would result if all other states were to put forward emissions reduction commitments with the same relative position on their respective fair share range, or, in other words, the same ambition level.

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GDP per person of a country is referenced, in the first in absolute terms (the higher it is the more must be invested by a state) and in the second in terms of costs per GDP per person (the higher it is the less a state must invest).

27 On capabilities in terms of feasibility of measures see below.

28 BVerfGE 157, 30 para 225.

29 Be aware that the range of efforts can be based on different allocation principles. For instance, a strong effort with low emissions may be based on responsibility (viz. for past emissions) in a highly industrialised state and on capability in a developing state that disposes of rich renewable energy sources.

This normative profile makes it possible to calculate the emissions quantities or budgets that are available for a state if it wants the world to keep global temperatures below the temperature limits that shall be maintained or risk to be exceeded.

### 3.2 Modelled domestic pathways

While, as said, fair shares are based on equity criteria the overall budget can also be distributed by application of feasibility criteria. This leads to modelled domestic pathways of emissions reduction. In legal terms the modelling of pathways can be based on the principles ‘respective capabilities’ and ‘highest possible ambition’ contained in Arts. 2(3) and 4(3) PA. ‘Respective capabilities’ in the feasibility context mainly relates to technical progress while if the same criterion is applied in the fair share context it is rather concerned with financial means and consequently measured by GDP.<sup>30</sup> “Highest possible ambition” directly addresses the efforts to be taken. Although only related to second round NDCs, it is almost universally applicable because most states have meanwhile submitted first round NDCs (Voigt, 2023, p. 241).

Like fair shares, “modelled domestic pathways” are also prescriptive constructs. They outline the emission reduction strategies that a country is able to implement. Designing pathways at the global and regional levels and scaling them down to individual states are the two steps in the modelling process.

The CAT describes the methodology as follows:

“Scenarios of integrated assessment models (IAM) quantify storylines of future development of the coupled energy-land-economy-climate system and describe the anthropogenic emissions of greenhouse gases across sectors and regions over the twenty-first century. Between feasible transition pathways for a given set of technological, socio-economic and policy assumptions, these models select global least-cost solutions rather than an equitable distribution of burdens.”

The “storylines” are drawn from hundreds of studies that have been collated at the international, regional, and national levels and merged to form global pathways (IPCC AR 4 Full Report, p. 61). The studies show the potential for reducing emissions from the major sectoral sources, including industry, transportation, buildings, agriculture, and waste<sup>31</sup>, as well as from cross-sectoral policies (such as renewable energy) and tools (like regulation, economic incentives, emissions trading; see, for example, IPCC AR 4 WG 3 ch. 11.3). The reduction potentials of five world regions are differentiated based on cost-effectiveness standards.<sup>32</sup> This makes it possible to identify the world regional least cost reduction pathways. The remaining emissions are summed up and categorised according to corresponding warming impacts resulting in five ranges of temperature limits —<1.5°C, 1.5° - 2°C, 2° - 3°C, 3° - 4°C, and >4°C.

30 Cf above.

31 Due to a lack of accurate data and consensus counting, emissions and absorptions from land use, land use change, and forestry (LULUCF) are not included. See <https://climateactiontracker.org/methodology/land-use-and-forestry/>

32 Cost-effectiveness is calculated by assuming that the cost of a ton of CO<sub>2</sub>eq emissions is the same worldwide (this is known as the marginal price), and then counting the amount of reduction investment a state would make at this price. This naturally indicates that, given a fixed price, nations with abundant sunlight and low wages will produce more renewable energy than nations on the other side. The warming impacts of the remaining emissions are then tallied and evaluated. Temperature ranges are created by raising or lowering the marginal price in accordance with various temperature ceilings are formed.

In order to determine domestic modelled pathways, the world regional least cost scenarios must be downscaled to pathways of individual states. This is done by applying the emission intensity (ratio of emissions to GDP) of the states while taking into account the fact that the ratio will fluctuate over time but is expected to eventually converge.<sup>33</sup>

### 3.3 Comparing fair shares and modelled pathways

As mentioned, modelled pathways are compiled relying on cost effectiveness. This means that industrialised states have lower burdens to bear because climate protection measures will be more costly for them than for developing countries where wages are lower and technology less advanced. This means that for industrialised states the budgets allowable from modelled pathways are larger than those allowable from fair shares. According to the CAT, this so-called fair share gap shall be bridged by transfer payments of industrialised to developing states.<sup>34</sup>

However, there are legal concerns about the cost-effectiveness criterion. It should first of all be noted that this criterion is not explicitly set out by the PA (Rajamani et al., 2021). It does appear in the UNFCCC but only as an aspect qualifying precautionary measures.<sup>35</sup> One would expect that because of its highly consequential nature it would have been listed in the PA as one of the legitimate allocation principles if it was politically welcome. It may have been left out because its core shortcoming is distributional injustice. Cost-effectiveness causes unequal treatment when one state – the ineffective one – is allowed to forgo climate protection measures and another state – the more effective one – is burdened to do more. This may be economically rational but economics must leave room for distributional considerations. In consequence, of course, if modelled pathways were calculated without concern for cost effectiveness, the budgets of industrialised states would significantly be reduced (Rajamani et al., 2021).

## 4. Measuring and evaluating effectiveness

The budgets resulting from fair shares and modelled pathways serve as yardsticks against which the predicted factual emissions are assessed.<sup>36</sup> If the budget that equals the level of acceptable harm is exceeded by the prognosticated factual emissions the CAT labels the performance of a state as insufficient, and highly or even critically insufficient depending on degree of excess.<sup>37</sup> In legal terms the rating as insufficient can be regarded as a violation of the PA temperature limits and effort sharing criteria.

There are certainly different methods how to predict the de facto emissions of a state from now until an assumed reference year, which commonly is the year 2030. The CAT has proposed two parameters, “policies and actions” on the one hand and “domestic targets” on the other.

33 <https://climateactiontracker.org/methodology/cat-rating-methodology/modelled-domestic-pathways/>

34 <https://climateactiontracker.org/methodology/cat-rating-methodology/>

35 See Art. 3 (3) 2nd sentence which reads: “Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing such measures, taking into account that policies and measures to deal with climate change should be cost-effective so as to ensure global benefits at the lowest possible cost.”

36 <https://climateactiontracker.org/methodology/cat-rating-methodology/>

37 <https://climateactiontracker.org/methodology/cat-rating-methodology/>

#### 4.1 Policies and actions

“Policies and actions” refer to the actual emissions that were computed using a state’s current policies and activities. These are compiled in accordance with historical occurrences as well as projections for the years up to 2030. The parameter is descriptive, meaning it is based on actual measurements or predictions of effects of policies and actions. The main emission sectors are examined, including industry, transportation, buildings, and agriculture/forestry/land use (AFOLU), as well as cross-cutting measures such as renewables and instruments like payments for emissions, regulation, and self-regulation.

The predicted factual emissions are then evaluated with the emissions corresponding to the normative modelled pathway temperature categories. If both of them are consistent, the “policies and actions” are classified as sufficient, and as insufficient the allowable budget is exceeded. Likewise, the predicted emissions can also be evaluated with the emissions corresponding to fair shares.

#### 4.2 Domestic targets

“Domestic targets” is the second descriptor. These are made up of the emission reduction goals a state has established for a future year. The domestic target may also be included in the state’s Nationally Determined Contributions (NDCs) under Article 4 (2) of the Paris Agreement. NDCs are proclaimed either as unconditional or as conditional, conditional in the sense that it is predicated on receiving international financial and technological support. The emissions resulting from the domestic target are then compared to the emissions remaining from modelled pathways, and may also be rated accordingly. They can also be evaluated against the fair share ranges.

## IV. Conclusions: summary and a reform proposal

### 1. Summary

This contribution has demonstrated how the somewhat vague provisions of the FCCC and PA can be concretised by science-based parameters, in particular by:

- global emissions budgets that are derived from the PA warming limits,
- equity based fair shares and feasibility based modelled domestic pathways that are grounded on the effort sharing criteria laid out by the PA, and
- policies and actions as well as domestic targets from which the real emissions of a country are predicted; the emissions can then be evaluated against the budgets corresponding to fair shares and modelled pathways.

This implementation route rests on the premise that given the already present damage from climate change any calculation with budgets can only be understood as management of an emergency reserve, not as distribution of a merited resource.

But even on that premise there are doubts whether the budget approach is indeed an effective tool of treaty implementation. If the available global budget is derived from a ceiling of 2°C with more than 90% likelihood, or of 1.5°C with 50% likelihood, as it should be, there is almost nothing to distribute anymore. If the global budget is assumed to be larger, under any of the allocation principles (excluding grandfathering) the budgets allocated to industrialized states will be tiny and even negative,

demanding timely zero emissions and increased removal of CO<sub>2</sub> from the atmosphere. This is true for both the equity based fair shares and the feasibility based modelled pathways (provided the latter leave out cost-effectiveness).

This situation is discouraging and may lead to an attitude of suspense and endless disputes about uncertainty and evaluations of the budget approach. If related actions are brought to court alleging violations of the treaties, there is a risk that the judges will refuse to take position and defer to state practices. This does not mean that fair share and modelled pathway calculations should not be pursued. They can serve as an urgent warning sign (and – by the way – as grounds for compensation claims for loss and damages).

For these reasons a more realistic approach is submitted that better fits into common court practice. This is the obligation that states must employ best possible means to reduce GHG emissions. The standard will first be discussed as one of regulatory nature (2.1). But possibilities of flexibilisation through financial transfers may also be considered (2.2).

## 2. A reform proposal

### 2.1 'Best possible means' as regulatory concept

'Best possible means' demands that any state must reduce GHG emissions:

- from all source sectors
- to a degree that is technically, economically, socially, geographically and institutionally makeable
- and employing the most effective instruments.

The sectors, evaluative criteria and instruments are about the same the IPCC has employed in many mitigation reports (IPCC AR 4 WG 3 chapters 4-13; IPCC AR 1.5°C Cross Chapter Box 3; IPCC AR 4 Synthesis Full Report ch. 4.3, p. 61).<sup>38</sup> There is a difference of methodology though. The IPCC elaborates reduction potential on the global and regional level and scales this down to national levels. In contrast to this top-down reasoning<sup>39</sup>, the standard 'best possible means' addresses each individual state without immediate calculation of total effects on warming limits. It is a fall-back position, an urgent appeal to states to at least do what they can. As a second step, though, accompanying studies can of course do the addition and inform about overall warming effects.

In some more detail the sectors to be looked at include energy, industry, transport, buildings, agriculture, waste, and, notably, consumers. Land use, land use change and forestry (LULUCF) would also be integrated because for a bottom-up perspective no transnationally agreed counting

38 An early example of bottom-up feasibility is the so-called triptych approach which in the late 1990ies assisted the negotiations in the European Community (EC) on the sharing of the EC reduction target between the Member States (Phylipsen et al., 1998). This approach focussed on three major emission sources: power generation, large industrial energy consumers, and domestic production and consumption. It designed reduction targets for each sector based on their technical and economic potential. The sum of the sectoral and state related pathways finally yielded the overall reduction percentage the EU was able to achieve.

39 To be precise the modelled pathways concept not only uses global scenarios but also national ones. The IPCC calls this a double approach combining top-down and bottom-up scenarios. Still, the national scenarios are integrated into global pathways before being scaled down (IPCC AR 4 SYR Full Report p. 58, fn 21). In contrast, 'best possible means' would take the national studies as such, i.e. as evidence for whether the potentiality of a state was exploited or more can be done.

is necessary; it is sufficient for a state to understand that LULUCF should reduce emissions and enhance removal of GHG gases as far as possible.

The evaluative criteria would need to include more dimensions than the technical and economic components. They would embrace socio-cultural feasibility in order to ensure acceptability for citizens, especially when it comes to sufficiency measures. Geophysical feasibility advises to factor in natural conditions of a state (such as in relation to sun, soil, and water). Institutional feasibility must be respected as, for instance, in relation to powers of governance vis à vis vested interests. Economic feasibility would need to imply a look at transnational relations of a state with a view to avoid what is called the “island effect” of progressive states (Duwe et al., 2019).

Concerning instruments, the usual types must be scrutinized including capping emissions, regulation, emissions pricing, emissions trading, tort liability, financial incentives, voluntary agreements, and information.

Methodologically, the complex investigation will make use of existing physical and societal models and itself result in new modelling. The state of the art of model composition (Gray & Gray, 2017) must of course be respected and legally evaluated.

Interestingly, an approach searching for best possible means was recently adopted by the EU Scientific Advisory Board on Climate Change (SABCC, 2023) which proposed bottom-up feasibility as a complement to fair share reasoning. While the SABCC concentrated on best possible means to promote renewable energy, in the present context more strategies must be included, such as, for instance, concerning energy efficiency and sufficiency. It seems that also the legal scholarship moves towards focussing on bottom-up reasoning (Voigt, 2023).

In legal terms ‘best possible means’ is akin to already existing tools of environmental law, and notably the requirement of best available techniques (BAT). BAT is a standard that combines with environmental quality objectives (EQO) pushing for further emission reduction where EQO shall be underbidden or are based on uncertain dose-response correlations (Meinken, 2011; Krämer, 2016, ch. 8).<sup>40</sup>

Most importantly, the approach may better correspond to court practices. Notably, the ECtHR requires that ‘appropriate investigations and studies’ must be undertaken<sup>41</sup>, ‘using detailed and rigorous data’<sup>42</sup>, that ‘a legislative and administrative framework designed to provide effective deterrence against threats to the right to life’ must be put in place<sup>43</sup> and that the public must be given opportunities to comment.<sup>44</sup> An instructive example of how the ECtHR applies this test is *Cordella v Italy* where the court carefully scrutinizes the search and measures undertaken by the respondent government concluding that they were insufficient.<sup>45</sup>

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40 See the definition of ‘best available technology’ in Art. 2 (10) Directive 2010/75/EU on industrial emissions (OJ L 334, p. 17) which refers to the ‘most effective and advanced state in its development’, the ‘practical suitability’ and the ‘economically and technically suitable conditions’.

41 *Budayeva v. Russia*, appl. no. 11673/02, para 136.

42 *Fadeyeva v. Russia*, appl. no. 55723/00, para 128.

43 *Budayeva v. Russia*, appl. no. 11673/02, para 129.

44 *Taşkın et autres c. Turquie*, appl. no. 46117/99, paras 118-119.

45 *Cordella et autres c Italie*, appl. nos. 54414/13 et 54264/15.

'Best possible means' can also be a standard for national expert commissions when they assess their government's climate policy. For instance, the UK Climate Change Commission (CCC) in its 2022 report found that:

'the Government has made a relatively high-risk choice to rely heavily on technology to reach its targets, with much less focus on efficiency improvements and demand management across the economy. This is a narrow approach that could lead the UK down a more expensive path to Net Zero, with a higher risk of failure and energy insecurity. It also misses the opportunity to maximize on co-benefits to the transition via improvements to health through more comfortable homes, reduced air pollution, healthier diets and more active lifestyles.' (CCC, 2022, p. 79)

The standard 'best possible means' should not be understood as a purely voluntary choice of states. It has a legal basis in 'respective capabilities' of the PA. Beyond that, it would be useful to design a more specific code of appropriate methodology. This could be compiled as an informal agreement of scientists and lawyers, for instance instigated by the IPCC that could draw on its own work with national scenarios. Preferably, binding national climate laws could lay out a prescriptive framework, and even better international agreement that could be set up in the framework of the PA. In addition, court jurisprudence could develop bits and pieces of requirements from experiences made with case constellations. In addition, reporting must be required which is easy to obtain from the bi-annual reports required according to Art. 13 (4) PA.

Once appropriate scenarios for each state have been elaborated and started to be implemented the emissions unavoidably remaining can be summed up as a second step. The resulting global aggregate could then be compared with the budgets corresponding to the temperature limits. If an assumed limit is exceeded and the emissions shall be further reduced, a method must be found how to distribute the reduction among states. A percentage applied to all states would not be fair because privileging those who have not done their homework. Instead, those states which lag behind should be urged to catch up. If the entire community must move forward, no way out is possible but than either to proact or to perish.

## 2.2 Flexibilisation through financial transfers?

It remains to be considered whether 'best possible means' as a regulatory approach should be flexibilised by allowing that emissions reduction quantities can be compensated by financial transfers. There are different schemes of such transfers that should be browsed to find a possibly suitable one. The following five grounds for transfers may be distinguished.

- (1) Compensation for loss and damages: This ground is envisaged in Art. 8 PA and subject to ongoing negotiations, called the Warsaw mechanism, about a legal framework. It however progresses at very slow pace (Johanson et al., 2022; Puig, 2022). It is anyway different from an idea of offsetting reduction activities.
- (2) Development aid: This ground is largely altruistically aiming at enabling public welfare of the receiver country. It does not primarily pursue a specific own interest of the provider state which would be the case with offsets.
- (3) Commons approach: All participating states commit themselves to reach a common goal, such as to limit warming. But some may not be able to afford what is technically appropriate and possible for them. This is the reason for assisting them financially. The commons concept of financial transfers can be found in Art. 6 (8) and Art. 9 PA which oblige industrialized countries to assist developing



countries to fulfil the latter's own PA based reduction obligations. Such finance shall be based on the global stocktake (Art. 9 (6) PA) which is currently being elaborated and shall meet certain enabling conditions (IDDRI, 2023). It is combined with obligations of technology transfer and capacity building (Arts. 10, 11 PA). This ground requires that financial transfers come in addition to the best possible means standard.

(4) Sales of surplus fair shares: This ground is based on the fair share concept. If, for instance, the per capita criterion is applied, states with low per capita emissions may receive more emission allowances than they can make use of for some time. These allowances can be sold to high consumption states which generates revenue that the receiving state can spend for mitigation measures. The concept is a kind of reverse offsetting. What is paid for are non-used emission rights, not emissions reductions.

(5) Cost effectiveness: This type is based on the feasibility of emissions reductions and the fact that the costs of emissions reductions are different in different states. High-cost states are allowed not to invest and thus save money while low-cost states will receive financial support and be able to invest (Höhne & Wachsmuth, 2020, p. 4). As explained this ground is advocated by the CAT as possibility to compensate the gap between reduction requirements for fair shares and modelled pathways. The idea is certainly attractive but the concept needs more stringency in order to prevent that states both on the provider and receiver side use the idea as an excuse for inaction.

The concept has before been practiced as 'Clean Development Mechanism' (CDM) in the framework of the Kyoto Protocol. It reappears in Art. 6 (2) PA as a cooperative setting of individual partners as well as in Art. 6 (4) as a multilateral undertaking. It suggests that financial support for mitigation outcomes in a host state is provided in exchange for the provider state to count the outcome against its NDCs. However, as experiences made with the CDM advise,<sup>46</sup> any offsetting project must be embedded in a reliable framework that needs to be agreed internationally. Such project should only be accepted if the receiving state was not anyway legally required or politically engaged to implement the reduction amount, in other words it must be additional to the law and policy of the receiving state. There must also be standards how to determine the baseline from which reduction amounts are counted, and for how long the envisaged project must endure. Such requirements must be supervised by independent bodies. While in the PA context some progress has been made regarding cooperative arrangements, the framework for a multilateral mechanism foreseen by Art. 6 (4) and (5) PA is still under elaboration. Meanwhile, such requirements could of course be laid down in national legislation and bilateral contracts between provider and receiver states.

## References

Birnie, P., Boyle, A., & Redgwell, C. (2021). *International law and the environment* (4<sup>th</sup> ed). Oxford University Press. <https://doi.org/10.1093/he/9780199594016.001.0001>

Bodansky, D. (2016). The Legal Character of the Paris Agreement. *RECIEL*, 25(2), 142–150. <https://doi.org/10.1111/reel.12154>

Bodle, R. & Oberthür, S. (2017). Legal form of the Paris Agreement and nature of its obligations, in: Klein et al. (2017), pp. 91–103.

Climate Action Tracker (CAT). <https://climateactiontracker.org/>

<sup>46</sup> For an assessment of CDM practices see IPCC AR6 WG3 ch. 13.3.3.4.2.



- Climate Change Committee (2022). *Progress in reducing emissions. 2022 Report to Parliament*. <https://www.theccc.org.uk/publication/2022-progress-report-to-parliament>
- Daillier, P., Forteau, M., & Pellet, A. (2022). *Droit international public* (9<sup>e</sup> éd.). LGDJ-Lextenso éditions.
- Dooley, K., Holz, C., Kartha, S. et al. (2021). Ethical choices behind quantifications of fair contributions under the Paris Agreement. *Nature Climate Change*, 11, 300–305. <https://doi.org/10.1038/s41558-021-01015-8>
- Duwe, M., Evans, N., Duscha, V., & Wachsmuth, J. (2021). Support to the development of ambitious climate change scenarios in Europe. Final report. *Climate Change 73/2021*. Umweltbundesamt Dessau. <http://www.umweltbundesamt.de/publikationen>
- Franzius, C. & Kling, A. (2021). The Paris Climate Agreement and liability issues, in: Kahl, W. & Weller, M.-Ph. (eds). *Climate Change Litigation. A Handbook* (Beck Hart Nomos), 197–216.
- Ganti, G., Geiges, A., Jeffrey, L., Fekete, H., Gidden, M. J., Schaeffer, M., Hare, B., & Höhne, N. (n.d.). *Fair national greenhouse gas reduction targets under multiple equity perspectives – A synthesis framework*. Submitted to Climatic Change. Supplementary.
- Gray, W. G. & Gray, G. A. (2017). *Introduction to environmental modelling*. Cambridge University Press.
- Höhne, N. & Wachsmuth, J. (2020). *Fair contributions versus fastest possible reductions. Equity considerations in the context of the Paris Agreement and the climate emergency*. New Climate Institute. <https://newclimate.org/resources/publications/fair-contributions-versus-fastest-possible-reductions>
- IDDRI (2023). *Using the Global Stocktake to identify and design opportunities for enhanced global collaboration that accelerates national climate and development action: the case of international finance*. <https://www.iddri.org/en/publications-and-events/other-publication/using-global-stock-take-identify-and-design-opportunities>
- Intergovernmental Panel on Climate Change (IPCC). Various reports cited as IPCC AR 1-6, Synthesis (SYR), or Working Group (WG) reports.
- International Court of Justice (1970). Legal consequences for states of the continued presence of South Africa in Namibia [...]. Advisory Opinion, ICJ Rep. 1971, 16.
- International Court of Justice (1996). Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, I.C.J. Reports 1996 (I), 242.
- Johanson, A. (2022). Evaluating progress on loss and damage: an assessment of the Executive Committee of the Warsaw International Mechanism under the UNFCCC. *Climate Policy*, 22(9-10), 1199-1212. <https://doi.org/10.1080/14693062.2022.2112935>
- Klein, D., Carazo, M. P., Doelle, M., Blumer, J., & Higham, H. (eds.) (2017). *The Paris Agreement. Analysis and Commentary*. Oxford University Press.
- Krämer, L. (2016). *EU Environmental Law* (8<sup>th</sup> ed.). Sweet & Maxwell.
- Mayer, B. (2021). Temperature Targets and State Obligations on the Mitigation of Climate Change. *Journal of Environmental Law*, 33, 585–610. <https://doi.org/10.1093/jel/eqab003>
- Meinken, L. (2001). *Emissions- und Immissionsorientierung*. Nomos Verlagsgesellschaft.

- Nash, S. L. et al. (2021). Climate change acts: origins, dynamics, and consequences. *Climate Policy*, 9, 1111–1119. <https://doi.org/10.1080/14693062.2021.1996536>
- Phylipsen, G. J. M., Bode, J. W., Blok, K., Merkus, H., & Metz, B. (1998). A triptych sectoral approach to burden differentiation; GHG emissions in the European bubble. *Energy Policy*, 26(12), 929–943. [https://doi.org/10.1016/S0301-4215\(98\)00036-6](https://doi.org/10.1016/S0301-4215(98)00036-6)
- Preston, B. J. (2021). The influence of the Paris Agreement on climate litigation: legal obligations and norms (Part I). *Journal of Environmental Law*, 33(1), 1–32. <https://doi.org/10.1093/jel/eqaa020>
- Preston, B. J. (2021). The influence of the Paris Agreement on climate litigation: causation, corporate governance and catalyst (Part II). *Journal of Environmental Law*, 33(2), 227–256. <https://doi.org/10.1093/jel/eqaa021>
- Puig, D. (2022). Loss and damage in the global stocktake. *Climate Policy*, 22(2), 175–183. <https://doi.org/10.1080/14693062.2021.2023452>
- Rajamani, L. & Guérin, E. (2017). Central concepts in the Paris Agreement and how they evolved, in Klein et al. (2017), pp. 74–90.
- Rajamani, L. & Werksman, J. (2018). The legal character and operational relevance of the Paris Agreement’s temperature goal. *Phil. Trans. R. Soc. A*. 376: 20160458. <http://dx.doi.org/10.1098/rsta.2016.0458>
- Rajamani, L., Jeffery, L., Höhne, N., Hans, F., Glass, A., Ganti, G., & Geiges, A. (2021). National “fair shares” in reducing greenhouse gas emissions within the principled framework of international environmental law. *Climate Policy*, 1(22), 983–1004. <https://doi.org/10.1080/14693062.2021.1970504>
- Robiou du Pont, Y. (2022). Paris Goals NDC Alignment. Traffic Light Assessment (Climate Vulnerable Forum). <https://thecvf.org/resources/publications/cvf-ndc-traffic-light-assessment-report>
- Schlacke, S. (2014). Grenzwert oder Politikziel? Dogmatik und Legitimität der 2°Celsius-Leitplanke, in Dilling, O. & Markus, T. (eds.) *Ex rerum natura ius? – Sachzwang und Problemwahrnehmung im Umweltrecht* (Nomos), 93–103.
- Schleussner, C.-F., Rogelj, J., Schaeffer, M. et al. (2016). Science and policy characteristics of the Paris Agreement temperature goal. *Nature Climate Change*, 6, 827–835. <https://doi.org/10.1038/nclimate3096>
- Schleussner, C.-F., Ganti, G., Rogelj, J. et al. (2022). An emission pathway classification reflecting the Paris Agreement climate objectives. *Commun Earth Environ*, 3, 135. <https://doi.org/10.1038/s43247-022-00467-w>
- Scientific Advisory Board on Climate Change (2023). *Scientific advice for the determination of an EU-wide 2040 climate target and a greenhouse gas budget for 2030–2050*. <https://doi.org/10.2800/609405>
- Thorgeirsson, H. (2017). *Objective* (Article 2.1) in: Klein et al. (2017), 122–130.
- Voigt, C. & Ferreira, F. (2016). Dynamic differentiation: The principles of CBDR-RC, progression and highest possible ambition in the Paris Agreement. *Transnational Environmental Law*, 5(2), 285–303. <https://doi.org/10.1017/S2047102516000212>
- Voigt, C. (2023). The power of the Paris Agreement in international climate litigation. *RECIEL*, 32(2), 237–249. <https://doi.org/10.1111/reel.12514>

Wachsmuth, J., Denishchenkova, A., Fekete, H., Parra, P., Schaeffer, M., Ancygier, A., & Sferra, F. (2019). Fairness- and Cost-Effectiveness-Based Approaches to Effort-Sharing under the Paris Agreement. *Climate Change*, 39/2019 (Umweltbundesamt Dessau). <https://newclimate.org/resources/publications>

Wara, M. (2007). Is the global carbon market working? *Nature*, 445, 595–596. <https://doi.org/10.1038/445595a>

WBGU (German Advisory Council on Global Environmental Change). *Factsheet no 3/2009*. [https://www.wbgu.de/fileadmin/user\\_upload/wbgu/publikationen/factsheets/fs3\\_2009/wbgu\\_factsheet\\_3\\_en.pdf](https://www.wbgu.de/fileadmin/user_upload/wbgu/publikationen/factsheets/fs3_2009/wbgu_factsheet_3_en.pdf)

Wiener, J. (2006). Precaution, in: Bodansky, D., Brunnée, J. & Hey, E. (eds). *The Oxford Handbook of International Environmental Law* (Oxford University Press), 597–612.

Winkler, H. (2017). Mitigation (Article 4) in: Klein et al. (2017), 143–165.

Winkler, H. (2020). Putting equity into practice in the global stocktake under the Paris Agreement. *Climate Policy*, 20(1), 124–132. <https://doi.org/10.1080/14693062.2019.1680337>

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# Forests and the environmental rule of law: reflections on the effectiveness of Brazilian legislation

by Antonio Herman Benjamin<sup>1</sup>

## Abstract

The regulation of forests has a long history in the law. More recently, previously ignored or sidelined aspects of the forest debate have taken on a central role in the legal treatment of the field, such as the conservation of biodiversity, the protection of lands traditionally held by indigenous peoples, and the climate change implications of deforestation. Deep legislative reforms have been undertaken throughout the world, in the hope of reducing the devastation of native forests—an even greater concern in the enormous and mega-diverse tropical and subtropical forests that remain on the Planet. Three general questions must be addressed in these new laws. First, have the problems and deficiencies in the old legal models been adequately described and addressed? Second, does the law provide adequate implementation mechanisms for the prescribed obligations and requirements? Third, how will the actual on-the-ground effectiveness of the laws, norms, and regulations be measured and evaluated? Brazil—owner of the largest expanse of tropical forests in the world—serves as an excellent case study for a reflection on the historical, cultural, and legal challenges in combating deforestation, especially because the country has such modern legislation and specialized institutions. This essay concludes that Brazilian forest legislation faces: a) a problem of form (defective rules regarding language and legislative technique), b) a problem of content (weak and contradictory rules as to the values espoused and the related protection mechanisms), c) a problem of implementation (a wide gap between the norm and the actual identification and prosecution of infractions, as well as the absence of indicators to evaluate the effectiveness of the legal requirements), and d) a problem of institutionality (politically weakened environmental bodies with inexcusable financial and staff shortages). The result is dysfunction in the credibility of environmental legislation and the fragility of the environmental rule of law.

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The history of Western law offers well-known examples of veritably monumental legislative projects, from Justinian's *Corpus Juris Civilis* to the Civil Codes of the 19<sup>th</sup> Century and welfare state constitutions of the 20<sup>th</sup> Century. But we all know that enacting laws – even laws which earn universal praise for their technical quality or progressive spirit – does not ensure that the intended objectives will in fact be achieved. Particularly in countries lacking strong legal traditions and independent judicial institutions, many laws only have rhetorical force, and are incapable of transforming reality – *law in books* rather than *law in action*, in the often-repeated phrases coined by Roscoe Pound.<sup>2</sup>

1 Justice of the National High Court of Brazil (STJ) and President of the Global Judicial Institute on the Environment.

2 See Pound, R. (1910). Law in books and law in action, in 44 *American Law Review*.

The gap between legal eloquence and legal efficacy is accentuated further when we are dealing with the protection of vulnerable persons, communities and resources, as is precisely the case in environmental law.

Given this, one might expect legal systems to have an almost natural predisposition to create mechanisms that would systematically and regularly measure the effectiveness of enacted laws, especially when these are intended to protect public goods – such as the environment – for which we lack defined individual owners, and for which there are serious challenges for access to justice. Instead, legislators tend to assume, out of naivete or utopian perceptions, that their noble mission is complete once a catalogue of rights and obligations is published. A noteworthy example of this picture is the notorious failure of the regulatory system to stop deforestation in tropical rainforests, and among these, in the Amazon biome.

Following the 1972 Stockholm Conference, the immense negative impact on Nature of the combination of unchecked population growth and the emergence of powerful new technologies brought about a growing and holistic interest and attention from law. At least three types of unintended occurrences ensued as a result. Firstly, the desire to control the tragedy of environmental destruction brought about an avalanche of constitutional provisions, statutes and administrative regulations, a profusion that created an impression of normative disarray. Secondly, in response to this perceived chaos, and in an effort to assert at least a minimal conceptual order and normative system, the last fifteen years saw the emergence with greater force of the concept of an *environmental* rule of law,<sup>3</sup> adopted by the United Nations in 2012. Thirdly, as far back as the 1970s, many in the legal community realised that requirements to protect the environment were imperfectly followed or even openly ignored. The notion of environmental implementation indicators<sup>4</sup> emerged as a response to this pathology.

These three phenomena are interrelated, chiefly because very often the roots (or the entire tree, as it were) of the obstacles to implementation are already present in the laws themselves (through faulty drafting), in the administrative and judicial system (due to a lack of integrity, personnel, budget, and access to victims), and—most concerning—in the very cultural cauldron in which the normative system operates.

Despite international attention and pressure, the legal protection of tropical forests is still one of the areas in which we can most easily observe the double phenomenon of bad law and bad implementation. There is no mystery here: everyone sees it and knows what is happening, but existing legislation lacks built-in mechanisms for systematic evaluation. On the other hand, few countries have as conspicuous a *theatrical* environmental law framework as does Brazil, a champion, sadly, of low or, in recent periods, even zero effectiveness. In other words, Brazil's legal regime for the protection of forests (and flora in general) operates through norms that a) lack grounding in modern and sound ethical-ecological foundations and references, b) are not coordinated either vertically and horizontally (the evil of isolated normative silos), and c) are shielded from meaningful evaluation of their effectiveness.

This brief essay seeks to present only a cursory analysis and critique of the *quality of regulation* and the *quality of implementation* of the Brazilian legal system for protection of forests, an understanding

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3 For an excellent overview of the subject, see Voigt, C. (Ed.). *Rule of Law for Nature: New Dimensions and Ideas in Environmental Law*, Cambridge, Cambridge University Press, 2013.

4 Cf. Prieur, M., Bastin, C., & Mekouar, A. (2021) *Measuring the Effectivity of Environmental Law – Legal Indicators for Sustainable Development*, Brussels, Peter Lang.

of which will be essential *if and when* there is the political will to develop a comprehensive *system of indicators of the effectiveness* of our environmental law.<sup>5</sup>

## I. Reasons for optimism

The environmental rule of law depends not just on the legislative and institutional apparatus, but also and of equal importance on the country's social and cultural practices, as these make up the broth in which the regulatory prescription for the protection of nature will either flourish or falter. Along these lines, the promising (and evolving) attitudes and views of the Brazilian population are noteworthy and marked by an expanded environmental awareness. Thanks to this awakening, demands for enforcement of rights and obligations are more commonplace, as civil society is gradually becoming more organized. There are few environmental associations in comparison with other more developed countries, and most are seldom willing to go to court, preferring instead to bring their complaints to the environmental public prosecutors of the office of the attorney general (*Ministério Público*). The media give wide and daily coverage to international, national and local environmental issues. Major

5 In Brazil, certain experiences illustrate the difficulty to develop indicators of the effectiveness of environmental legislation.

In 2003, with the support of various states and NGOs, the Instituto “*O Direito por um Planeta Verde*” (Law for a Green Planet Institute) – a respected think tank that brings together specialists in environmental law – submitted a proposal to the National Environmental Council (CONAMA), – a federal body with normative powers, – for a “Regulation on Indicators of Implementation of Environmental law”, which I drafted. In explaining the reasons that justified the initiative, I wrote that “despite the fact that Brazilian environmental law has undergone a fantastic development in the last 20 years and has excellent instruments for action ... Brazil cannot be held up as an example of how to preserve its natural or cultural wealth”. I added that “we will only be able to plan concrete actions to improve environmental quality if we have indicators of implementation and compliance with legislation. Law has never prioritized the creation and maintenance of indicators of the effectiveness of regulations in any area.”

A Working Group was appointed and, after several technical meetings in Brasília, when the text was taken to the CONAMA Plenary in 2007, the Ministry of Agriculture and the State of Minas Gerais asked for the vote to be suspended and for a seminar to be held to better debate the matter. After further delay requests from the Ministry of Agriculture and, paradoxically, the Ministry of the Environment itself, which prevented the initiative from being approved (or rejected), the proposal was finally shelved in 2012.

The text being considered used “input indicators” (such as budget, number of civil servants), “output indicators” (such as the number of licenses issued, sanctions applied in cases of illegal deforestation, freshwater monitoring points, legal actions against offenders) and “outcome indicators” (such as the number of administrative and judicial settlements and actual compliance with, increased vegetation cover and improved freshwater quality). It imposed on federal, state, and municipal environmental agencies – under the coordination of the Ministry of the Environment – the duty to “feed information into the set of indicators”, giving them “due publicity”.

The blocking of the vote on the Regulation was mainly due to – without this argument ever having been openly reported – the fear of the agribusiness sector, the Ministry of Agriculture, the Ministry of the Environment as well as the states, that such indicators had the potential to harm our exports by revealing to the world Brazil's poor environmental management, and by exposing the weaknesses of federal, state and municipal environmental agencies.

This historical note, particular to but certainly not exclusive Brazil's experience signals that the obstacles to instituting public indicators for the implementation of environmental law are not few nor insignificant, nor are they purely technical or sincere - *they are essentially political*.

Cf. Benjamin, A. H. (2012) *Princípio da Proibição de Retrocesso Ambiental*. Brasília: Federal Senate, 2012. p. 55-72.

corporations, especially those focused on exports, carefully protect their environmental reputation and increasingly implement measures in order to comply with the required standards. There has been a slowdown in the destruction of the Atlantic Forest (*Mata Atlântica*), where most of the large urban population is located (in parallel, though, there has been an intensification of illegal occupation and deforestation of the Cerrado and the Amazon). Air quality in cities is improving.

On the legal-institutional side, Brazil has modern, comprehensive and sophisticated legislation, which includes some of the most cutting-edge procedural and substantive prescriptions in the world; public bodies with a strong and growing institutional weight; progressive environmental compliance; mechanisms for individual and collective access to courts; and an air of freedom, transparency and public participation in the administrative and judicial environmental decision-making processes.

Both federal and state judiciaries are made up of career judges with a reputation for independence and integrity since they are chosen through public merit-based examinations and not by political appointment or election. Judges earn the highest salaries in the civil service, a factor that is not negligible when recruiting bright young recent graduates from the best universities. Some regions have created specialized courts to hear environmental claims. Thousands of environmental cases of all kinds are decided by judges every year. The National High Court of Brazil (STJ) - the apex court for non-constitutional disputes, which hears appeals from 27 state supreme courts and 6 federal courts of appeal - issues more environmental decisions every year than all the supreme courts in Latin America combined. The same can be said for the federal and state offices of Attorneys General, whose members file hundreds of criminal and civil environmental lawsuits every year.

In terms of regulatory instruments, Brazilian legislation provides, in addition to those also known in other countries – environmental impact assessments and environmental permits; protected areas, such as national parks; strict and joint civil liability for environmental damage; criminalisation of environmental and deforestation violations, including criminal liability for legal entities – other indigenous mechanisms, such as *Legal Reserve* areas (80% of every parcel of private rural property in the Amazon and 20% in other biomes in which clear cutting is prohibited) and *Permanent Preservation Areas* (which protect vegetation in sensitive locations, for example, along the banks of watercourses, around springs, on land with a slope of 45 degrees, in mangroves, etc.). Not to mention the canons developed or perfected by Brazilian doctrine and jurisprudence, such as the possibility of reversing the burden of proof of causation, the principle of the *propter rem* nature of environmental obligations, the principle of the ecological function of property, the principle of *in dubio pro natura* and the principle of non-regression.<sup>6</sup>

This legislative framework is further accompanied by a basic institutional legacy: despite recent threats of closure, annexation to another ministry or reduction of its powers, the Ministry of the Environment, created in 1985, persists today. There are environmental public agencies in every state and in many municipalities.

In other words, from an abstract perspective, Brazil's legal and legislative framework (including formal/procedural and substantive components), coupled with specialized public agencies and judicial bodies, appears to meet the minimum conditions of form, content and institutionality for the environmental rule of law. However, this structure is precarious, due to poor practice of enforcement; insecure, due to the illegitimate pressures and attacks on it; frightened, due to the threats against and

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6 Cf. Benjamin, A. H. (2012) *Princípio da Proibição de Retrocesso Ambiental*. Brasília: Senado Federal, p. 55-72.



murders of environmental defenders; unpredictable, due to a lack of human and financial resources in the governmental bodies with oversight; and unreliable, due to serious and persistent incidents of corruption, clientelism and lethargy. In this context, some pessimism is warranted: the mediocrity of environmental implementation in Brazil, in all its drama and dysfunction, must not, unfortunately, be underestimated.

## II. Reasons for pessimism

Although the institutional advances are indeed impressive, they are victims of rain and thunderstorms. For example, some environmental agencies, particularly in the most remote corners of the country, do not always have enough gasoline to operate their inspection vehicles. Staff is scarce, which leaves huge swaths of territory, including major federally protected areas such as national parks and forests, completely abandoned.

Thus, a careful X-ray unfortunately identifies multiple defects and failures. The challenge for Brazil, a very serious dilemma which will be explored more fully below, is to adequately enforce legislation and guarantee the operation of the public bodies charged with overseeing these laws. In both spheres, we note a huge regional disparity, with greater deficiencies precisely in the areas where the state's presence and actions are most needed – the Amazon, the Pantanal, and the vast domains of the country's inaccessible interior.

What could be at the root of this discouraging panorama, afflicted by difficulties that are sometimes considered insurmountable? Without disregarding other causes,<sup>7</sup> as discussed below (the wink-and-a-nod *jeitinho* culture, contradictory legislative and political messages, for example), I am inclined to believe a cultural phenomenon, but also a legal one, lies at the foundation – and although it is not exclusive to Brazil, it has unique local characteristics. I am referring to the persistent error, particularly among the elite, of believing the rule of law to be purely a state of “rights”, and only of rights. In the wake of classical liberalism this has meant the expansion of the discourse of rights and the atrophy of the discourse of duties.

This historical vice of cognition – incompatible with the architecture of the current regulatory system, but unfortunately still influential – helps decipher the origins of the multiple contradictions in the Brazilian legal-environmental framework. If everyone clamours for rights and few assume, or accept, their corresponding personal obligations, it is unlikely that environmental protection will become anything other than inane discourse, devoid of concrete results. The misunderstanding of the rule of law as a concept mainly composed of rights and few or no duties will be explored next.

## III. The colonising project of Brazil's *terra incognita* and its impact on the forest

In modern and democratic societies, the rule of law is not just a *state of rights* (in the plural), it inevitably becomes more and more a *state of duties* (also in the plural). From an environmental point of view, it is a state of intra- and intergenerational duties, for the benefit of individual subjects and of

7 On another occasion, I pointed out at least 12 causes for the “widespread failure, we could say, of the implementation of environmental public policies and environmental law in Latin America”. Benjamin, A. H. A proteção do meio ambiente nos países menos desenvolvidos: o caso da América Latina. *Revista de Direito Ambiental*, São Paulo, n. 0, p. 102-103, out. 1995.

the national and international community. And, in a gradual but unstoppable process, also in favour of Nature itself.

The 1988 Brazilian Constitution, enacted at the end of the military regime, exponentially expanded the list of new rights, but also introduced many new duties – of an individual, collective and intergenerational nature. In this sense, we could say that it established a sort of paradise of environmental duties. However, this profound normative transformation was not able to alter deep cultural perceptions of the scope and role of the rule of law.

Public perceptions, all the more so if they are the offspring of hitherto pulsating political traumas or indelible historical idiosyncrasies, hinder the understanding of reality and exert a formidable resistance to incorporating the spirit of change. For Brazilians – victims of periodic waves of oppressive regimes, if not outright dictatorships – rights have always been projected as part of a one-sided equation, in the face of a permanent conflict between citizens and public authorities. Under these conditions of an “us versus them” political and legal discourse, it is not surprising that in the popular imagination the rule of law should follow the playbook of “rights are only ours, duties are only theirs”. We (citizens), on the one hand; the state machine and its overbearing, cruel and corrupt agents, on the other - in a phrase, the state seen as the enemy of the people. Not just one-way rights, but, as an intuitive consequence, absolute rights, without limits and devoid of correlated responsibilities. Much of the anti-solidarity opposition to the current legislation that safeguards vulnerable subjects and assets can be explained by the stubborn and uncomfortable legacy of this cultural hyper-individualistic ethos.

Without much effort, even today we can see that the discourse on the exploitation of environmental resources is marked by remnants of selfish arrogance and a *laissez-faire* attitude that have shaped our history. This has been the approach to property rights since the 1500s. The project of colonizing the *terra incognita* which the Portuguese “discovered” had as its enemies the original inhabitants and the exuberant natural environment, which justified an attitude of rights and hardly any or very few duties. The right to invade, conquer and colonize; the right to expel and massacre the indigenous and poor communities; the right to enslave, humiliate, rape and torture; the right to destroy everything through deforestation, to exterminate the native fauna and contaminate the environment; the right to disregard the natural and cultural heritage of previous generations and decimate the legacy to be passed on to future generations. It is in the wake of this entrenched thinking that the strict Forest Code of 1965, a sort of legal anomaly in our history, was repealed and replaced by the Code of 2012.

The untouchability of the elites, it bears repeating, is firmly ingrained in the collective mind. It is a thinking that subverts the spirit of the people and the function and operation of the legal system. Contrary to law and through a *de facto* “normalization” of barbarity, it rewards a minority with the right to occupy everything, yet save nothing; to use and raze everything, preserving nothing. Here is the provenance of the conflagration against the environment in Brazil and the stumbling block on the path toward realisation of the environmental rule of law. It is also the background to the difficulties in implementing forest protection requirements.

#### **IV. A preliminary evaluation of the environmental rule of law in Brazil**

The question of whether Brazil, in the abstract, has a minimally satisfactory constitutional and legal program for the environmental rule of law was answered affirmatively above. I move on to the subsequent, more intricate question: what degree of environmental rule of law do we have in practice?

The environmental rule of law is an ideal, which may be visualized in the form of a spectrum, reflecting varying levels of fulfilled adherence. No one would categorically state that this aspiration has been fully met anywhere in the world, not least because the expectations of content, of existential and functional conditions and standards of evaluation are not set in stone forever; they fluctuate over time and space.

Adding to the uncertainty is the fact that, so far, no gauge or scale has been invented to precisely measure the rule of law, nor, similarly, the environmental rule of law.<sup>8</sup> Its architecture or skeleton may be x-rayed, but its separate components – bricks and bones – do not reveal the final shape, the vigour and the dynamism, in a word, of the legal building or body. Along these lines, Michel Prieur and Mohamed Ali Mekouar rightly argue that “States need to accurately assess the *effectiveness of environmental laws and treaties by means of consistent legal indicators*. This can assist governments, parliaments and civil society to track progress, gaps and regressions, so as to precisely measure the extent to which existing laws and treaties are effectively implemented, and to chart the path to suitable reforms, as appropriate.”<sup>9</sup>

Pessimists (or perhaps realists) will say that there is little that is encouraging or worth celebrating. And they do so with indisputable data. The list of endangered species constantly grows. Deforestation and forest fires, particularly in the Amazon, Cerrado and Pantanal, give the appearance of a constant catastrophe, reported on in headlines worldwide and turning Brazil into an international pariah. The quality of our urban and rural water is deteriorating. Our long and beautiful coastline suffers from relentless destruction, occupation, and the illegal privatisation of public spaces. Further inland, pesticide contamination advances, injuring and killing poor workers, while we become humanity’s breadbasket. Indigenous reservations are invaded in broad daylight by thousands in search of precious metals, diamonds and timber, leaving in their wake a trail of misery, disease, devastated land and cultural extermination.

Based on this incongruous picture of extensive legislation and deficient legal application, I believe that the environmental rule of law in Brazil faces a) *a problem of form* (defective rules regarding language and legislative technique), b) *a problem of content* (weak and contradictory rules as to the values espoused and the related protection mechanisms), c) *a problem of implementation* (a wide gap between the norm and the circle of infractions, as well as the absence of indicators to evaluate the effectiveness of the legal requirements), and d) *a problem of institutionality* (politically weakened environmental bodies with inexcusable financial and staff shortages). The result is dysfunction in the credibility of environmental legislation and the fragility of the environmental rule of law.

8 Developing a metric for the rule of law is not easy, although it is an essential task. Measuring the quality of the environmental rule of law is possibly an even more complex task, because not only do we not have the needed indicators to do so, but existing data “is often inconsistent, difficult to collect and even more difficult to compare, considering the differences between ecosystems and the great biological diversity around the world. Measuring the Environmental Rule of Law raises challenging political questions, as it presupposes that governments and institutions open themselves up to external scrutiny while extending the rights of civil society. These tensions, while present in developed nations, are heightened in nations dominated by political conflict and insecurity, those struggling to establish democratic and legal institutions, and those under economic stress” Dunn, A. D. & Stillmann, S. Advancing the environmental rule of law: a call for measurement, in 21. *Southwestern Journal of International Law*, n. 2, p. 292, 2015.

9 Prieur, M., & Mekouar, M. A. (2021) Fostering legal indicators for sustainable development. *Perspectives*, n. 40. Available at: <https://www.unep.org/pt-br/node/29545>. Accessed on July 21, 2023, Emphasis added.

The on-the-ground drama of colossal illegal deforestation is an eloquent example of how far apart theory and practice are when it comes to the environmental rule of law in Brazil.

## V. Deficiencies in the practice of environmental law: the example of deforestation

We may conclude from all of the above that in Brazil there is a serious disconnect between two elements of environmental law (and of the environmental rule of law) which should instead always go hand in hand: good law and good law enforcement. The country has a kind of legislative-environmental Eden in contrast to the despairing hell of environmental implementation. But even good environmental laws cannot always exist peacefully in the Brazilian political landscape, as they are always subject to being suddenly weakened, cut back, or simply repealed.

Already in 1993, I noted that:

[...] the efforts of regulation are much easier than that of implementation. After all, the activity of regulation doesn't impose great costs: the legislative bodies exist for that. Implementation, however, especially in the environmental field, requires enormous human, financial and technical support. The greater the lack of conformity between the regulations and the behavior of the regulated group, the greater the costs of implementation, or, in the case of deficiency or non-existence of the latter, the greater the likelihood of its failure.<sup>10</sup>

Earlier I pointed out that the expansion of the rights discourse and the atrophy of the corresponding discourse on duties is one of the sources of the rift between legal provisions and legal reality. It would be wrong, however, to conclude unfairly from this that all segments of Brazilian society have an innate aversion to the law. Rather, this commentary refers mostly to certain sectors of our elites, who see rights as privileges of their class.

An indisputable characteristic of some of Brazil's economic and political actors is a documented history of hostility to forests, and still worse, a hostility to forest legislation—an antipathy that is also directed generally toward statutory protections for public assets and for society's most vulnerable. French historian Charles Morazé keenly reported in the 1950s on “ a gap between law and fact in Brazil”.<sup>11</sup> This observation, if applied to environmental law, would only be partially accurate. In fact, a majority of Brazil's population does not support actions that are against the law, e.g. illegal deforestation, as public opinion polls in urban areas have repeatedly shown.

Contrary to what spokespersons for federal, state and municipal governments say (questioning or denying their environmental responsibilities), as well as statements by representatives of the most backward segments of agribusinesses (especially those who repeatedly lobby for repealing and watering-down current legislation), large-scale deforestation is not due to the actions of traditional populations or rural small-scale farmers who live on the land they work with their families. Quite the contrary, these destructive events are bankrolled by and at the behest of individuals and companies, often with no connection other than a financial one to the land. The main culprits are wealthy

10 Benjamin, A. H. (1993) A implementação da legislação ambiental: o papel do Ministério Público. (The implementation of environmental legislation: the role of the Public Attorney General) In: Benjamin, A. H. (coord.). *Dano ambiental: prevenção, reparação e repressão. (Environmental damage: prevention, reparation and repression.)* São Paulo: Revista dos Tribunais, p. 370.

11 Morazé, C. (1954) *Les trois âges du Brésil*. Paris: Librairie Armand Colin, p. 194.

landowners and businesspersons from large cities and capitals in the region or even from other major and distant cities such as São Paulo, Rio de Janeiro and Brasília, hundreds or thousands of kilometres from the devastation they cause.<sup>12</sup>

The elites of Brazil treat laws governing social responsibility with a certain laxness. The deficit in this context is not linked nor limited to an undervaluation of forests. Rather it is a deficit of our legal culture – a cultural complicity regarding illegality – as was mentioned earlier, which leads to the pathology which, on another occasion I called “*leis de mentirinha*” or “make-believe laws” – laws that are adopted but will never or hardly ever be enforced. These are *amulet laws* designed to deflect criticism of the weaknesses of the legislation itself or in enforcement; laws which people refuse to or don’t care to properly follow, or for which compliance is at most only selective, and not in the contexts where it would be most critical, i.e. in regions facing immense rates of deforestation and the destruction of habitats that are practically intact, such as in the Amazon.

The laxity in obeying the law can be explained by another cultural trait, unfamiliar to foreign experts, namely the so-called Brazilian *jeito* (“the Brazilian way”), as difficult to translate into Anglo-Saxon languages as our sense of “*saudade*”. As far as I know, only one jurist has written in detail on the subject, an essential sociological note for deciphering the theatrical environmental implementation that prevails here. I’m referring to two articles by Keith Rosen, an American professor, one from 1971<sup>13</sup> and the other from 1984.<sup>14</sup>

The *jeito*, or better yet, the affectionate diminutive *jeitinho*, which serves to trivialize it and diminish the outrage at undermining the foundations of the rule of law - has a lot to do with the disconnection between legal reality, institutional reality and social reality. This deplorable cultural idiosyncrasy (and to be fair, legal complicity also) was masterfully described by Charles Morazé as “the skill, the ingenious maneuver that makes the impossible possible; the unjust, just; and what is illegal, legal,” this “to the great sadness of the most zealous and the least astute officials”.<sup>15</sup> Without considering the customary practice of the *jeito*, it is doubtful that we will minimally begin to comprehend the functioning – but above all the non-functioning – of our legal system.

Another cause for the failures of implementation are the contradictory legislative and political messages which offer something with one hand and then take it away with both hands: a behaviour that contributes much to the popular perception that we are not faced with a legal and environmental emergency nor a dire necessity, nor a critical need for permanence of and fidelity to the law which is already enacted. Of course, such an attitude is wholly incompatible with the rule of law and, consequently also, with the environmental rule of law. I should add that in Brazil it is not uncommon for an environmental statute to state one thing and then for a politician or an *ancien régime* jurist to

12 On another occasion, I wrote “Let’s not be deluded, however, by the arguments of some Latin American governments who say that deforestation is the result of the exploitation of natural resources by these ‘poor’ people. The biggest and most devastating deforestations have been the result of actions by large companies, both national and multinational. The state often encourages, by tax and credit incentives - the unsustainable felling of forests.” Benjamin, A. H. A proteção do meio ambiente nos países menos desenvolvidos: o caso da América Latina. (Environmental protection in less developed countries: the case of Latin America) *Revista de Direito Ambiental*, São Paulo, n. 0, p. 89, Oct. 1995.

13 Rosenn, K. S. (1971) The jeito: Brasil’s institutional bypass of the formal legal system and its development implications. *The American Journal of Comparative Law*, v. 19, n. 3, p. 514-549.

14 Rosenn, K. S. (1984) Brazil’s legal culture: the jeito revisited. *Florida International Law Journal*, v. 1, n. 1, p. 1-43.

15 Morazé, C. (1954) *Les trois âges du Brésil*. Paris: Librairie Armand Colin, p. 195.

contradict it, and openly preach insubordination. By any criteria, a situation of this sort should be of grave concern. The aphorism of the rule of law as law that is to be *obeyed is transformed into obey the law if you want to or, worse, obey if you're a fool.*

Such a harsh diagnosis does not in any way advocate paralysing the evolution of the legal system. Once enacted, laws will always invite criticism, reform, and improvement, which are a welcome part of the democratic legislative process. Parliamentarians are tasked with drafting and changing the law, unlike judges, who are limited to compelling compliance, without abandoning, of course, the task of interpreting and reconciling statutes with constitutional parameters, international law and the general principles of the legal system. What is unacceptable, however, because it is incompatible with the environmental rule of law, is to irrationally modify the legislation, on grounds that deny or contradict scientific knowledge, or, equally pernicious, to incorporate additions that disregard or are offensive to the basic tenets and objectives of the legal discipline in case, or – even more repugnant – to take actions for reasons that cannot be disclosed.

To illustrate the drama of contradictory legislative messages, I will mention the repeated amnesties for deforestation (e.g. the new Forest Code of 2012, which drastically relaxed the obligation to recover areas that had been illegally deforested prior to July 22, 2008). Amnesties also occur in the context of criminal invasions and seizure of public lands. I list these recurrent events without expressing any value judgment on the desirability of reforms, much less on the orientation of political parties. I am simply recognising a legislative fact.

Another example of the institutional weakening of environmental protection, in this case directly affecting the federal-state relationship, was the approval in 2011 of Complementary Law 140, which “returned” to the states the primary administrative authority to license forest clearing. This was done even though the states never had such a monopoly, and now, in fact, excludes the federal government (with a few exceptions) from acting in such an important area of environmental law.

Regrettably, the legislative amnesties that have taken place will likely not be the last. In fact, the big deforesters and land grabbers in Brazil live in the constant expectation of a future pardon, applicable not only of for consummated environmental crimes, but also to validate the illegal seizure of public lands. From this perspective, our environmental rule of law remains fragile, constantly under threat of being hollowed out and unable to deliver on the promises set out in the supporting legislation. Here is the path: invasion, cutting of the forest, amnesty, and, as an extra prize, the privatisation of public land.

Clearly, all these actions and behaviours of perverting the legal process are contrary to the heart of the environmental rule of law, whatever theoretical archetype it adopts (procedural or substantive), since it turns the implementation of laws into a chimera or a joke. Without effective implementation, the environmental rule of law will never become what it is intended to and should be. Laws and orders are only accepted as such “if it is believed that they will be obeyed and enforced. If there is doubt regarding this, the actions of the authorities presumably have other purposes besides regulating behavior”.<sup>16</sup>

In environmental law “other purposes” often camouflage and provoke cosmetic reactions from legislators and administrators, a convenient ruse to protect the image of those in power, especially in the eyes of the international community, always ready to demand that laws be enacted, but rarely

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16 RAWLS, John. *A theory of justice*. Cambridge: Harvard University Press, 1999. p. 208.

able to ascertain the content, seriousness and durability of their commands and, more importantly, unable to be vigilant in regards to whether or not there is compliance.

## Conclusion: good laws alone do not guarantee the effectiveness of environmental rights and obligations

In sum, it is fair to say that we have good environmental laws in Brazil, but we suffer from the evils of inconstant regulations and a low level of regulatory effectiveness, even though we have remarkable access to justice for disputes related to the protection of nature, health and the landscape.

Given this situation, we urgently need to introduce a system of *environmental implementation indicators*.

## References

- Beatty, D. M. (2005). *The ultimate rule of law*. Oxford: Oxford University Press, 2005.
- Benjamin, A. H. (1993). A implementação da legislação ambiental: o papel do Ministério Público. In: Benjamin, A. H. (coord.) (1993). *Dano ambiental: prevenção, reparação e repressão*. São Paulo: Revista dos Tribunais.
- Benjamin, A. H. (1995). A proteção do meio ambiente nos países menos desenvolvidos: o caso da América Latina. *Revista de Direito Ambiental*, São Paulo, n. 0, p. 83-105.
- Benjamin, A. H. (2012). *Princípio da Proibição de Retrocesso Ambiental*. Brasília: Federal Senate Federal, 2012.
- Dunn, A. D. & Stillmann, S. (2015). Advancing the environmental rule of law: a call for measurement, in 21. *Southwestern Journal of International Law*, n. 2.
- Morazé, C. (1954). *Les trois ages du Brésil*. Paris: Librairie Armand Colin.
- Pound, R. (1910). *Law in the books and law in action*. American Law Review, vol. 44, p. 12-36.
- Prieur, M. & Mekouar, M. A. Fostering legal indicators for sustainable development. *Perspectives*, n. 40, May 2021. Available at: <https://www.unep.org/pt-br/node/29545>. Accessed on: July 21, 2023.
- Prieur, M., Bastin, C., & Mekouar, A. *Measuring the Effectivity of Environmental Law – Legal Indicators for Sustainable Development*. Brussels: Peter Lang, 2021. <http://www.peterlang.com/document/1114411>
- Rawls, J. (1999). *A theory of justice*. Cambridge: Harvard University Press.
- Rosenn, K. S. (1971) The jeito: Brasil's institutional bypass of the formal legal system and its development implications. *The American Journal of Comparative Law*, v. 19, n. 3, p. 514-549.
- Rosenn, K. S. (1984). Brazil's legal culture: The jeito revisited. *Florida International Law Journal*, v. 1, n. 1, p. 1-43.
- Voigt, C. (Ed.) (2013). *Rule of Law for Nature: New Dimensions and Ideas in Environmental Law*. Cambridge: Cambridge University Press.

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