UiO: Faculty of Law University of Oslo

Commitments and Legal
Obligations in the Paris
Agreement: Compliance and
Adjudication

The supplementary role of the ICJ and ITLOS in tackling climate change

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"The shift to a cleaner energy economy won't happen overnight, and it will require tough choices along the way. But the debate is settled. Climate change is a fact. And when our children's children look us in the eye and ask if we did all we could to leave them a safer, more stable world, with new sources of energy, I want us to be able to say yes, we did."

U.S. President Barack Obama, State of the Union, January 28, 2014.

"Ice storm rolls from Texas to Tennessee - I'm in Los Angeles and it's freezing. Global warming is a total, and very expensive, hoax!"

Donald J. Trump, on Twitter, December 6, 2013.

"We should avoid falling into the trap of these four perverse attitudes, which certainly do not help honest research or sincere and productive dialogue on building the future of our planet: denial, indifference, resignation and trust in inadequate solutions."

Pope Francis, in message issued to the COP23, November 7, 2017.

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List of abbreviations

CAT Climate Action Tracker

CBDRRC Principle of common but differentiated responsibilities and respective

capabilities

CO₂ Carbon dioxide

COP Conference of the Parties

EU European Union

GHG Greenhouse gas

GtCO₂e Gigatonnes of equivalent carbon dioxide

ICJ International Court of Justice

ITLOS International Tribunal for the Law of the Sea

KP Kyoto Protocol

L&D Loss and damage

NDC National determined contribution

PCCB Paris Agreement Committee on Capacity-building

TD&T Technology development and transfer

PA Paris Agreement

UNCLOS United Nations Convention on the Law of the Sea

UNFCCC United Nations Framework Convention on Climate Change

US United States of America

USD United States Dollar

1. Introduction

1.1. Background

The advent of the Paris Agreement (PA) to the United Nations Framework Convention on Climate Change (UNFCCC)¹ has attracted opposing points of view. It was perceived by some as a substantial victory for the global climate, even being hailed or referred as the "world's greatest diplomatic success." Others remained skeptical about its effectiveness in tackling the climate problem, deeming the PA as a "triumph of wishes over facts." Perhaps, the adequate point of view is the one in which "the truth lies somewhere in-between." In any way, what still resonates is whether the PA will be effective in preventing global climate change.

No treaty prior to the PA has managed to gather such substantial amount of states⁵ with a common scientifically based objective, which, if accomplished, is likely to preclude the climate threat. This may be seen as a step towards 'victory.' On the other hand, the language in the PA does not always reveal itself as the most biding, what has created a certain confusion around its legal character, nonetheless made possible the almost

¹ Paris Agreement (Paris, 12 December 2015)

² Fiona Harvey, Paris climate change agreement: the world's greatest diplomatic success, GUARDIAN (DEC. 14, 2015)

³ Tom Switzer, *Paris Agreement Is a Triumph of Hope over Facts*, SYDNEY MORNING HERALD (Dec. 30, 2015)

⁴ Daniel Bodansky, *The Paris Climate Change Agreement: A New Hope?*. THE AMERICAN JOURNAL OF INTERNATIONAL LAW VOL. 110, NO. 2 (April 2016), pp. 288-319.

⁵ As for today, 175 states have ratified the Paris Agreement. Data available at: http://unfccc.int/paris agreement/items/9485.php

universal acceptance by the parties. Anyhow, the PA does create obligations of which compliance is mandatory.⁶

Notwithstanding, on 4 November 2016 the PA entered in force with a discrepancy that could already have been predicted. Although the PA was placed with the objective to "strengthen the global response to the threat of climate change" by "holding the increase in the global average temperature to well below 2°C ...[or ideally] 1.5°C above pre-industrial levels", most of the nationally determined contributions (NDCs) have not demonstrated to be proactive enough towards the fulfillment of such objectives, leading to an overall insufficiency scenario, also referred as the PA emissions gap. 10

The emissions gap gives cause to worry¹¹ about the effectiveness of the PA in tackling the problem, once in the absence of compliance, broad participation and ambition of the parties¹² would not guarantee the achievement of the global targets. Important to remember, the PA counts with a compliance mechanism and other internal administrative arrangements designed to promote compliance and enhance the individual participation.¹³ However, it remains unsure how these mechanisms are supposed to work, and if they will be able to positively impact the trajectory of a state refraining from compliance, or falling short of its own NDC.

The effectiveness of the PA will be determined based on how successful it is in achieving its objectives. Therefore, it is crucial to question how such insufficient pathway, and other eventual behavior in disagreement with the objectives and principles of the PA, may be addressed in order to improve its effectiveness in tackling climate change.

⁶ Daniel Bodansky, *The Legal Character of the Paris Agreement*. REVIEW OF EUROPEAN, COMPARATIVE, AND INTERNATIONAL ENVIRONMENTAL LAW, FORTHCOMING (March 22, 2016).

⁷ Paris Agreement, 2-1.

⁸ *Ibid.*, 2-1(a).

⁹ See analysis of the proposed NDCs made available by Climate Action Tracker (CAT) at http://climateactiontracker.org/

¹⁰ The CAT, above, enlights the circumstances around the Paris Agreement emissions gap.

¹¹ UN sees 'worrying' gap between Paris climate pledges and emissions cuts needed. UN NEWS CENTRE (Oct. 31, 2017). Available at: https://news.un.org/en/story/2017/10/569672-un-sees-worrying-gap-between-paris-climate-pledges-and-emissions-cuts-needed

¹² R.B. Mitchell, *Compliance Theory*, in: THE OXFORD HANDBOOK OF INTERNATIONAL ENVIRONMENTAL LAW. (Oxford University Press, 2007) 893; Christina Voigt, *The Compliance and Implementation Mechanism of the Paris Agreement*. REVIEW OF EUROPEAN COMMUNITY & INTERNATIONAL ENVIRONMENTAL LAW (RECIEL) Vol. 25 (2) (Jun. 22, 2016)

¹³ The Paris Agreement counts with an "enhanced transparency framework" (Article 13), a system referred as "global stocktake" designed to evaluate the "collective progress" and "long-term goals" (Article 14), and a committee which its purpose is to "facilitate implementation of and promote compliance with" the PA (Article 15).

1.2. The research question

The following question characterizes this study:

How can a state be compelled or persuaded to fulfill the commitments created by the Paris Agreement?

Currently, the parties to the PA are falling short of performance, creating an insufficiency scenario that jeopardizes the effectiveness of the PA in combating climate change. Under this context, the PA counts with a compliance mechanism, though it still has not reached functionality, consequently being unable to contribute to the effectiveness of PA in achieving its objectives. Thus, it is important to question which other possible approaches may help in the resolution of the climate problem and whether something can be done to adjust the national posture in relation to the global climate objectives.

As such, this paper is meant to investigate (1) to what extent the commitments created by the PA must be complied with; (2) whether the PA compliance mechanism may impose the fulfillment of these commitments to states behaving disproportionately to the PA objectives or states' own NDCs; and, (3) whether international courts could play a role in supplementing the PA, in case of ineffectiveness or inability of this treaty in tackling climate change on its own.

1.3. Methodology

This master thesis focuses on different aspects related to the PA such as (1) the commitments created to the parties; (2) whether a given party may be compelled, or persuaded to achieve such commitments; (3) whether the PA is effective in tackling the climate problem; and, (4) whether the international courts have a role to play as a supplementary approach to the PA.

In so doing, this paper uses a combination of description, conceptual analyses, and evaluation in different development sections. As such, the first part consists of a description and, to a certain level, a conceptual analysis of commitments and legal

obligations created by the PA. The second part analyses the contemporary conceptual framework related to the mechanisms meant to improve ambition and compliance within the PA, and evaluates whether such mechanisms can affect the PA effectiveness in tackling climate change. Finally, the third part investigates the current conceptual framework related to the role of the ICJ and ITLOS in adjudicating climate change, and how they may supplement the PA effectiveness in tackling the climate problem.

1.4. Legal Sources

As sources, this paper uses the following international treaties:

- The Paris Agreement (Paris, 12 December 2015). The latest advent to the UNFCCC, and the main treaty discussed by this paper;
- Kyoto Protocol (Kyoto, 11 December 1997). Meant to strengthen the commitments of the Annex I Parties to the UNFCCC;
- United Nations Framework Convention on Climate Change UNFCCC (New York, 9 May 1992). The central climate treaty which has established the UN climate regime;
- United Nations Convention on the Law of the Sea UNCLOS (Montego Bay, 10 December 1992), Article 192, referring to the states' obligation in preserving and protecting the marine environment;
- United Nations Fish Stocks Agreement (New York, 4 August 1995), Article 2, as for its objective in ensuring the long-term conservation and sustainable use of the fish stocks.

Also, the following decisions of the Conference of the Parties (COP):

- 1/CP.21, which establishes the PA and gives further instructions.
- 1/CP.16, which describes extreme weather events;
- 27/CMP.1, on what relates to the punitive measures of the KP.

Further, the regulations related to jurisdiction in contentious cases, and advisory opinions of the ICJ and ITLOS:

- Statute of the International Court of Justice, Article 36, on jurisdiction, and Articles 65 to 68 (chapter IV) on advisory opinions;
- Rules of the Tribunal (ITLOS), Articles 130 to 138, on advisory opinions.

This paper also mentions the following cases in international case law:

- The 2005 petition by the Inuit to the Inter-American Commission on Human Rights;
- The petitions by environmentalist groups to the World Heritage Convention, arguing that climate change is a threat to the World Heritage sites;
- Advisory Opinion on a Request for an Advisory Opinion Submitted by the Sub-Regional Fisheries Commission (2 April 2015) ITLOS 53-60;
- Legality of the Use by a State of Nuclear Weapons in Armed Conflict, Advisory Opinion, I.C.J. Reports 1996, p. 66;
- Case concerning Gabcikovo-Nagymaros Project (Hungary/Slovakia) ICJ Rep 1997
 53:
- Case concerning Pulp Mills on the River Uruguay (Argentina v. Uruguay) ICJ Rep 2010 167-68;
- Wailing in the Antarctic case (Australia v. Japan, New Zealand Intervening) ICJ Rep 2014 67;
- Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory, Advisory Opinion, I.C.J. Reports, 2004, p. 126;
- Accordance with International Law of the Unilateral Declaration of Independence in respect to Kosovo, Advisory Opinion, I.C.J. reports 2010; p. 403.
- Responsibilities and Obligations of States with respect to activities in the Area, Advisory Opinion, 1 February 2011, ITLOS Reports 2011, p. 10.

1.5. Intended academic contribution

The academia counts with research on the commitments and obligations created by the PA, and a few works on its effectiveness. Further, there is also some research on the possibility of general climate change adjudication by the international courts. However, there appears to be a lack of research on the possibility of bringing a climate case before international forums specifically to what relates to the lack of performance of the parties to the PA, in reaching their commitments and obligations. As such, this master thesis is intended to help to fill this gap, by providing an analytic point of view which could integrate the existing literature on these different topics. Consequently, the thesis is intended to discuss the PA lack of effectiveness in tackling climate change, and the possibility of bringing climate cases before the international forums. The latter meaning not in a sense of how these forums could enforce decisions made by the compliance mechanism, or on what touches matters of the PA implementation; but how they could supplement this treaty, rather than substituting its compliance mechanism or other of its institutional arrangements.

2. Commitments and Obligations under the Paris Agreement

2.1. Background

Before advancing into the commitments and obligations under the PA, it is relevant to understand its background. That because, the PA is built upon a pre-existing complex structure consisting of a body of institutions, rules, and procedures. At the very core of this pre-existing framework, are present other two essential treaties, namely the UNFCCC and the Kyoto Protocol (KP).

The UNFCCC was adopted on 9 May 1992, having entered into force on 21 March 1994. This treaty has established the UN climate regime, and its 'ultimate objective' - in preventing 'dangerous anthropogenic interference with the climate system.' However, the UNFCCC was not meant to immediately address, and resolve the climate matter, but to allow its further development in accordance to the dynamics, and advances in the science, understanding, and political will related to the climate matter. Furthermore, the UNFCCC have also introduced guiding principles and concepts to the climate regime, such as 'equity' and 'common but differentiated responsibilities and respective capabilities' (CBDRRC).

The KP is the second treaty to the UN climate regime, meant as a supplementation (not replacement) to the UNFCCC. It was established on 11 December 1997, having entered into force only on 16 February 2005. The KP was supposed to improve the commitments of Annex I parties to the UNFCCC. The KP has adopted a result oriented

¹⁴ UNFCCC, Article 2.

¹⁵ Klein, et al., THE PARIS AGREEMENT ON CLIMATE CHANGE (Oxford University Press, 2017). Chapter 2, page 27.

concept with legally-binding emission reduction targets, to the mentioned parties.¹⁶ The KP had its first period of commitments in between the years of 2008 and 2012, and the second period of commitments established by the Doha Amendment agreed from 2013 to 2020.¹⁷

Under this spectrum, the PA is the third treaty embraced by the UN climate change regime, representing the latest advent of efforts taken by the international community in addressing climate change.

2.2. The Paris Agreement legal character and its effectiveness in achieving the global climate objectives

The PA, in contrast to the KP, has adopted a more flexible approach; one that 'safeguard national decision making.' This structural difference represents the materialization of a paradigm shift, started at the 2009 Copenhagen Conference, which is also likely to be the reason behind its almost universal acceptance. In this sense, the PA quits the result oriented concept adopted by the KP, in favor of a system that incentivizes the parties to determine their own share of contribution, without punishment in case of not reaching such pledge. This approach permitted states to take on more significant commitments and induced a higher degree of participation - than when compared to the method used by the KP. This new style cannot be, in any way, discredited from being a decisive factor for the climate matter; however, it has sparked a discussion regarding the legal form of the PA, and its effectiveness in achieving the global climate objectives. In the parameter of the participation is a discussion of the PA, and its effectiveness in achieving the global climate objectives.

Concerning the legal form, it is possible to affirm that the PA is a binding treaty within the legal definition provided by the Vienna Convention on the Law of Treaties,²¹ though not all of its provisions are mandatory.²² In general, the language used on a certain

¹⁶ Kyoto Protocol, Article 3.

¹⁷ As for 15 March 2018, 111 parties have accepted the Doha Amendment. Doha's current status available at: https://unfccc.int/process/the-kyoto-protocol/the-doha-amendment

¹⁸ See Bodansky, n. 4 above.

¹⁹ Ibid.

²⁰ A.-M. Slaughter, 'The Paris Approach to Global Governance', *Project-Syndicate* (28 December 2015), available at: https://scholar.princeton.edu/sites/default/files/slaughter/files/projectsyndicate 12.28.2015.pdf; R. Falk, 'Voluntary International Law and the Paris Agreement' (16 January 2016), available

 $https://richardfalk.wordpress.com/2016/01/16/voluntary-international-law-and-the-paris-agreement/\ ;\ and,\ D.\ Bodasnky,\ n.\ 7\ above.$

²¹ The Vienna Convention on the Law of Treaties (Vienna, 23 May 1969)

²² See Bodansky, n. 6 above.

provision will determine whether that rule is legally binding, or not. For instance, the PA makes use of verbs such as 'shall,'23 'should,'24 'may,'25 and other non-normative verbs ('will,'26 'are to,'27 'acknowledging,'28 and 'recognizing'29), indicating various degrees of legal bindingness.³⁰ As such, some provisions have a more imperative tone, while others appear more flexible. However, it is wrong to affirm the PA does not create legal obligations to its parties; or, even, that commitments without such classification are supposed to be considered voluntary.

As a result of the extent in which a commitment, created by the PA may be considered binding, a given provision may fall into one of the following four groups:³¹

- (i) procedural obligations³²;
- (ii) legal obligations³³;
- (iii) recommendations³⁴, expectations³⁵ or understandings³⁶; and,
- (iv) mandatory terms of institutional nature.³⁷

The first group mainly represents individual procedural obligations regarding the NDCs and some financial provisions. The second contains requirements for adaptation, means of implementation and some other duties (including the provision of financial support) of the developed country parties. The third group is represented by provisions related to mitigation, and it makes use of flexible language not seeming to impose any legally binding criteria. The last group, designed with legally binding terms, does not seem to create a commitment to the parties, but towards the 'institutional nature' of the PA.

²³ E.g., Paris Agreement, n. 1 above, Articles 4.2, 4.5, 4.8, 4.10, and 4.13.

²⁴ E.g., Ibid., Article 4.4.

²⁵ E.g., Ibid., Article 4.6 and 4.11.

²⁶ E.g., Ibid., Article 4.3.

²⁷ E.g., Ibid., Article 3.

²⁸ E.g., Ibid., Preamble, Paragraph 11.

²⁹ E.g., Ibid., Preamble, Paragraphs 4, 7, 9, 12, and 15.

³⁰ See Bodansky, n. 6 above, under the topic 'Legal Character of Particular Provisions'.

³¹ See Bodansky above for more on the classification of the commitments on the PA.

³² E.g., Paris Agreement, n. 1 above, Articles 4.2, 4.3, 4.8, 4.13, and 13.7(b).

³³ E.g., Ibid., Articles 7.9, 9.1, 9.5, 9.7, 10.2, 11.4, 12, and 13.9.

³⁴ E.g., Ibid., Articles 4.4, 4.19, 5.1, 7.7, 7.10, 8.3, 9.2, 9.3, 11.3, 13.8, and 13.10.

³⁵ E.g., Ibid., Article 4.1.

³⁶ E.g., Ibid., Articles 7.2, 7.4, 7.5, and 10.5

³⁷ E.g., Ibid., Articles 4.5, 4.12, 6.2, 6.5, 7.12, and 7.13

³⁸ See Bodansky, n. 6 above.

It is also important to notice the categorization of the provisions, by how legally binding they may be considered, does not represent different levels of priority that specific commitments have in the context of the PA. That because some provisions are of intrinsically more relevance (in achieving the PA main objectives) than others, despite the fact of being considered legally binding or not.

As for effectiveness, the central question is to know how successful is the PA in addressing the climate problem.³⁹ As such, the legal character of the PA is not necessarily responsible for determining its success in achieving the global climate objectives. Instead, the PA effectiveness must be evaluated under the lights of at least the following three factors⁴⁰:

- ambition;
- level of participation; and,
- degree of compliance.

High ambition and strong participation are inherent to the PA. However, it is not sure how much compliance can be expected by the parties. That because the understanding of what compliance means in the context of the PA may be relative, once many of the key provisions are ambiguously described, allowing different interpretations.

For instance, the PA differentiates the subject of certain provisions, by applying the use of different terminologies for individual, collective, or (what seems to be) institutional obligations. In this sense, many of the provisions related to mitigation are structured as collective expectations, rather than an individual commitment or obligation. However, these provisions are central pieces, in the PA, which achievement is highly dependent on the individual ability of the parties in contributing to the global target. As such, even though certain provisions have been structured as collective or institutional obligations, it

³⁹ See more on effectiveness on Catherine Banet, *Effectiveness in Climate Regulation: Simultaneous Application of a Carbon Tax and an Emissions Trading Scheme to the Offshore Petroleum Sector in Norway* (April 1, 2017). Carbon & Climate Law Review, Volume 11, Issue 1 (2017), pp. 25-38; University of Oslo Faculty of Law Research Paper.

⁴⁰ See: Barrett, *Environment and Statecraft: The Strategy of Environmental Treaty-Making* (oxford University Press, 2003); D. Bodansky, *Legally Binding Versus Non-legally Binding Instruments*, in: TOWARDS A WORKABLE AND EFFECTIVE CLIMATE REGIME (CEPR Press and Ferdi, 2015), 155; C. Voigt, *The Compliance and Implementation Mechanism of the Paris Agreement*, in: REVIEW OF EUROPEAN COMMUNITY & INTERNATIONAL ENVIRONMENTAL LAW (RECIEL) Vol. 25 (2) (Jun. 22, 2016).

⁴¹ See Bodansky, n. 6 above, under the topic 'Legal Character of Particular Provisions'.

is possible to question whether these provisions somehow create individual commitments to the parties, and, if so, to what extent they must be complied with.

Further, another relevant consideration about the commitments created by the PA is the existence of provisions which materialization dependents on the fulfillment of others. For instance, achieving the emissions peak as soon as possible is a crucial factor in reaching net-zero emission in the second half of this century, what consequently affects the desired pathway of holding the average global temperature increase to well below 2° Celsius, or ideally not more than 1.5° Celsius, when compared with pre-industrial levels. These are provisions highly dependent on each other, and the shortcoming in achieving one of them could potentially break the chain, causing the failure of the entire system.

The complexity of the PA is unavoidably latent. As such it is not possible to surely predict how its provisions will interact with each other, and, consequently, if this treaty will be successful in achieving its objectives. In another hand, it is possible to affirm the determining factor of its effectiveness, is not the legal character of the commitments, but the PA ability in progressively increase the individual capacity, and will of the parties in contributing to the global objective.

2.3. The key tasks of the Paris Agreement

Before advancing any further into the study of the commitments and legal obligations created by the PA, it is relevant to specify which are the key groups of tasks needed to be performed under the PA, in order to achieve its objectives. This categorization helps understanding the links in between the provisions and, therefore, the overall importance of individual commitments in the context of the PA. As such, the provisions in the PA may be characterized as belonging to one of the following key groups 42.

- Mitigation - The PA establishes a long-term mitigation goal with the objective of reaching net-zero emissions by the second half of the century, alongside a safety temperature threshold, that should be kept to avoid significant consequences and impacts of climate change. The materialization of the global mitigation action

⁴² Dagnet, et al., *Staying on Track from Paris: Advancing the Key Elements of the Paris Agreement.* Working Paper. Washington, DC: World Resources Institute.

supported by the PA relies on the ability of the parties, as a group, in achieving the objectives described in the NDCs. The mitigation objectives do not seem to have created individual commitments to any of the parties, but an overall collective commitment under the institutional nature of the PA. In the other hand, the NDCs have established a series of procedural obligation to the parties;

- Adaptation The PA created provisions directed to the enhancement of the parties' capacity to adapt to climate change, by reducing vulnerability and strengthening resilience. This group contains provisions designed to establish actions which could potentially minimize the adverse effects of climate change. Most of these provisions can be characterized as recommendations, expectations or understandings; arguably, with the exception of the requirement of each party engaging in adaptation planning and implementation;
- Loss and damage (L&D) The PA has created a dedicated framework for this topic, which also makes permanent the Warsaw International Mechanisms on Loss and Damage. However, further development is needed in order to gain a better understanding of how the parties could support countries that may suffer from catastrophic effects of climate change. Anyhow, L&D does not seem to impose any commitment or obligation to the parties; rather it seems as a simple collective statement of an understanding;
- Finance The main financial objective in the PA is to divert the financial flow from not sustainable activities, towards zero-emission and climate-resilient development. In addition, these provisions have created legal obligations towards developed countries, in providing financial resources for mitigation and adaptation of developing countries. The financial provisions have also created certain procedural obligations to the developed country parties;
- Technology development and transfer (TD&T) The parties to the PA committed to strengthen the cooperative action in developing and transferring technology, in order to improve climate resilience, and to reduce GHG emissions. The PA has also

opted to use the current Technology Mechanism of the UNFCCC. These provisions seem to have created a commitment of institutional nature;

- Capacity building The parties have agreed in enhancing the developing country
 parties' capacity and ability in taking effective mitigation, and adaptation action
 against climate change. This section is perceived mainly as encouragement, rather
 than imposing legally-binding criteria to the parties;
- Transparency of action and support The PA created a transparency framework meant to provide clear understanding in between climate action, and the PA objective. This is supposed to be done by tracking the progress of NDCs, and parties' adaptation actions. These provisions are also meant to promote accountability of the parties. As such, it has been considered as the backbone⁴³ of the PA, once it is the mechanism supposed to incentivize the materialization of the individual commitments. These provisions have created a series of procedural obligations;
- Global stocktake The global stocktake refers to the assessment of the collective progress in reaching the long-term goals. These assessments will take place every five years, starting from 2023, and are supposed to increase parties' ambition. However, the operational aspects of the global stocktake still have to be decided. Anyhow, these provisions seem to have created obligations related to the institutional nature of the PA;
- Compliance The PA have established a compliance mechanism, consistent of an expert-based committee. However, this mechanism requires further development in order to achieve functionality;
- Cooperative approach The PA have also established a mechanism designed to supervise the voluntary cooperative approach in between parties. As such, the PA foresees the possibility of some sort of a trading GHG scheme. Engaging in a cooperative approach is entirely voluntary.

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⁴³ See Dagnet et al., n. 42 above, page 3.

Also necessary to mention, the PA, Article 2, announces the central objectives in combating climate change by taking three different courses of action. First, it establishes a long-term temperature limitation, what gives cause to the mitigation provisions. Second, it determines the necessity of taking measures to handle unavoidable effects of climate change, what leads to the provisions on adaptation. Third, it implicitly condemns unsustainable development, by requiring a shift in the finance flow towards low emission and climate-resilient development, inducing the provisions regarding finance.

That being said, it is now possible to proceed to the legal analysis of the PA key groups.

2.4. Mitigation

Of the three different courses of action intended by the PA, mitigation is possibly the most important. That because it has a scientifically based objective meant to prevent climate change from worsening. Under these circumstances, the PA has implemented a long-term mitigation strategy, with the goal of reaching net-zero emissions by the second half of the century, alongside a limitation in the increase of the average global temperature. The global mitigation strategy, supported by the PA, relies on the parties' ability to individually contribute to the overall climate objective, what is expected to be done by the NDCs. However, it is still not possible to affirm how the national policies will impact the overall global climate scenario, or which legal challenges may arise further ahead. In this context, the next sections of this paper will explore some legal questions related to mitigation in the PA, and to what extent it creates an obligation to the parties.

2.4.1. Temperature objective

At the very core of the mitigation strategy is the temperature limitation objective, which is introduced by the Article 2.1, 'a', of the PA. This limitation represents the materialization and development of the United Nations Framework on Climate Change⁴⁴ (UNFCCC) ultimate objective⁴⁵ - of stabilizing the concentration of greenhouse gases and,

⁴⁴ United Nations Framework on Climate Change (New York, 9 May 1992).

⁴⁵ Ibid., Article 2.

consequently, preventing dangerous anthropogenic interference with the climate system - into a science-based global temperature target with a specific value.⁴⁶ The temperature objective is announced, by the PA, in the following manner:

"Holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing 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"

In adopting such objective, the PA has endorsed the scientific point of view, and also allowed a certain degree of flexibility, as it is made clear by the contemplation of two different targets within the same provision. In this sense, the 2° Celsius target is described as a maximum limit, once it is preceded by the expression "well below". The below 1.5° Celsius target, in contrast, seems to take the connotation of an ideal case scenario which should be pursued by, but not imposed to, the parties. As such, the global temperature target allows its flexibility from somewhere around 1.5° Celsius, up to less than 2° Celsius (functioning as a temperature safety threshold).

Perhaps, the idea behind the adoption of two different temperature targets reflects a political mindset (not a scientific one), meant to boost the effectiveness of the NDCs' 'bottom-up' approach and stock-taking mechanism, in the way of gradually increasing parties' ambition⁴⁷. This idea would explain the flexibility offered by the provision; however, it does not clarify if, in fact, it constitutes an obligation and, if so, to what extent and to whom.

Although the language does not seem strictly mandatory, it would be premature to deem global temperature targets merely as guidance, and not as an obligation. That because, the PA uses a more strict language when to referring to the 2° Celsius temperature target, making it seem like an obligation. In contrast, when referring to the 1.5° Celsius target, it adopts a more flexible language, giving the impression of a guideline. Further, the provision last sentence does recognize the global temperature target's potential in averting negative effects caused by climate change. In this way, the parties have agreed in the

⁴⁶ Gao, et al., The 2 °C Global Temperature Target and the Evolution of the Long-Term Goal of Addressing Climate Change—From the United Nations Framework Convention on Climate Change to the Paris Agreement, ENGINEERING (Volume 3, Issue 2, April 2017) Pages 272-278.

⁴⁷ Ibid., page 277.

relevance of pursuing the global temperature targets, and, in doing so, have also demonstrated to understand the correlation in between their individual behaviour, the global temperature targets, and the future impact it may cause to the global climate system. Consequently, it is not possible to unequivocally affirm whether this norm merely consists of a guideline, or if it could somehow indirectly impose an obligation.

This impasse is aggravated by the introductory paragraph of the article 2, in which it is possible to observe the use of the sentence 'aims to strengthen the global response to the threat of climate change.' In this sentence, the verb 'aim' is used as intention or direction of efforts; In a more general context, the use of the verb 'aim' indicates different possible outcomes, and does not guarantee meeting the target. It does give the understanding, however, that measures shall be taken in the pursuit of reaching the best results.

According to scholar Daniel Bodansky, the use of the word 'aim' does not, generally, creates a legal obligation.⁴⁸ That because, in the UNFCCC,⁴⁹ it has been used in association with 'less obligatory language'⁵⁰ in a context of ambiguity that allowed 'divergent interpretations.'⁵¹

In the case of the PA, however, the context appears more specific than in the UNFCCC, leaving less room for a gap in between interpretations. As it is noticeable, the word 'aim', in the article 2.1, of the PA, is further refined by, firstly, the expression 'to strengthen', what indicates the idea of increasing or fortifying the object ('the global response to the threat of climate change'), meaning it should be improved beyond its current situation; and, secondly, by the temperature targets itself.

Nonetheless, the provision was structured in a way which does not necessarily assign individual responsibility. This happens because the provision refers to 'This Agreement', not to the parties. Therefore, it could be possible to suggest that it creates a commitment of institutional nature, rather than a commitment to the parties. However, the completion of the temperature objective relies in the outcome of the effort taken by the parties. In this sense, it goes beyond any institutional capability of the PA.

⁴⁸ See Bodansky, n. 6 above.

⁴⁹ See United Nations Framework on Climate Change, n. 44 above, art. 4-2 (b)

Daniel Bodansky, *The United Nations Framework Convention on Climate Change: A Commentary*, 18 Yale J. Int'l L. (1993). Page 516.

⁵¹ Ibid.

If for a moment juridical classifications are put aside, it is possible to observe the focus of the provision in announcing the main objective of the PA: in preventing the increase in the global average temperature from surpassing the below 2° Celsius target. It is, therefore, reasonable enough to expect that each and all parties would contribute appropriately to the pursuit of the global temperature targets; This would give a collective character to this commitment, once its outcome is intrinsically related to overall performance of the parties.

Being that so, the individual contribution to the global objective should be made in the way of not imposing a more onerous burden than what is only just to the other parties. In this sense the Article 2.2, states:

"This Agreement will be implemented to reflect equity and the principle of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances."

The second paragraph of the Article 2, of the PA, does reflect a general idea in which the individual contribution of the parties must be apportioned based on the individual circumstances faced by each of the parties. That is made clear by the use of the expression 'different national circumstances', what presupposes that each party must have its own duties tailored to what would be equivalent to a fair share in the resolution of the climate matter. However, though the provision introduces the idea of an individual commitment, it does not specify any criteria to evaluate if parties are behaving adequately to the global temperature objective.⁵²

As a conclusion, these factors combined signalize the possibility to suggest that:

- First, there is a collective obligation to pursue the 1.5° Celsius temperature target;
- second, there is a collective obligation in ensuring that global average temperature will not surpass the 2° Celsius above pre-industrial levels; and,
- third, this provision alone does not directly create or impose individual obligations;
 however, it seems to stimulate the idea of promoting accountability to the parties,
 based on individual circumstances and performance.

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⁵² See mention to CAT, n. 10 above.

2.4.2. Global peaking and net-zero emissions in the second half of this century

Global peaking and net-zero emissions are two different, but intrinsically related, commitments created by the Article 4.1. The provision is described in a flexible language, and it is directed as a collective objective, rather than an individual obligation. The PA describes it in the following manner:

"In order to achieve the long-term temperature goal set out in Article 2, Parties aim to reach global peaking of greenhouse gas emissions as soon as possible, recognizing that peaking will take longer for developing country Parties, and to undertake rapid reductions thereafter in accordance with best available science, so as to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century, on the basis of equity, and in the context of sustainable development and efforts to eradicate poverty."

When analyzing this provision, the first factor to notice is the correlation made by its first sentence, to the temperature target delineated in the Article 2. In this sense, the PA demonstrates to understand, firstly, that GHG emissions have an impact in the average global temperature, and, secondly, that reaching peak and net-zero emissions are essential matters in accomplishing the long-term temperature objective.

As for reaching global emissions peak and net-zero emissions, it is essential to mention the article being directed to 'Parties.' This choice of subject is generally associated with commitments of joint nature, rather than individual. Further, the provision recognizes 'that peaking will take longer for developing country Parties', what permits the understanding of the commitment in two different degrees: (i) one potentially more strict collectively directed to the parties, and (ii) another with certain flexibility to the developing country parties. As such, the PA makes a political concession, in not expecting all parties to reach peak immediately. In doing so, the PA have placed a lesser burden on the developing countries.

Another relevant factor, the provision is ambiguous when using the expression 'as soon as possible.' Such expression is not very precise, and it may be interpreted in at least

two different ways. It may represent a priority, which must be accomplished immediately, or it may merely be used meaning that something should be done when there is a chance to do it, but not urgently. In any case, some observers suggest, for staying under the 2° Celsius target, global emissions peak must happen by the year of 2020 at the latest.⁵³

Nonetheless, reaching global emissions peak and net-zero depends on the overall performance of the parties as a group. In other words, this is an objective which can be successfully achieved, as long as the parties contribute with the equivalent to their fair share. Consequently, the individual performance of a party may affect the overall result. This leads to question if the provision also creates an individual obligation, or if it should merely be perceived as a guideline.

Under this circumstance, it is reasonable to expect that each party should individually take on its apportioned share of the commitment, avoiding to impose a burden, heavier than what is just to other parties. However, it is still unclear if a party could be somehow compelled, or convinced, to change an individual behavior that may jeopardize the collective objectives of reaching emissions peak 'as soon as possible,' and net-zero emissions, by the second half of the century. Anyhow, this provision seems to have created a collective commitment, rather than an individual obligation.

2.4.3. Nationally determined contributions (NDCs)

The NDCs illustrate the paradigm shift from legally binding emissions targets in the KP to a more flexible style with requirements to 'implement' rather than an obligation to 'achieve'; hence, a hybrid approach containing both 'top-down' and 'bottom-up' elements.⁵⁴ In this sense, The PA has introduced the NDCs in the Article 4.2, as the following:

"Each Party shall prepare, communicate and maintain successive nationally determined contributions that it intends to achieve. Parties shall pursue domestic mitigation measures, with the aim of achieving the objectives of such contributions."

⁵³ Stefan Rahmstorf and Anders Levermann, *Why global emissions must peak by 2020*. 2020 THE CLIMATE TURNING POINT (April 2017). Available at: https://newclimate.org/2017/04/10/2020-climate-turning-point/

⁵⁴ See Catherine Banet, *The Paris Agreement to the UNFCCC: Underlying Dynamics and Expected Consequences for the Energy Sector*, in: EUROPEAN ENERGY REPORT XI, 2017. Chapter IV, Page 69.

As it is possible to observe in the first sentence, the provision makes use of the verb 'shall' as referring to 'Each Party', what establish an individual legal obligation as regarding to preparing, communicating and successively maintaining NDC's. The second sentence, however, demonstrates itself with a higher degree of complexity, what may allow divergent understandings of the provision. That because of at least two factors: First, it refers to the sentence's subject as 'Parties' instead of 'Each Party', in contrast to what was previously seen in the first sentence; Second, it uses a mix of legally binding and non-legally binding terms.

The first factor, regarding the subject of the second sentence, may arguably indicate a collective, rather than individual, obligation. That because the use of plural subject is generally associated with a collective idea.⁵⁵ However, in the context of the PA, that may not always be the case, as some provisions make use of the plural form indicating what seems to be an individual obligation.⁵⁶ As such, a mere and isolated analysis of this specific provision does not allow to affirm whether it creates an individual or a collective obligation.

Under this spectrum, scholar Daniel Bodansky has demonstrated what seems to be an inconsistent use of the plural form, as for indicative of individual or collective obligations throughout the PA. In his paper 'The Legal Character of the Paris Agreement', ⁵⁷ he brings the attention to the first sentence of the Article 4.13, which is described by the PA in the following manner: "Parties shall account for their nationally determined contributions." In the context of the PA, this provision seems to create an individual obligation directed to each party. However, it is important to remember, in the Article 6, the PA allows voluntary collaborative approach in between the parties, what could potentially enhance the comprehension of the previously mentioned provision. That because, if multiple parties opt for the collaborative pathway, it would not be unreasonable to expect accountability to take form as a result of their overall performance. In this sense, although the Article 6 precludes the double counting of traded emissions, it does not specify how the process of accountability must take place. For this reason, even if the context seems to impose an individual obligation, the interpretation regarding the legal

⁵⁵ See Bodansky, n. 6 above in the 'Legal character of particular provisions'.

⁵⁶ Ibid.; the scholar refers to the Paris Agreement, Article 4.13, as an example of plural formulation seemly intended to indicate an individual obligation on accounting for each party.

⁵⁷ Ibid.

character of the subject in this norm may be passive of a certain degree of flexibility; although, possibly not more than to the extent of an eventual voluntary collaboration between the parties. Anyhow, the use of the plural form in the PA does not seem to consistently indicate whether a given norm has an individual or collective character.

On what touches the second factor, regarding the legal bindingness indicated by the choice of terms, the first part of the second sentence uses the verb 'shall', indicating a legal obligation. However, in the second part of the sentence, the provision makes use of the word 'aim', what seems to modify the legal character of the first part of the sentence. In using this word, the PA would have arguably softened the meaning of the word 'shall', which is normally associated with legal obligations. However, from a personal perspective and opinion, the use of the word 'aim' does not seem to affect the meaning of the word 'shall' significantly. That because the word is in a complex sentence, constituted of two clauses separated by the coma. In this context the first part of the sentence is an independent clause, making sense on its own. The second, however, is a dependent clause, and would not make sense without the first part. As such, the first clause could stand alone as a simple sentence, without having its meaning altered; while the second clause seems to work as an additional component to the independent clause. Therefore, in this provision, the use of the word 'aim' does not necessarily interfere with the traditional role of the verb 'shall', in determining the legal bindingness of the norm.

Further, another two matters can be observed with the structure of this provision. First, the use of the infinitive 'pursue' does not allow the understanding of an obligation to 'implement', or to 'achieve' the NDCs, ⁶⁰ suggesting a certain degree of flexibility of the norm. Second, the 'aim' described in the last part of the provision refers to the 'objectives' of the NDCs, instead of directing it towards their specific content. ⁶¹

As such, the NDCs represent the individual commitments, made by each of the parties, as for how they intend to contribute to the overall climate objective. In this sense, the analysis of the Article 4.2 points to the inviability of considering such norm individually binding on each party as in relation to results or implementation.⁶²

⁵⁸ As previously discussed in this paper, the word 'aim' does not necessarily signalize a legal obligation, but certainly the possibility and allowance of different outcomes.

⁵⁹ See Bodansky, n. 6 above in the 'Legal character of particular provisions'.

⁶⁰ Ibid.

⁶¹ Ibid.

⁶² Ibid.

Nevertheless, the provision creates an obligation of conduct⁶³; not meaning, however, that NDCs are voluntary. In fact, the Article 4.2, and other related provisions have created strong individual procedural obligations regarding the NDCs, such as hereby mentioned:

- The obligations to prepare, communicate and maintain successive NDCs⁶⁴;
- The obligation of providing the information necessary for clarity, transparency, and understanding (when communicating the NDC)⁶⁵;
- The obligation to communicate a successive NDC every five years, representing a progress beyond the current NDC⁶⁶;
- NDCs accountability and duty to avoid double counting⁶⁷;
- The obligation to regularly provide the necessary information for tracking the progress in implementing and achieving the NDC.⁶⁸

Perhaps for political reasons, the PA has chosen to undertake a more flexible approach to its parties, when compared to the KP. In this sense, the NDCs reflect the 'bottom-up' character of the PA, by allowing the parties to self-establish their own national goals, without a strong concern of not reaching such pledges. On the other hand, in doing so, the PA expects each party to ambitiously engage in the resolution of the global climate matter. In this sense, even in absence of binding criteria regarding the results, the PA still imposes legal obligations regarding the individual conduct of the parties, what results in the aforementioned individual procedural obligations. However, it is still not precisely known how the PA will handle cases of countries which do not comply with the procedural obligations; or a situation in which countries comply with the formal procedure aspects, but without the minimum necessary ambition, needed to justify their national contribution, as not imposing a heavier burden than what is only just to other parties. The second situation seems to be the current challenge faced by the PA.⁶⁹ It would, nonetheless, be premature to declare this new approach as a failure. That because the PA still has not had the chance to implement and test its mechanisms of Transparency, Global Stocktake, and

⁶³ Daniel Bodansky, *The art and craft of international environmental law*. Harvard University Press.

⁶⁴ Paris Agreement, n. 1 above. Article 4.2.

⁶⁵ Ibid., Article 4.8.

⁶⁶ Ibid., Articles 4.9 and 4.3.

⁶⁷ Ibid., Article 4.13.

⁶⁸ Ibid., Article 13.7(b).

⁶⁹ The current overall state of the NDCs represent only a fraction of the emissions reduction needed to limit the temperature increase to 2° Celsius. See CAT, n. 10 above.

Compliance. As such, the effectiveness of the PA will not be determined merely based on the degree of ambition described by the NDCs, but for the PA ability in progressively increase the individual ambition of the parties over time.

2.5. Adaptation

Adaptation is the second course of action determined by the main objectives of the PA. The following goals introduce the provisions regarding adaptation:

- First, as described by the Article 2.1, 'b':

"Increasing the ability to adapt to the adverse impacts of climate change and foster climate resilience and low greenhouse gas emissions development, in a manner that does not threaten food production."

- Second, as delineated by the Article 7.1:

"Parties hereby establish the global goal on adaptation of enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change, with a view to contributing to sustainable development and ensuring an adequate adaptation response in the context of the temperature goal referred to in the Article 2"

These provisions are structured with a flexible language which does not impose any legal obligation. As for the subject, the first provision seems to be directed towards the institutional nature of the PA, while the second has opted for using the word 'Parties', what would arguably reveal a collective commitment⁷⁰ - although the PA do not seem to consistently use of the plural form as an indicative of a norm's collective nature.⁷¹ As such, these provisions on its own do not create an individual obligation to the parties.

The same is true for most, but not all, of the provisions on adaptation. That because the PA mostly uses non-normative verbs ('recognize' and 'acknowledge') for describing these provisions, what merely indicates a statement by the parties regarding a certain

⁷⁰ Nina Hall and Åsa Persson, '*Global climate adaptation governance: Why is it not legally binding?*' (8 September 2017), in: EUROPEAN JOURNAL OF INTERNATIONAL RELATIONS.

⁷¹ As discussed in section 2.4.3 of this paper.

expectation, understanding or a collective opinion.⁷² Some of the examples involving adaptation which falls into this category are found:

- In the Article 7.2 Recognition of adaptation as a global challenge and key component in the long-term global response to climate change, taking into account the urgent and immediate needs of developing countries vulnerable to the adverse effects of climate change;
- In the Article 7.4 Recognition of the existence of a current need for adaptation, and that greater needs can involve greater costs. Also, the recognition of the positive contribution that greater mitigation can offer in reducing the need for additional adaptation efforts;
- In the Article 7.5 Acknowledgement that adaptation should be country-driven and guided by the best available science; and,
- In the Article 7.6 Recognition of the importance of support and international cooperation on adaptation efforts, taking into account the needs of developing countries, in special those vulnerable to the adverse effects of climate change.

In a few instances, the provisions on adaptation are described as recommendations. That is the case when the PA opts for using verbs such as 'should' or 'encourage' - being the second used as indicative of a more flexible tone.⁷³ Some examples can be found:

- In the Article 7.7 Collective recommendation to the parties to strengthen their cooperation on enhancing adaptation;
- In the Article 7.8 Encourages the specialized organizations and agencies of the United Nations to support the parties' implementation efforts; and,
- In the Article 7.10 Recommendation to each party to periodically submit, and update a communication regarding adaptation.

It is also possible to notice, the paragraphs 11 and 12 of the Article 7 make use of the modal verb 'shall'. However, these are strictly related to the paragraph 10 and seem to

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⁷² See D. Bodansky, n.6 above.

⁷³ Ibid

merely serve as a reference to the procedural form of the indicated recommendation. Further, the paragraphs 13 and 14, of the same Article, also use the modal verb 'shall'. In paragraph 13, the modal verb does not have a subject and seem to create an obligation of institutional nature⁷⁴ related to the continuous and enhanced international support for developing countries, while in paragraph 14, it is directed to the global stocktake as referred in the Article 14. As such, the mentioned paragraphs do not seem to impose any individual or collective obligation to the parties.

In contrast, the Article 7.9 uses the modal verb 'shall' in connexion to the subject 'Each Party', creating a legal obligation of individual nature, referring to the requirement of each party engaging in the processes of planning and implementation of the actions related to adaptation. However, this provision does not specify what constitutes the 'processes of planning' and 'implementation of actions', leaving enough room to question what exactly is the obligation imposed by this article.

As a conclusion, on what touches adaptation, the PA is ambitious but vague. As such, it needs further refinement in order to fill the gaps in the process of how to achieve the adaptation goals. In any case, most of the mentioned provisions seem to be characterized by a non-mandatory status. The provision in the Article 7.9 creates a legal obligation, however ambiguous to a certain degree. Under this spectrum, it is possible to affirm the PA has created a non-legally binding environment, only requiring the parties to engage in the processes of planning and implementation of actions referent to adaptation.

2.6. Loss and Damage (L&D)

L&D relates to the adverse effects of climate change that may not be avoided by mitigation or adaptation measures.⁷⁶ These adverse effects refer to extreme weather events and slow onset events, what includes sea level rise, increasing temperatures, ocean acidification, glacial retreat and related impacts, salinization, land and forest degradation,

⁷⁵ See Dagnet et al., n. 42 above. Page 13.

⁷⁴ Ibid.

⁷⁶ CLIMATE FOCUS, 'Loss and Damage in the Paris Agreement', Climate Focus Client Brief on the Paris Agreement IV (15 February 2016); UNFCCC (2013), 'Non-economic losses in the context of the work programme on loss and damage: technical paper', FCCC/TP/2013/2, pages 8-9.

loss of biodiversity and desertification.⁷⁷ The PA recognizes the importance of the evolving issue surrounding L&D and, in this sense, has created a dedicated framework for the topic - which was previously treated as a subcategory of adaptation.⁷⁸ Also, it has made permanent the Warsaw International Mechanism for Loss and Damage. L&D is introduced by the Article 8.1 of the PA in the following manner:

"Parties recognize the importance of averting, minimizing and addressing loss and damage associated with the adverse effects of climate change, including extreme weather events and slow onset events, and the role of sustainable development in reducing the risk of loss and damage"

In the introductory provision on L&D, the use of the non-normative verb 'recognize' in association to the subject 'Parties' seems to indicate a collective statement of an understanding⁷⁹ - regarding both the importance of the actions towards the adverse effects of climate change and the role of sustainable development in reducing L&D. In a second moment, this provision associates 'extreme weather events' and 'slow onset events' to the adverse effects of climate change. In doing so, the PA acknowledges the significance of climate change effects that incur severe or permanent damages beyond adaptive capacity. This provision, however, does not create legal obligations.

In fact, the legal character of L&D as a whole, in the context of the PA, does not seem to impose any legal obligation. That because, the few relevant provisions are either described with a non-legally binding language, or are not directed to the parties. Besides the first paragraph in the Article 8, the only provision that may be perceived as an L&D commitment is the one found in the subsequent paragraph 3, announced as the following:

"Parties should enhance understanding, action and support, including through the Warsaw International Mechanism, as appropriate, on a cooperative and facilitative basis with respect to loss and damage associated with the adverse effects of climate change"

The choice of language in the mentioned provision reveals a mere recommendation related to the enhancement of the understanding, action, and support regarding L&D. Also,

⁷⁷ UNFCCC (2011), Decision 1/CP.16: in the Report of the Conference of the Parties on its sixteenth session, held in Cancun from 29 November to 10 December 2010. FCCC/CP/2010/7/Add.1, paragraph 25, page 6.

⁷⁸ Dagnet et al., n. 42 above, page 14.

⁷⁹ See Bodansky, n. 6 above.

the choice of the word 'support', instead of 'finance', indicates the PA was careful in not creating an additional financial commitment to the developed countries - what is further confirmed by the finance provisions in the Article 9, which restricts the finance to mitigation and adaptation, excluding any mentions to L&D. This is likely to be the case due to the highly controversial aspect surrounding L&D, as there is a certain concern, mainly from developed countries, that it could be used for attributing liability for climate damages. This concern is reflected in the facilitative and non-punitive approach adopted by the L&D provisions.⁸⁰

Although L&D is of great importance for the countries particularly vulnerable to the effects of climate change, on what touches addressing climate consequences not passive of adaptive measures, the provisions on L&D do not seem to allow a high degree of functionality. As such, these provisions do not to impose any form of legal obligation to the parties and, therefore, may be perceived as not mandatory.

2.7. Finance

The financial goal is described by the PA in the Article 2.1, 'c', as the following:

"Making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development"

In adopting this objective, the PA signalize that all finance - public and private - need to be divested towards climate friendly development.⁸¹ However, it does not impose a legal obligation. The financial objective introduced by the Article 2.1, 'c', is further developed by the provisions on financial support in the Article 9. The first paragraph of this Article establishes that:

"Developed country Parties shall provide financial resources to assist developing country Parties with respect to both mitigation and adaptation in continuation of their existing obligations under the Convention."

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⁸⁰ See CLIMATE FOCUS, n. 76 above, page 3.

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The referred provision uses the verb 'shall' in association with the subject 'Developed country Parties', therefore establishing a collective legal obligation. Another important remark, the provision restricts such financial support to mitigation and adaptation, excluding any mentions to L&D (as seen in the previous topic). This position is reaffirmed by the Article 9.4, in the PA, and the paragraph 52, in the decision 1/CP.21,82 indicating that financial resources provided to developing countries should to be directed towards adaptation and mitigation.

Further, in the paragraph 2, the PA encourages 'Other Parties' to provide support. Presumably, 'Other Parties' refer to the country parties which do not have an obligation in doing so. However, it can additionally suggest the possibility of third parties in voluntarily contributing to the climate finance in the context of the PA. This is stimulated by the COP decision 1/CP.21, which acknowledges the participation of non-party stakeholders in the resolution of the climate matter.⁸³ In fact, the financial mobilization plans delivered by the developed countries include a combination of public and private financing.⁸⁴

In addition, the paragraph 3 of the PA recommends 'developed country parties to continue to take the lead in mobilizing climate finance', and that '[s]uch mobilization ... should represent a progression beyond previous efforts.' This provision does not impose a mandatory commitment. However, the concept is refined by the paragraph 53 of the COP decision 1/CP.21, which uses a legally binding language to determine that "prior to 2025 the Conference of the Parties ... shall set a new collective quantified goal from a floor of USD 100 billion per year". In using the verb 'shall', the COP decision has created a minimum mandatory goal for mobilization of funds. As a consequence, it is possible to question if this minimum amount configures a mandatory collective commitment to the developed country parties and, if so, to what extent. It is reasonable to make this question once developed country parties have a collective mandatory financial commitment, that should not be aimed in less than USD 100 Billion per year. In any way, these provisions seem to signalize an obligation of conduct rather than result.

⁸² UNFCCC (2016), Decision 1/CP.21: 'Report of the Conference of the Parties on its twenty-first session, held in Paris from 30 November to 13 December 2015'.FCCC/CP/2015/10/Add.1. Page 8.

⁸³ Ibid., Page 19. As in the paragraph 133.

^{84 &#}x27;Roadmap to US\$100 Billion'. Report released in 17 October 2016.

Finally, the PA also creates certain procedural obligations regarding finance, such as the obligations to provide information (Article 13.9) and biennially communicate (Articles 9.5 and 9.7) on financial support provided or mobilized.⁸⁵

As a conclusion, the provisions on finance have created a collective obligation to the developed countries in providing financial support to developing countries, in assistance to mitigation and adaptation measures. This obligation do not seem to impose the achievement of the goal, established by the COP decision 1/CP.21, of USD 100 billion per year. Nevertheless, the provisions also create a procedural obligation to developed countries in providing information, and biennially report, on the financial support provided and mobilized.

2.8. Technology development and transfer (TD&T)

TD&T was first introduced by the UNFCCC,⁸⁶ and has since been a recurring issue under political negotiations.⁸⁷ In the PA, the provisions on TD&T are found in the Article 10 which, in its first paragraph, seems to indicate a collective statement of an understanding, regarding the materialization of TD&T, and its importance in both improving climate resilience and reducing GHG emissions.

The first paragraph of the Article 10 uses a flexible language not imposing a binding commitment. In contrast, later the PA uses the modal verb 'shall', in paragraph 2, determining that "[p]arties... shall strengthen cooperative action on technology development and transfer." This paragraph reaffirms the importance of TD&T by imposing what could arguably be considered an obligation of collective nature. However, the provision does not determine how the parties should do it so. As a consequence, it seems more to reflect a qualitative idea than a material objective that could be imposed to the parties.

In paragraph 3, the PA makes the choice to keep in use the Technology Mechanism of the Convention and, in paragraph 4, it establishes a technology framework intended to provide guidance to the mentioned mechanism (in order to support the implementation of

⁸⁵ The form in which these communications must take place still needs to be decided by the parties. See Decision 1/CP.21, above, paragraphs 55, 56 and 91; and, Decision 8/CP.22, Annex, paragraphs 9 to 14.

⁸⁶ UNFCCC, n. 44 above, Article 4, paragraphs 1 and 5.

⁸⁷ See Decision 1/CP.16, n. 77 above. Paragraph 117.

the PA). Further, the paragraph 5 creates a commitment (apparently of institutional nature) in providing support and financial means to research and development, and to the facilitation of access of developing country parties to climate technology. Finally, paragraph 6 determines the provision of financial support for developing country parties for the general implementation of TD&T in the context of the PA.

As a conclusion, the provisions on TD&T reaffirm the collaborative work, among nations, in developing and sharing climate technologies⁸⁸ that can potentially contribute to the abbreviation of the climate matter. However, these provisions need further refinement in order to achieve a higher degree of functionality. In this sense, TD&T seems more to have created a commitment of institutional nature, rather than an obligation directed either collectively or individually to the parties.

2.9. Capacity-building

Capacity-building under the PA is introduced by the Article 11.1 of the PA, which suggests that:

"Capacity-building ... should enhance the capacity and ability of developing country Parties ... to take effective climate change action ... and should facilitate technology development, dissemination and deployment, access to climate finance, relevant aspects of education, training and public awareness, and the transparent, timely and accurate communication of information."

Later, in paragraph 3, the PA announces that:

"All Parties should cooperate to enhance the capacity of developing country Parties to implement this Agreement. Developed country Parties should enhance support for capacity-building actions in developing country Parties."

The choice of the modal verb 'should' in these provisions merely indicate suggestions (or encouragement) rather than mandatory commitments. In the other hand, the

⁸⁸ These technologies are generally associated to renewable energy, drought-resistant crops, warning systems, sea walls, and energy-efficient practices. As in the UNFCCC webpage's topic 'What is technology development and transfer?' Available at: https://unfccc.int/topics/climate-technology/the-big-picture/what-is-technology-development -and-transfer

paragraph 4 makes use of the verbs 'shall' and 'should'. 89 The first is used in association to "[a]ll Parties enhancing the capacity of developing country Parties", indicating an obligation in regularly communicating on such actions; The second, recommending developing country parties to regularly communicate on the implementation progress of the capacity-building measures.

The use of the verb 'shall' in paragraph 4 seems to have created a mandatory communication requirement. However, this requirement is given due to the fact of an obligation being created out of the free choice of a party, in voluntarily engaging with the provision. In other words, the main provision seems to be of voluntary nature, however with a clause which creates a legal obligation to those who decide to participate. As such, it does not seem reasonable that a non-binding provision could, to a certain degree, turn a non-mandatory and solidary action into a binding commitment. Such behavior of the PA could potentially jeopardize the ambition of the parties in engaging with capacity-building of the developing countries. For this reason, it is possible to question how much legal bindingness is, de facto, added to the norm by the use of the modal verb 'shall'; and, if so, how would this norm impact the ambition of the parties in freely engaging with the provision.

As for the paragraph 5, it uses the modal verb 'shall' in two instances.⁹⁰ Firstly, indicating that capacity-building shall be enhanced through institutional arrangements, including the ones under the Convention; and, secondly, imposing the parties to consider formalization of the initial institutional arrangements for capacity-building, by adopting a decision in the first session of the COP serving as a meeting of the parties in the PA.⁹¹

The outcome of the provisions on capacity-building, under the article 11 of PA, can be described by the following four factors⁹²:

⁸⁹ Paris Agreement Article 11.4: "All Parties ... shall regularly communicate on these actions or measures on capacity- building. Developing country Parties should regularly communicate progress made ,"

⁹⁰ See the Paris Agreement Article 11.5: "Capacity-building activities shall be enhanced ... The Conference of the Parties ... shall, at its first session, consider and adopt a decision on the initial institutional arrangements for capacity-building."

⁹¹ The first COP meeting has in fact established the mentioned institutional arrangements. See more at: https://unfccc.int/process/bodies/constituted-bodies/paris- committee-on-capacity-building

⁹² See Dagnet, et al., n. 42 above. Page 22.

- First, it suggests all parties take collaborative action in enhancing the capacity-building of developing country parties;
- Second, it requires all parties to communicate on their actions taken in order to enhance the capacity-building of developing country parties;
- Third, it triggered the creation of the PA Committee on Capacity-building PCCB; by provoking a the COP decision which has established the PCCB; and,
- Fourth, it refines the institutional arrangements for capacity-building under the UNFCCC.

As such, the provisions in the Article 11 seem to merely serve as an encouragement of a voluntary engagement of the parties, rather than imposing a mandatory commitment. However, it is perhaps relevant to mention the Article 12, which announces that:

"Parties shall cooperate in taking measures, as appropriate, to enhance climate change education, training, public awareness, public participation and public access to information [...]"

In the context of the PA, the provision on the Article 12 creates a mandatory collective commitment to the parties, in taking cooperative measures. However, its content is partially mentioned among the provisions in capacity-building. The Article 11.1 also mentions climate change education, training and public awareness, and information. In this sense, the Article 12 seems to have reaffirmed the mentioned topics under a mandatory character, what could indicate a certain level of interaction among these two provisions.

As a conclusion, the provisions announced by the Article 11 do not impose mandatory commitments. However, some of these matters are also mentioned by the Article 12 - which has added a mandatory nature, at least, to what touches the cooperation of the parties in enhancing climate change education, training, awareness, and information. As such, the second provision has further refined the legal bindingness of the overlapping topics, what could potentially enhance the comprehension of the legal character of such elements under the provisions on capacity-building.

3. The Effectiveness of the Paris Agreement in Tackling the Climate Problem

3.1. The Determining Factors of the Paris Agreement Effectiveness

The PA created commitments with different levels of legal bindingness, irrespective of the importance a given provision may embody in reaching the central climate objectives. As a result, some commitments relevant to the materialization of the PA objectives, do not have a legally binding character. This situation has sparked a concern among scholars regarding the effectiveness of the PA in tackling the climate problem. As such, the PA effectiveness must be evaluated under the lights of at least three factors: participation, ambition, and compliance. In this context, the PA counts with high levels of participation and ambition; however, it is uncertain how much compliance can be expected by the parties.

The PA has chosen a flexible and non-punitive environment, presupposing this would induce higher levels of participation and ambition. In principle, such approach could fare better than a scenario with full compliance of shallow commitments, 95 what could also potentially induce higher effectiveness. However, there is no point in having broad participation and ambition, if the parties do not do what they have promised. 96 In this sense, parties which fulfill all of the procedural obligations may still jeopardize the effectiveness of the PA in two ways: (1) by not presenting an ambitious NDC, that could

⁹³ See Bang, et al, *The Paris Agreement: Short-Term and Long-Term Effectiveness*, in: POLITICS AND GOVERNANCE (ISSN: 2183-2463) 2016, Volume 4, Issue 3, Pages 209-218; C. Voigt, n. 12 above.

⁹⁴ See Barrett and, also, Bodansky, both in n. 39 above.

⁹⁵ See Bang, et al., above. Page 212.

⁹⁶ See Voigt, above. Page 161.

justify their equivalent fair share,⁹⁷ or (2) by not taking the intended efforts to fulfill their pledges.⁹⁸ In fact, the current challenge faced by the PA seems to result from the culmination of both factors.⁹⁹

Although scholars may not agree on what in fact would consist compliance within the PA (what will be analyzed in section 3.3 of this paper), the performance of the parties is related to the PA effectiveness in tackling the climate problem. Under this spectrum, the main objectives of the PA are of collective nature; however, a successful outcome relies on the individual capacity of each of the parties in contributing to the climate cause, adding to the overall result. As a consequence, the determining factors of the PA effectiveness (see sections 2.2 and 2.4.3), are also related to its ability in (1) increasing the parties' ambition over time, and (2) ensuring the materialization of the national pledges.

3.2. The Paris Agreement approach in promoting ambition and compliance

The PA has established at least four different approaches meant to enhance the parties' individual contribution to the achievement of the global objectives. As such, the PA has created:

- in the Article 13, a transparency framework designed to enhance the transparency arrangements in a facilitative manner. Although this framework is non-punitive, it does impose certain legal obligations. In this context, each party has the duty to regularly provide both (1) a national inventory report of GHG emissions/removals by sinks, and (2) the necessary information to track the progress of NDCs. The transparency framework also requires from the developed country parties to provide information on financial, technology transfer and capacity-building support provided to developing country parties;

⁹⁷ The fair share concept as under the lights of equity and the CBDRRC. Factual data comparing the national pledges and the equivalent fair share can be found at CAT webpage, n. 10 above.

⁹⁸ What could lead to the 'free-riding' effect, as discussed by Bang, et al., n. 91 above.

⁹⁹ CAT concluded that national pledges would lead to a temperature increase of 2.6 to 3.2° Celsius, if fulfilled. However, the overall outcome of the current climate policies is likely to result in the temperature increase of 3.1 to 3.7° Celsius. See CAT, n. 10 above.

- in the Article 14, the global stocktake meant to assess the collective progress towards the global and long-term objectives. The global stocktake must be done in a comprehensive and facilitative manner, under the lights of equity and the best scientific knowledge available;
- in the Article 15, an expert-based compliance and implementation mechanism, supposed to facilitate implementation and to promote compliance; and,
- in the Article 6.4, the supervision body related to the cooperative approach mechanism, not further specified by the PA itself, but possibly meant to ensure proper accountability in an eventual GHG trading scheme among parties.

The provisions in the Articles 13, 14, and 6.4 relates to the overall transparency of action adopted by the PA. In this case, the PA has established a series of procedural duties, with the objective to assess whether the parties are on track with the global climate targets. These mechanisms are supposed to promote accountability through the evaluation of the individual progress of the parties in relation to their NDCs, consequently allowing feedback regarding the eventual need to adjust, and strengthen their national pledges. This system is meant to provide non-punitive incentives in order to increase the parties ambition over time - what could potentially lead to the improvement of the action needed to elevate the individual contribution of the parties, to a level equivalent to their fair share. Important to notice, however, these provisions are conceived under the presumption that, once emitted a feedback, parties would voluntarily improve their individual posture in relation to the global targets. Therefore, these transparency actions are not meant to compel a party to refrain from a behavior which is not in accordance with the general objectives and principles of the PA.

Further, the provisions in the Article 15 have established a mechanism responsible for implementation and compliance, within the context of the PA. On what touches such matters, the PA has clarified that this mechanism consists of an expert-based committee, which must function in a non-punitive manner.¹⁰¹ Such provisions were refined by the decision 1/CP.21, which, in its paragraph 102, have determined that the committee "shall

¹⁰⁰ Streck, et al., 'The Paris Agreement: A New Beginning'. JOURNAL FOR EUROPEAN ENVIRONMENTAL & PLANNING LAW 13 (2016) 3-29.

¹⁰¹ Paris Agreement, n. 1 above. Article 15.2.

consist of 12 members with recognized competence in relevant scientific, technical, socioeconomic or legal fields, to be elected by the Conference of the Parties serving as the meeting of the Parties to the PA on the basis of equitable geographical representation, with two members each from the five regional groups of the United Nations and one member each from the small island developing States and the least developed countries, while taking into account the goal of gender balance." ¹⁰² In the other hand, neither the PA nor the mentioned decision has specified how exactly such mechanism should function, and to what extent, and if, it could compel a party to improve its climate policy.

The transparency actions and the compliance and implementation mechanism, consist of two different pathways meant to increase the effectiveness of the PA in tackling the climate problem. However, it is unsure how these provisions will interact with each other. Anyhow, both are of relevant importance in incentivizing the adequate individual participation, in relation to the global objectives. Consequently, both institutes have the potential to affect the levels of compliance within the context of the PA.

With that being said, it is still essential to further analyze the compliance and implementation mechanism, what is done in the next section, in order to investigate whether the PA may impose to the parties the fulfillment of their commitments.

3.3. The compliance and implementation mechanism in the Paris Agreement

The PA, in its Article 15, have established a compliance and implementation mechanism. However, the mentioned provision is shallow, and only provide the basis for a framework, not specifying how it is supposed to be structured, how it will work, or, even, what types of circumstances it will evaluate. In this sense, the parties still have to decide on how this mechanism will be set in the context of the PA.

As such, the Article 15 has left open the question regarding whether there will be different branches under the committee, to separately deal with the matters related to compliance, and the issues of implementation (somewhat like in the structure adopted by the KP, consistent of two different branches, namely the facilitative branch and the

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¹⁰² Decision 1/CP.21, n. 82 above.

enforcement branch); or if both functions would be applied by the same institute. Anyhow, the language adopted by the Article 15 does not prevent either of the possibilities.¹⁰³

Under this spectrum, scholar Christina Voigt, in her paper 'The Compliance and Implementation Mechanism of the Paris Agreement', understands the PA as containing provisions which are legally binding, and provisions which are non-legally binding. Therefore, the mechanism established by the Article 15 should be able to capture both modalities. Consequently, the scholar suggests the possibility of two branches within the mechanism: (1) a Compliance Branch, which would handle issues with the legally binding obligations, such as the obligations related to procedural matters and conduct of the parties; and, (2) an Implementation Branch, that could deal with the remaining elements that do not establish legally binding obligations for any party. In any way, the scholar acknowledges the inexistence of clarifications regarding how the PA will handle non-performance or bad performance not resolved; and, therefore, suggests that the compliance and implementation mechanism should provide another element of strength, in such situations.¹⁰⁴

Also, the concept of compliance within the context of the PA seems to have assumed different interpretations in the academia. For Christina Voigt, compliance is seen as in its legal sense, and only being possible with provisions that have created legally-binding obligations to the parties. ¹⁰⁵ In contrast, Bang, Hovi, and Skodvin seem to have adopted a different concept, using the terminology of "compliance" and "noncompliance" when referring to a country being successful or not in fulfilling its NDC. ¹⁰⁶ These different points of view may result from the PA having created obligations to 'implement' rather than to 'achieve' ¹⁰⁷; hence, an obligation of conduct. ¹⁰⁸ In any case, it is uncertain if parties that turn out to fall short on their commitments may be perceived as not complying with the norms.

¹⁰³ Yamide Dagnet and Eliza Northrop, 'Facilitating Implementation and Promoting Compliance (Article 15)'. In Klein et al., THE PARIS AGREEMENT ON CLIMATE CHANGE (Oxford University Press, 2017). Pages 338-351

¹⁰⁴ See Voigt, n. 12 above. Page 165.

¹⁰⁵ Ibid.,. Page 166.

¹⁰⁶ See Bang, et al., n. 93 above. Page 211.

¹⁰⁷ See Bodansky, n. 6 above.

¹⁰⁸ See Christina Voigt, 'The Paris Agreement: What is the Standard of Conduct for the Parties'. 26 QUESTIONS OF INTERNATIONAL LAW (2016), 17; Also, D. Bodansky, n. 6 above.

In contrast to the KP, which adopted punitive measures for noncompliant parties, ¹⁰⁹ the PA has precluded the creation of any punitive mechanism. However, the sole fact of a party fulfilling the procedural obligations does not necessarily indicate that party as in full compliance. That because the lack of punitive measures differs from an allowance to the parties in neglecting their fair share - needed to resolving the climate matter without creating a heavier burden than what is only just to other parties. ¹¹⁰ In this context, the PA has not specified what exactly consists noncompliance within its terms. In the other hand, the PA has demonstrated that it will not punish parties falling short of compliance, or performance.

When establishing the PA, the parties have reaffirmed the importance of combating climate change. In such context, the parties are not required to achieve their pledges; however, the necessity to take action against climate change is not in discussion. As such, the parties have committed to limit the average global temperature increase to a safe maximum target, and to other mitigation, adaptation, and financial commitments. Therefore, although compliance in the legal sense is only possible with provisions which create legally binding obligations to the parties, 111 it would not seem reasonable to consider a party to be in full compliance with the PA, if that party only fulfill the procedural aspects, without regard to avoiding 'free riding', or to refrain from actions which can potentially undermine the collective objectives and efforts. 112

Furthermore, the non-punitive approach should not be confused with the matters related to the legal character of the PA, and whether it is enforceable. Under this spectrum, the compliance and implementation mechanism should be able to at least condemn behaviors not in line with the general objectives and principles of the PA. In doing so, the compliance and implementation mechanism would not be exercising any form of punitive measures; it would simply note a given behavior as not in conformity with the PA.

¹⁰⁹ See punitive measures in: Decision 27/CMP.1, 'Procedures and Mechanisms Relating to Compliance under the Kyoto Protocol', Annex, FCCC/KP/CMP/2005/8/Add.3 (30 March 2006), 92 [CMP 1]. Section XV.

Paris Agreement, Article 2.2: "equity and the principle of common but differentiated responsibilities and respective capabilities."

¹¹¹ See Voigt, n. 12 above. Page 166.

¹¹² See Bang, et al., n. 93 above.

¹¹³ See Bodansky, n. 6 above.

In any way, this mechanism would have to be non-punitive. Thus, even a behavior that could be legally considered as noncompliance¹¹⁴ would not be passive of sanctions. Therefore, breaching a legally or a non-legally binding commitment, would not represent a vast difference in terms of direct consequences to the parties.

As such, the mere fulfillment of the procedural obligations created by the PA should not be seen as an allowance to undermine the climate objectives. Such mentality would confront the very own reason of existence of the PA. Consequently, there is absolutely no reason, legally or morally, why the compliance and implementation mechanism would not be able to emit a decision, or an opinion, in relation to the extent in which the performance of a party is whether adequate or not, to the context of the PA.

3.4. Conclusion

The establishment of the compliance and implementation mechanism demonstrates the desire of all parties in committing to ambitious climate action, with progressive implementation of efforts over time. In this sense, the implementation and compliance mechanism could play an essential role in improving the PA effectiveness in tackling the climate problem, by clarifying what precisely consist noncompliance with the PA. However, the functionality of the mechanism is conditioned to the will of the parties in materializing its institutional arrangements. Consequently, the slow pace in setting such system seems to be holding back the PA potential and effectiveness in combating climate change. That because the current challenge faced by the PA is given due to the insufficiency of ambition and lack of fulfillment related to the NDCs, what could be improved by a functioning compliance and implementation mechanism. In any way, the PA has precluded any punitive measures and relies exclusively on a series of mechanisms designed to provide incentives to the parties over time. As a conclusion, the PA may suggest a party to improve its national climate policy; however, on its own, it will not be able to compel parties to fulfill or increase the ambition of their NDCs.

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¹¹⁴ As in the legal sense described by Voigt. See n. 108 above.

¹¹⁵ See Dagnet and Northrop, n. 103 above.

4. The Role of International Courts Towards the Fulfillment of the Paris Agreement Objectives

4.1. The opportunity of bringing a case before an international court

The PA represents an advance regarding of global emissions reduction relative to the business as usual scenario, 116 and it is expected to reduce around 3.6 GtCO2e by 2030. 117 This fact can be considered a great deal of success. However, the PA falls short in resolving climate change, 118 once it fails in leading the world to a pathway which could limit the average global temperature increase to well below 2° Celsius. In this sense, researchers have urged for accelerated short-term action, and enhanced national long-term ambition, in order to keep the PA objectives achievable. 119 This situation was aggravated by the announcement of the US intending to withdraw from the PA, what has induced uncertainty regarding the future of the international climate regime. These circumstances allow skepticism around the effectiveness of the PA in tackling the climate problem on its own.

Perhaps for these reasons, the number of high profile climate lawsuits have sparked in several regions of the world. Most of these cases were brought to domestic forums, which can play an important role in adjudicating local, and national climate issues. However, the problem with anthropogenic climate change goes beyond national

Business as usual refers to the projected climate pathway in absence of the efforts created by the PA.

¹¹⁷ Synthesis Report on the Aggregate Effect of the Intended Nationally Determined Contributions, in COP Report n. 21. Paragraph 36.

¹¹⁸ See Bodansky, n.4 above. Page 316.

¹¹⁹ UNEP (2017). The Emissions Gap Report 2017. United Nations Environment Programme (UNEP), Nairobi.

¹²⁰ Data on the current climate lawsuits can be found at: http://climatecasechart.com/

capabilities. Therefore, domestic courts are not well suited to address the global aspects of climate change. 121

In such scenario, cases seeking to address the global aspects of the climate problem may be proposed before a wide array of international courts or tribunals. However, most of these forums would be limited by the application of a determined convention, not necessarily characterized by the climate issue. 122 A few examples of such scenarios are: (1) the 2005 petition by the Inuit to the Inter-American Commission on Human Rights, claiming the U.S. failure in reducing its emissions as a violation of human rights; and, (2) the petitions by environmentalist groups to the World Heritage Convention, arguing that climate change is a threat to the World Heritage sites, such as the Great Barrier Reef. 123 In such instances, the mentioned courts have a limited role and are unable to contribute with a broader response, needed to resolve the global climate challenge. 124

Under this spectrum, the two international forums with a more general jurisdiction, that could apply not just treaties, but as well general international law, would be the International Court of Justice (ICJ) and the International Tribunal for the Law of the Sea (ITLOS).¹²⁵

4.1.1. ICJ

The ICJ is considered as the closest institution to a high court of the world. 126 It is the "principal judicial organ of the United Nations," 127 and it has the most general subject matter jurisdiction of any international tribunal. Therefore, the ICJ would have an advantage in addressing climate change in a more comprehensive manner, when compared to other international courts.

Andrew Strauss, Ch. 15: Climate Change Litigation. Opening the Door to the International Court of Justice, in: ADJUDICATING CLIMATE CHANGE (Cambridge University Press, 2009). Pages 334-356.

See Philippe Sands, *Climate Change and the Rule of Law: Adjudicating the Future in International Law*, in: JOURNAL OF ENVIRONMENTAL LAW, 28 (Oxford University Press, 2016). Pages 19-35.

¹²³ See Strauss, above; also Daniel Bodansky, 'The Role of the International Court of Justice in Addressing Climate Change: Some Preliminary Reflections' (August 2, 2017). Arizona State Law Journal, Vol. 49, 2017.

¹²⁴ See Sands, above, Page 25.

¹²⁵ Ibid.

¹²⁶ See Strauss, page 336.

¹²⁷ U.N. Charter, Article 92.

Due to the unique status and visibility of the ICJ, a favorable ruling by this court could serve as an authoritative reference, contributing to the crystallization of the public opinion in relation to climate change. Consequently, the ICJ may be able to induce a political environment prone to attend the requirements established by the current climate framework. As such, the ICJ may also be able to incentivize higher levels of ambition and compliance among the parties to the PA.

The ICJ could adjudicate climate change either as in a contentious case or as in an advisory opinion. The former would require one country bringing a claim against another. For example, this would be the case of a climate vulnerable state bringing a claim against one, or more states mostly to blame for climate change. The latter would merely require a request being made by an international organization with the necessary authority to do it so. 129

Important to notice, due to the principle of State sovereignty, the jurisdiction of the court is bind to State consent. Consequently, a contentious case imposes certain criteria regarding the jurisdiction of the ICJ, what may be established under one of the following ways: (1) by the mutual agreement of the parties involved; (2) by compulsory jurisdiction, if the responding state has accepted so; or, (3) if in the pertinent treaty, the parties have specifically conceived jurisdiction to the ICJ, on what touches dispute resolution. With such jurisdictional criteria fulfilled, it would not be a problem to a state party to the UNFCCC, to bring a claim against another. However, thus far only Cuba and the Netherlands have accepted the ICJ jurisdiction for dispute resolution under the UNFCCC, and only Solomon Islands and Tuvalu have recognized the UNFCCC compulsory arbitration. ¹³¹

Besides the aforementioned criteria, a contentious case would need to overcome other procedural aspects, such as: (1) whether applicants have the sufficiently individualizable interest in litigation to bring the suit¹³²; or, (2) whether the obligation in preventing climate change is an obligation *erga omnes*, thus with all States interested in its enforcement.

¹²⁸ Strauss. Page 337.

¹²⁹ Ibid.,. Page 348.

¹³⁰ Ibid., for detailed analysis on the ICJ Jurisdiction

¹³¹ See Declaration of State Parties to the UNFCCC at: https://unfccc.int/process/the-convention/status-of-ratification; also Sands. Page 28.

¹³² Strauss. Page 347.

These procedural restrictions may preemptively impede the proposal of a contentious climate case to the ICJ. However, an advisory opinion could allow the ICJ to adjudicate climate change, without requiring the assertion of its jurisdiction.¹³³ This makes the advisory opinion rather accessible, as an instrument for climate adjudication by the ICJ.

4.1.2. ITLOS

The ITLOS, in a similar manner to the ICJ, could also adjudicate climate change under a contentious case (here the EU could also become a party in a contentious case), or an advisory opinion. Anyhow, this tribunal would be limited to the climate cases related to damages either to the marine environment, as in a case of breach of the United Nations Convention on the Law of the Sea (UNCLOS) or to the Fish Stocks Agreement.

As such, the ITLOS could contribute to the formulation of the public opinion related to the effects of climate change, by elucidating whether the parties to the UNCLOS are responsible for preventing the negative effects of climate change on the marine environment. Concomitantly, in regards to the Fish Stocks Agreement, the tribunal could also clarify the responsibility of the parties to this agreement in preventing climate change from jeopardizing the long-term conservation, and sustainable use of the fish stocks.

4.2. Requesting an advisory opinion on climate change to the ICJ and ITLOS

As seen in the previous topics, an international contentious climate case would have to overcome certain procedural obstacles, making it less plausible than an advisory opinion. At the ICJ, an advisory opinion could be requested by the UN General Assembly and other specialized agencies.¹³⁴ Furthermore, ITLOS has the jurisdiction to provide an advisory opinion on a legal question if an international agreement related to the purposes of the Convention specifically provides for the submission to the Tribunal of a request for

¹³³ ICJ, Article 65.

¹³⁴ Sands, n. 122 above, page 28.

such an opinion.¹³⁵ In this sense, ITLOS has already exercised this power by accepting a request from an African sub-regional fisheries commission.¹³⁶

Requests for advisory opinions in such forums are likely to be accepted; However, it is important to mention, in 1996 the ICJ refused to adjudicate a request made by the World Health Organisation on the legality of the use of nuclear weapons. That said, an advisory opinion could play an important role in producing an authoritative reference, contributing to a more comprehensive understanding of states' obligation in preventing climate change.

4.2.1. Questions to be adjudicated by the ICJ

In the ICJ, for instance, an advisory opinion could clarify: (1) the nature of states' obligation in combating climate change; (2) the legitimacy and relevance of specific technical and scientific aspects, contained in the PA, related to resolving the climate problem. Under this spectrum, the ICJ could address the following points:

- Whether there is a correlation in between the national reduction of anthropogenic emissions, and the prevention of the average global temperature increase surpassing the well below 2° Celsius threshold prescribed by the PA;
- Whether the well below 2° Celsius temperature threshold is binding to the parties of the PA;
- Whether a given state has the obligation to implement a national climate policy in an adequate manner to the PA temperature threshold, respecting the principle of CBDRRC, by not imposing a heavier burden than what is only just to other states;
- Whether reaching global emissions peak as soon as possible, in order to keep the PA objectives achievable, creates a binding obligation to the parties to the PA. Consequently, when as soon as possible would actually be;

¹³⁶ Advisory Opinion on a Request for an Advisory Opinion Submitted by the Sub-Regional Fisheries Commission (2 April 2015) ITLOS 53-60.

¹³⁵ ITLOS, Rules of the Tribunal, art. 138.

¹³⁷ Legality of the Use by a State of Nuclear Weapons in Armed Conflict, Advisory Opinion, I.C.J. Reports 1996, p. 66.

- In virtue of reaching emissions peak and net-zero emissions, whether states have a binding obligation to start phasing out their national anthropogenic emissions. If so, whether this constitutes an individual obligation;
- Whether non-performance or bad performance not resolved, of a given party in the context of the PA, constitutes a violation of the UN climate framework.

4.2.2. Questions to be adjudicated by ITLOS

The ITLOS could refine the correlation between climate change and the preservation of both the marine environments and the fish stocks. In this sense, ITLOS could be questioned on the following topics:

- Whether there is a correlation in between climate change, and the consequent negative climate effects observed by the scientific community, such as sea-levels rising, acidification of the oceans, and increase in the sea surface temperature;
- Whether the effects of climate change create a damage to the marine environment;
- Whether the parties to UNCLOS are responsible for the prevention of such damages;
- Whether the negative effects of climate change represents a threat to the preservation and sustainable use of fish stocks;
- Whether the parties to the Fish Stocks Agreement are responsible for the prevention of such damages;
- In both cases namely, under UNCLOS and The Fish Stocks Agreement whether
 parties not in conformity with the UN climate framework may be held responsible
 for such damages.

4.2.3. Settling the climate science

In addition to answering the questions left open by the PA, these international forums would likely need to reaffirm the scientific data around climate change. This could

happen in one of two ways: (1) as in the *Gabcikovo-Nagymaros*¹³⁸ and the *Pulp Mills*¹³⁹ cases, in which scientific experts were brought as consul, not being questioned by the Court; or, (2) as in the *Wailing in the Antarctic case*, ¹⁴⁰ in which scientific experts were subjected to cross-examination and questioning by the Court. The second approach is likely to produce the most comprehensive understanding of climate change. That because all information needed by the Court would be available for the assessment of the case, in contrast to the cases which the experts were not cross-examined. As such, the scientific knowledge around climate change could be reaffirmed with authoritative status and endorsement by the international forums.

4.3. The possible outcomes of an advisory opinion made by the ICJ or ITLOS

4.3.1. Former advisory opinions made by the ICJ and ITLOS

Although decisions made by the international courts are not formally binding, their ability in influencing future legal trends is unequivocal.¹⁴¹ As such, the international courts may not necessarily be able to have its decisions enforced; however, forums such as the ICJ and ITLOS have, in certain ways, enough legitimacy to produce an effective result at the national level, without affecting democracy or state sovereignty.¹⁴² Not to mention, depending on the legal system adopted by a given state, a decision made by an international court may be automatically enforced at the national level.¹⁴³

¹³⁸ Gabcikovo-Nagymaros Project (Hungary/Slovakia) ICJ Rep 1997 53

¹³⁹ Pulp Mills on the River Uruguay (Argentina v. Uruguay) ICJ Rep 2010 167-68

¹⁴⁰ Wailing in the Antarctic case (Australia v. Japan, New Zealand Intervening) ICJ Rep 2014 67

¹⁴¹ See Nienke Grossman, *The Normative Legitimacy of International Courts* (December 5, 2012), in: TEMPLE LAW REVIEW, Vol. 86, 2013;

¹⁴² For legitimacy and effectiveness of international courts, see Daniel Bodansky, *The Legitimacy of International Governance: A Coming Challenge for International Environmental Law?* in: THE AMERICAN JOURNAL OF INTERNATIONAL LAW, Volume 93, n. 3 (July, 1999). Pages 596-624.

Eg., Brazil foresees immediate enforcement at national level, though lacking the necessary mechanism. For enforcement of international decisions in the Americas, see Marcela Pereira, *Cumprimento da sentença da Corte Interamericana de Direitos Humanos no âmbito interno*. At: http://www.ambito-juridico .com.br/site/index.php?n_link=revista_artigos_leitura&artigo_id=6491#_edn15 (Accessed in 6 May 2018).

In this context, advisory opinions from international courts are not meant to settle a dispute. 144 However, such instrument has the legitimacy to endorse or condemn a certain behavior or action, in reference to the general principles of international law. This was the case in the following two advisory opinions by the ICJ: (1) In regards to the *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory*, 145 in which the court has replied the question put by the UN General Assembly, by fourteen votes to one, that Israel actions in constructing the wall are contrary to international law, being this state under the obligations of ceasing further construction, dismantling the existing structure, rendering ineffective all related legislation, and, also, making reparations for all damages caused; and, (2) related to the *Unilateral Declaration of Independence in respect to Kosovo*, 146 in which the court has endorsed the declaration of independence of that state, adopted on 17 February 2008, by considering it as not in violation of the applicable international law.

In such advisory opinions, the ICJ has merely produce the delimitation of whether a certain action could be considered in accordance to the related international law. In so doing, the ICJ has exercised its power in advising on the mentioned matters; not intending to adjudicate the dispute between different nations, or to impose an obligation to any of the related states. For instance, in the *Wall in Palestine* matter, the court did not intend to address the situation in a contentious manner; however, it recommended the UN, in special the General Assembly and the Security Council, to consider taking further action in order to cease the illegalities, ¹⁴⁷ firmly signalizing its opinion.

Moreover, in 2011, the Seabed Dispute Chamber of ITLOS rendered its first advisory opinion, being that on the *Responsibility and Obligation of Sponsoring States*, ¹⁴⁸ in relation to the recovery of resources in the seabed, and ocean floor and subsoil. In such occasion, the Dispute Chamber was unanimous in clarifying not just the states' obligation in ensuring compliance by sponsored contractors, and other direct state obligations; but

¹⁴⁴ Anthony Aust, *Advisory Opinions*, in: JOURNAL OF INTERNATIONAL DISPUTE SETTLEMENT, Volume 1, Issue 1 (1 February 2010). Pages 123-151.

¹⁴⁵ Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory, Advisory Opinion, I.C.J. reports, 2004, p. 126.

¹⁴⁶ Accordance with International Law of the Unilateral Declaration of Independence in respect to Kosovo, Advisory Opinion, I.C.J. reports 2010, p. 403.

¹⁴⁷ See opinion on Wall in Palestinian Territory, n. 145 above, 163 (3) E.

¹⁴⁸ Responsibilities and Obligations of States with respect to activities in the Area, Advisory Opinion, 1 February 2011, ITLOS Reports 2011, p. 10.

also, the conditions for liability of the sponsoring states, arising from failure in fulfilling its obligations under the UNCLOS, and other related instruments.¹⁴⁹

In the mentioned cases, handled by the ICJ and ITLOS, the advisory opinions were applied in a way to give authoritative legal background for further considerations on the related matters. Consequently, these advisory opinions illustrate the potential such instrument have towards the resolution of the climate problem if properly requested to the adequate international forum.

4.3.2. The possible outcomes of an advisory opinion on climate change

The outcome of an advisory opinion made by the ICJ could not just reaffirm the objectives and principles of the PA, such as the temperature objective, global peaking and net-zero emissions (seen in the sections 2.4.1 and 2.4.2 of this paper); but also settle the obligation of each state in preventing climate change, by adequately formulating and fulfilling its NDC, in way not to impose a heavier burden than what is only just to another state (as mentioned in the section 3 of this paper). Moreover, ITLOS has an important role in clarifying the connection between the damages caused by the negative effects of climate change, and the states' obligation in protecting the marine environments and the fish stocks, as referred consecutively in UNCLOS, and in the Fish Stocks Agreement.

In any of these occasions, the mentioned forums have the potential to extend the comprehension of the scientific knowledge behind climate change, helping the world understand the consequences of non-performance, or bad performance not resolved, of the parties in the context of the PA. In doing so, these forums would fill the gaps left open by the PA compliance and implementation mechanism (as analyzed in section 3.3 above), consequently being able to help the current UN climate regime in achieving its objectives.

Another possible outcome of such an advisory opinion, would consist in the creation of external incentives to the parties to the PA, in taking the climate matter with a higher degree of ambition, and factual motivation to achieve their NDCs - what represents

¹⁴⁹ ITLOS/Press 161 (1 February 2011).

¹⁵⁰ See Sir Arthur Watts, *Israeli Wall Advisory Opinion (Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory)*, in: MAX PLANCK ENCYCLOPEDIA OF PUBLIC INTERNATIONAL LAW [MPEPIL] (at Oxford Public International Law webpage).

the current challenge faced by the PA (as described in section 3.1 above). Additionally, such opinion could also clarify the individual nature, and share, of the responsibility that each nation has in addressing global climate change, irrespectively of participation in the PA. In this sense, the international courts may turn out triggering an incentive to parties not to withdraw, or undermine, the international climate framework.

The ICJ and ITLOS are better suited to address the global aspects of climate change than any other forums. That because they have the capability, and jurisdiction, to provide an assertion of the national responsibilities in relation to the context of global actions against climate change. In this sense, the ICJ and ITLOS are placed in a unique manner to set forth the legal climate trends to the remaining forums, by promoting an international juridic standard on the climate problem.

In adjudicating climate change, even if as an advisory opinion, the ICJ and ITLOS may preemptively contribute to a more comprehensive understanding of the commitments and obligations created under the PA, by reaffirming its objectives in a more general attribution of responsibility, that each and all states have in tackling the climate problem. Consequently, without any necessity of enforcement, the ICJ and ITLOS could juridically incentivize nations to increase their efforts, in both achieving and improving their NDCs. Such incentives could positively affect the individual collaboration of states to the overall global climate action intended by the PA. In short, the ICJ and ITLOS may provide an additional incentive to the parties in the PA, to increase their ambition and performance under the current climate regime. As such, the ICJ and ITLOS are able to induce a higher level of the effectiveness (as in section 3 above) of the PA in achieving its objectives.

5. Conclusion

The PA was highly successful in attracting the broad participation of several different nations, under the common objective of averting the cataclysm of the global climate system¹⁵¹; this demonstrates the point of view of different countries converging to a similar mindset. This shared perspective has reiterated the importance of combating climate change, and part of the scientific aspects related to the matter - such as reflected by the temperature threshold in the Article 2.1, 'a', of the PA. These factors alone may justify the elevation of this treaty to a higher baseline of expectations, than when compared to the KP. However, the success of the PA, in achieving its main objectives, relies in significant part on the ambition and materialization of the NDCs. In this sense the PA has not demonstrated to be as fortunate, revealing lack of effectiveness in tackling climate change.

On what relates to ambition and materialization, it is relevant to mention that the PA was successful in steering the international climate situation aside from a highly damaging pathway (once considered as 'business as usual', see section 4.1 above), towards a less dangerous direction. ¹⁵² In the other hand, the promises made in the first instance by the parties to the PA are insufficient for the fulfillment of the objectives of this treaty. This situation is further aggravated by the factual implementation, and the result of the national climate policies, which are leading to an even less favorable climate pathway. ¹⁵³ Under this spectrum, the PA is still not able to count with the institutional arrangements meant to improve the compliance of the parties and its effectiveness in tackling climate change (see section 3 above). This seems to happen due to a relatively slow pace of the parties in

¹⁵¹ To this date, 175 Parties have ratified of 197 Parties to the Convention. Source: https://unfccc.int/process/the-paris-agreement/status-of-ratification

¹⁵² See Bodansky, n. 4 above. Page 316.

¹⁵³ For the scientific analysis of the NDCs, refer to CAT, n. 10 above.

deciding and setting the relevant mechanisms, such as the compliance and implementation mechanism (see section 3.3 above), what appear to be holding back the PA potential in promoting the necessary incentives to both increase parties' ambition over time and induce the achievement of NDCs (as seen in section 3.4). In addition, the flexible approach - the one which has created obligations of 'conduct' rather than 'result'¹⁵⁴ - do not help to characterize what consists noncompliance with the PA terms (discussed in section 3.3 above). Such situation, alongside the non-punitive character and the lack of functionality in the compliance and implementation mechanism, may potentially allow the existence of the 'free riding' effect or the neglect of the climate targets by the parties. In this aspect, the PA does little, if nothing, to incentivize the parties to do otherwise. ¹⁵⁵

Despite the PA shortcoming of effectiveness, it would be rather soon to deem this treaty as a failure. That because the parties still have not had the opportunity to obtain a feedback of their overall and individual performances, in relation to the global objectives. Therefore, in the appropriated time, the PA will be given a chance to prove the level of its effectiveness in achieving the climate objectives, by demonstrating whether it can be successful in (1) increasing the parties ambitions over time; and, (2) ensuring the materialization of NDCs (see section 3.1 above).

As for whether the parties to the PA may be compelled to fulfill their commitments, the short answer is likely to be 'no', once considered that the PA has not created any individual obligation to the parties in achieving their commitments (see discussion on obligation of conduct in sections, 2.4.3, 2.7, and 3.3 above). However, the PA should not be seen as the only piece in the fight against climate change. Other stakeholders and institutions have important roles in addressing the matter.¹⁵⁷

In this paper, it was only seen the possible contribution of two institutions, namely the ICJ and the ITLOS, which could help to expand the comprehension of the legal implications of climate change (section 4.3 above) and create a positive impact in the PA effectiveness in tackling the problem. However, there has been a substantial increase in climate litigation before national courts, though with a certain discrepancy in the decisions. In this sense, the international forums could help to standardize climate adjudication, at the

¹⁵⁴ See Voigt, n. 12 above.

¹⁵⁵ See Bang et al., n. 93 above.

¹⁵⁶ See Bodansky, n. 123 above. Page 712.

¹⁵⁷ See Decision 1/CP.21 and 'Roadmap to US\$100 Billion', numbers 82, 83 and 84 above.

same time national cases could aid the formulation of an international decision. In any way, other stakeholders and institutions are able to persuade nations to increase their overall contribution to the resolution of the climate matter, without interfering with democracy or state sovereignty.

The climate problem is a highly complex one. It has been called both 'super wicked' and 'the mother of all policy challenges.' It imposes societies and individuals with the burden of choosing whether to take costly measures now to address the aggravation of the matter in the future, or to remain inert due to climate-incompatible political ideology. Anyhow, the best scientific knowledge available today urges for immediate action against climate change. Consequently, any possible approach that may contribute to a solution should be entertained, including adjudication by the international forums.

As a conclusion, the PA has demonstrated lack of effectiveness towards the achievement of its objectives. However, facing the potentially harsh consequences that global warming represents to humankind, one can only hope other institutions and stakeholders will not remain apathetic to such insufficiency scenario, remarked by the lack of ambition and materialization of the NDCs, and the ineffectiveness of the PA in tackling the climate problem on its own.

liberate the Future (2009). Georgetown Law Faculty Publications and Other Works. 159.

¹⁵⁹ Bodansky, n. 123 above.

¹⁶⁰ For climate-incompatible political ideology refer to: Jean-Daniel Collomb, *The Ideology of Climate Change Denial in the United States* (2014). European Journal of American Studies 9-1, document 5.

¹⁶¹ Refer to *UN sees 'worrying' gap between Paris climate pledges and emissions cuts needed*, n. 11 above; Also, IPCC, 2013: Summary for Policymakers. In: Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change; and, CAT n. 10 above.

¹⁶² Bodansky, n.123 above.

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