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From Kyoto to Quito: Reassessing oil moratorium as an effective climate change policy from a property-based approach¹

Patrick Wieland²

Introduction

Leaving oil reserves unexploited in exchange for an economic compensation has been recently put forward as an innovative climate change policy. Some scholars have praised this idea for establishing the foundations of the “new economics of planet Earth” and for having the potential to become “a new paradigm for global conservation programs”. This alternative was first proposed by Ecuador, where a third of the state’s resources depend on the exploitation of oil. In 2007, President Rafael Correa announced Ecuador’s decision not to exploit the ITT oil fields, one of the largest in the country and which overlaps the Yasuni National Park in the Amazon, in exchange for a “fair” compensation from the international community for at least half of the revenue that would have otherwise come from extracting the oil (namely \$3.6 billion). Through the Yasuni-ITT Initiative, Ecuador purports to “lay the foundations for a more human and fair civilization”.³

This paper argues, however, that forgoing a country’s oil reserves will be an ineffective climate change policy in the long-run. In fact, rather than announcing non-enforceable and short-term political promises, states like Ecuador should move toward a system of “environmental property rights” that favor carbon sequestration.

¹ The author wishes to thank Professor Carol M. Rose for her valuable comments and suggestions, and Jocelyn Stacey for her feedback.

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³ Speech of the President of the Republic of Ecuador, Mr Rafael Correa, on the High Level Dialogue on Climate Change of the 62 Period of Sessions of the General Assembly of the United Nations, New York, September 24th, 2007.

In Part I, I provide an overall background on the creation and boundaries of the Yasuni National Park, the ITT oil reserves, and the territories of indigenous peoples. I then describe the main features of the Yasuni-ITT Initiative based on the agreements entered into between Ecuador and the United Nations last year, which set forth the creation of a trust fund to channel international contributions to the program.

In Part II, I discuss the reasons supporting Ecuador's claim as it was presented by Correa to the international community. In this Section, I also describe different climate-justice theories that have been offered to justify compensation from northern hemisphere to southern hemisphere countries. I focus particularly on the inconsistencies of the inter-state justice approach that justifies compensation based on developed nations' historical emissions and ability to pay, which are is underlying justification of the Kyoto Protocol and other international environmental treaties to date. I conclude that Correa's proposal is justifiable from a cosmopolitan justice standpoint.

In Part III, I criticize the Yasuni-ITT Initiative by stressing that a property-based approach would have reduced the likelihood that a post-Correa government would decide to disregard the oil moratorium in the future. My critique raises the following arguments: the initiative's excessive focus on the oil and not on the trees; the fact that it does not create "environmental property rights"; the lack of institutional framework supporting the program; the lack of ripeness of the property rights regime in Ecuador; and the initiative's potential to impinge on indigenous peoples' free exercise of their ancestral territories.

Finally, in Part IV, I propose three alternatives to Correa's model, namely (i) selling the oil reserves, (ii) paying for the ecosystem services, and (iii) establishing a conservation easement

over the national park. I conclude that the last of these alternatives is the most feasible option and should be taken into account in future climate change policymaking.

I. The Yasuni-ITT Initiative⁴

1. General background

The Yasuni National Park is located in the Amazon Region and is the largest protected area in Ecuador with 982,000 hectares. It was created in 1979 and is considered one of the most diverse areas in the world.⁵ In 1989, the Yasuni National Park was declared a World Biosphere Reserve by UNESCO for its unique biodiversity.⁶ Currently, the park is managed by the Ministry of Environment of Ecuador, an entity which faces limited budget and personnel.⁷

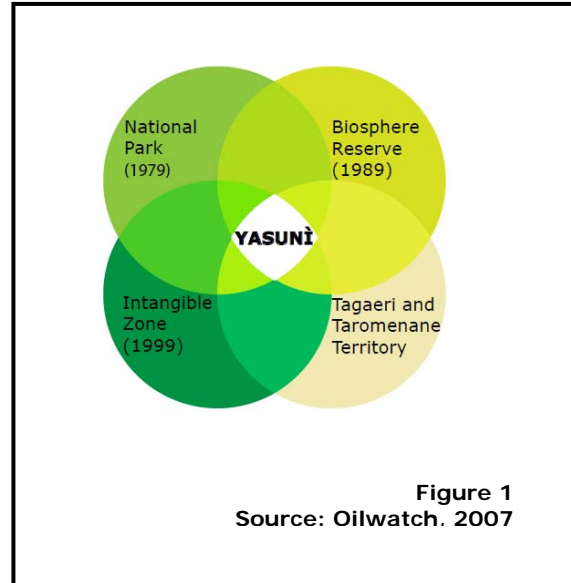
⁴ See generally Tracy C. Davis, *Breaking Ground Without Lifting a Shovel: Ecuador's Plan to Leave its Oil in the Ground*, 30 Hous. J. Int'l L. 243 (2008) (describing the initiative); Alexandra Valencia, *Ecuador, for pay, will not drill in Amazon* (Aug. 3, 2010), <http://www.reuters.com/article/idUSTRE6724S820100803> (last visited September 21, 2010); Daniel Gordon, *Ecuador seeks oil 'compensation'* (Sep. 21, 2007), <http://news.bbc.co.uk/2/hi/americas/7000345.stm> (last visited September 21, 2010); The Yasuni-ITT Initiative Web Page, <http://Yasuni-itt.gob.ec/>; and SOS YASUNI, <http://www.sosYasuni.org/en/>; Alberto Acosta et al., *Dejar el crudo en tierra o la busqueda del paraiso perdido* (May 2009), http://www.amazoniaporlavida.org/es/files/keep_oil_underground.pdf (last visited September 21, 2010); Alberto Acosta, *Yasuni, Building the Road to the Impossible: Leaving the Crude Oil Underground*, Presentation (University of Maryland, May 23, 2007), http://www.amazoniaporlavida.org/es/files/descargas/presentacion_itt_acosta_eng.ppt (last visited September 21, 2010); Alberto Acosta, *La iniciativa Yasuni-ITT: En la busqueda del paraiso perdido*, Presentation (Feb. 17, 2010), <http://www.amazoniaporlavida.org/es/files/descargas/ITT-USFQ.pptx> (last visited September 21, 2010); Alexandra Valencia, *Ecuador, for pay, will not drill in Amazon* (Aug. 3, 2010), <http://www.reuters.com/article/idUSTRE6724S820100803> (last visited September 21, 2010); Daniel Gordon, *Ecuador seeks oil 'compensation'*, (Sep. 21, 2007), <http://news.bbc.co.uk/2/hi/americas/7000345.stm> (last visited September 21, 2010); <http://Yasuni-itt.gob.ec/>; <http://www.amazoniaporlavida.org/>; <http://www.sosYasuni.org/en/>; and OILWATCH, *Keep the oil underground, the only way to fight climate change* (2007), http://www.amazoniaporlavida.org/es/files/keep_oil_underground.pdf (last visited September 23, 2010).

⁵ “An average upland hectare in Yasuni contains 655 species of trees (more than the United States and Canada combined) and 100,000 species of insects. One section of the park held at least 200 species of mammals, 247 amphibians and reptile species, and 550 species of birds, making the park one of the most biodiverse places on Earth”. Kelly Hearn, *Deep in Ecuador's Rainforest, A Plan to Forego an Oil Bonanza* (September 13, 2010), http://e360.yale.edu/feature/deep_in_ecuador_s_rainforest_a_plan_to_forego_an_oil_bonanza/2315/ (last visited September 23, 2010).

⁶ See UNESCO, <http://www.unesco.org/mabdb/br/brdir/directory/biores.asp?code=ECU+02&mode=all> (last visited September 23, 2010).

⁷ See OILWATCH, *supra* note 4.

The park hosts several indigenous people like the Huaorani, Tagaeri and Taromenane tribes. Studies indicate that almost 10,000 people inhabit the area.⁸ In 1999, the government declared 780,000 hectares of the park an “intangible zone” in order to protect the Huaorani people (see Figure 1).⁹ Although the government has officially recognized the Huaorani people’s right over a portion of this area, specific provisions stipulate



that this ownership does not comprise the subsoil, which is state property. Accordingly, the Huaorani people are prohibited to impede or obstruct “mining or hydrocarbon exploration and/or exploitation activities undertaken by the national government and/or legally authorized individuals or companies”.¹⁰

Currently, several oil companies already operate in certain blocks of the national park.¹¹ The Ishpingo Tambococha Tiputini (ITT) oil field is located in the heart of the park and is currently administered by the Ecuadorian state-owned company Petroecuador (see Figure 2). It contains 846 million barrels of heavy crude reserves that represent more than 20% of the total oil reserves of the country.¹² Considering the high density of the crude, the project to exploit the

⁸ See Tracy C. Davis, *supra* note 4.

⁹ See OILWATCH, *supra* note 4.

¹⁰ OILWATCH, *Conserving crude oil in the subsoil* (April 12, 2007). http://www.sosyasuni.org/en/files/ow_itt_proposal_v8-ingles.pdf (last visited September 23, 2010).

¹¹ Tracy C. Davis, *supra* note 4.

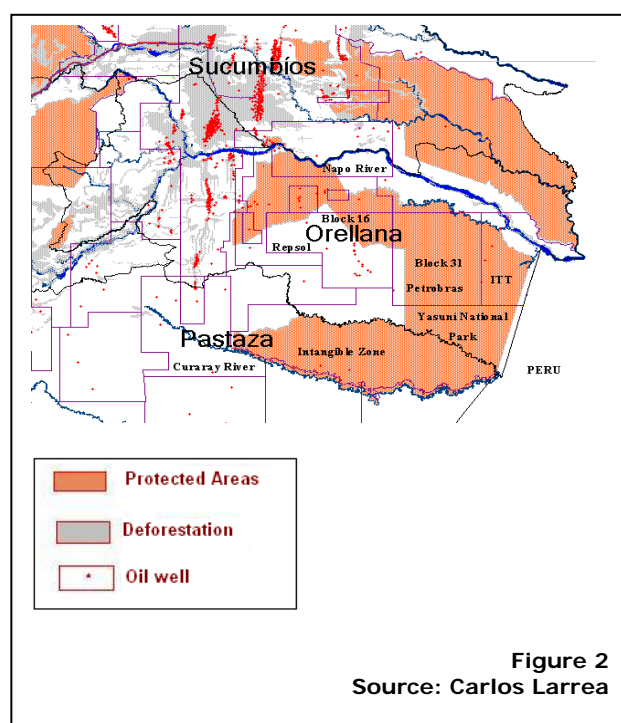
¹² See Carlos Larrea, *Conservation or oil extraction in Yasuni National Park? A transcendental challenge*, Presentation (Universidad Andina Simon de Bolivar),

reserves includes a thermoelectric plant, as well as an oil conversion plant to produce light oil and facilitate transportation.¹³ Oil exploration in ITT can only start in 5 years and will last approximately 13 years, producing 107,000 barrels a day. Experts claim that the exploitation of the ITT oil fields will generate significant negative social and environmental impacts to the park.¹⁴

2. The initiative

Ecuador has announced its decision to give up the ITT oil reserves in order “to put social and environmental values first and to change the energy matrix of the country”.¹⁵ In exchange, Ecuador has asked the international community to compensate it for at least half of the revenue that would have otherwise come from extracting the oil, namely \$3.6 billion over a 13-year period.

After arduous domestic and international



http://www.amazoniaporlavida.org/es/files/descargas/modelo_cuantitativo_Yasuni_ITT_ingles.ppt (last visited September 21, 2010).

¹³ See *id.*

¹⁴ The following negative impacts have been identified: environmental impacts (pollution, deforestation, alteration of ecological relationships in ecosystems); economic impacts (loss of productivity of self-sustenance economies, high costs of security, maintenance, mediation and compensation); social impacts (general deterioration in the zone, alcoholism, violence, prostitution, disease, destruction of the social fabric); political impacts (increase in conflicts in the region, state abandonment, crossborder violence); and cultural impacts (cultural extinction). See generally Alberto Acosta et al., *supra* note 4.

¹⁵ Yasuni-ITT Trust Fund Web Page <http://mdtf.undp.org/Yasuni>

debate,¹⁶ in August 2010 the United Nations Development Program (UNDP) and the government of Ecuador agreed on the terms for the establishment of the Yasuni Trust Fund. The signature of the “Memorandum of Agreement for management and other support services related to the in Ecuador Yasuni-ITT Fund,” dated August 3, 2010 (MOA), and the “Ecuador Yasuni-ITT Fund Terms of Reference,” dated July 28, 2010 (TOR), marked two landmarks in the history of the Yasuni-ITT Initiative.¹⁷ The signature of these documents is said to have “the potential to become a paradigm for global rainforest conservation programs”.¹⁸

The Yasuni Fund will be managed by the UNDP through a Steering Committee consisting of members of the UNDP and the government of Ecuador and will receive contributions from a broad range of donors.¹⁹ The funds raised will be used to finance strategic sustainable development programs as stated in the Ecuadorian national development plan guidelines.²⁰

As a guarantee for the contributions, the government will issue “Yasuni Guarantee Certificates” (CGYs) in US dollars equivalent to the face value of each contribution.²¹ The CGYs will also include the metric tons of carbon dioxide avoided according to the price, at that date, of the European Union Allowances (EUAs) in the Leipzig Carbon Market. They will not

¹⁶ “[T]he study of the Yasuni-ITT initiative and its global campaign is a lesson for academics and policymakers alike who are seeking innovative solutions to protect our most precious and vulnerable planetary areas”. Pamela L. Martin, *Global Governance from the Amazon: Leaving Oil Underground in Yasuni National Park, Ecuador*, Paper Presented at the 51st Convention of the International Studies Association, New Orleans, Louisiana (February 16, 2010), http://www.sosyasuni.org/en/files/global_governance_from_the_amazon_pamela_martin_isa_2010.pdf (providing an interesting discussion on the social movements, both domestic and international, behind the elaboration of the Yasuni-ITT initiative).

¹⁷ This paper is based on both official documents. See Yasuni-ITT Trust Fund Web Page, *supra* note 15.

¹⁸ See Kelly Hearn, *supra* note 5.

¹⁹ See *id.* at § 18.

²⁰ The main sources of contributions to the Yasuni Fund will be (i) contributions from governments, intergovernmental entities, non-governmental organizations, private foundations, private-sector organizations, and individuals; (ii) contributions from the public at large, through public fund-raising events following the prior approval of the Steering Committee; and, (iii) income from the sale of CGYs by the Government of Ecuador to private and public entities. See Trust Fund TOR at § 8.

²¹ Those contributions below the minimum threshold to be established by the Steering Committee will be deemed as “donations”, consequently are not entitled to CGYs.

earn interest and will not have an expiration or maturity date. The maximum total number of CGYs issued will be equivalent to the value of a total of 407 million metric tons of carbon dioxide not emitted as a result of preserving the ITT oil reserves.²²

The MOA establishes that the contributions to the Yasuni Fund must reach a minimum threshold of \$100 million by the end of 2011; otherwise, the contributions will be reimbursed to donors. The TOR provides that if in the future the world carbon market accepts the CGYs as equivalents of emission permits, the government will issue CGYs for sale to private or public entities in mitigating Green House Gases (GHG) through avoidance of oil and gas extractions from mega-biodiverse areas that are highly socially and environmentally sensitive.²³ However, in the event that the government defaults on its commitment and decides to initiate oil prospecting in the Yasuni ITT oil fields, the CGYs will entitle the holders to be reimbursed by the government.²⁴

In general, the proposal is said to help abate climate change by avoiding the release into the atmosphere of 407 million tons of carbon dioxide as a consequence of burning the ITT oil reserves. It will also avoid biodiversity destruction and deforestation, protect fresh water from the possible oil operations in the area, respect the indigenous peoples' rights, and initiate a post-oil economy by changing the energy matrix of the country.²⁵

To date the regional government of Wallonia (Belgium), Chile, China and Spain have contributed (or committed to contribute) to the Yasuni Fund.²⁶ Surprisingly, shortly after the

²² See Trust Fund TOR at § 26-30.

²³ See *id.* at § 27.

²⁴ See *id.*

²⁵ See OILWATCH, *supra* note 4.

²⁶ See e.g. Chile realiza primer aporte a proyecto Yasuni ITT (Sep. 15, 2010), <http://www.eluniverso.com/2010/09/15/1/1356/chile-realiza-primer-aporte-proyecto-yasuni-itt.html> (last visited

signature of the MOA and notwithstanding its initial posture fostering Correa's proposal,²⁷ Germany announced that it would not further support the Yasuni Fund.²⁸ In relation to the civil society, the Avina Foundation has also channeled funds to finance this project.

II. Why should the international community pay Ecuador?

Correa's proposal is asking the international community for compensation to forgo its ITT oil fields. Is there any reason that justifies such payment or is Ecuador asking to be compensated for something it is obliged to do in the first place? This Section addresses these questions.

1. Climate justice

Climate change is increasingly an inescapable phenomenon for everyone, but its effects are especially unavoidable for the poor.²⁹ Indeed, poor nations are more vulnerable to climate change than developed ones³⁰ and are expected to suffer its consequences disproportionately.³¹ The Intergovernmental Panel on Climate Change (IPCCC) says that the consequences of climate change "will fall disproportionately upon developing countries and poor persons within all

November 5, 2010); <http://mdtf.undp.org/factsheet/fund/3EYCO> (last visited January 29, 2011); <http://yasuni-itt.gob.ec/blog/2010/12/10/gobierno-regional-de-wallonia-belgica-compromete-contribucion-para-iniciativa-yasuni-itt/> (last visited January 29, 2011); <http://yasuni-itt.gob.ec/blog/2010/12/03/mas-instituciones-se-unen-a-la-iniciativa-yasuni-itt/> (last visited January 29, 2011); and <http://yasuni-itt.gob.ec/blog/2010/11/11/espana-concreta-contribucion-a-la-iniciativa-yasuni-itt/> (last visited January 29, 2011).

²⁷ See Alberto Acosta et al., *supra* note 4.

²⁸ See Tasmin Walker and Vinicio Chacón, *Alemania retira apoyo a fondo ecuatoriano para no explotar petróleo* (Sep. 27, 2010) <http://www.dw-world.de/dw/article/0,,6043578,00.html> (last visited October 1, 2010).

²⁹ See PAUL G. HARRIS, *WORLD ETHICS AND CLIMATE CHANGE: FROM INTERNATIONAL TO GLOBAL JUSTICE* 35-48 (Edinburgh: Edinburgh University Press, 2010).

³⁰ "The relationship between climate change-related suffering and poverty is decidedly direct; as climate change increases, so too does the poverty of poor countries and poor people". *Id.* at 25.

³¹ See STEVE VANDERHEIDEN, *ATMOSPHERIC JUSTICE: A POLITICAL THEORY OF CLIMATE CHANGE* 45 (New York: Oxford University Press, 2008).

countries, and thereby exacerbate inequities in health status and access to adequate food, clean water, and other resources”.³² Unlike less developed countries,

the wealthy nations. . . are in a much better position for three independent reasons. First, they have much more adaptive capacity. Second, a small percentage of their economies depend on agriculture, a sector that is highly vulnerable to climate change. Third, the wealthy nations are generally in the cooler, higher latitudes, which also decreases their vulnerability.³³

Climate change is thus a profound matter of justice,³⁴ and raises questions concerning the distribution of environmental burdens and benefits among world nations.³⁵ For Steve Vanderheiden, “Anthropogenic climate change presents a case of the world’s affluent benefiting at the expense of the world’s poor”.³⁶ Accordingly, different climate-justice theories have been put forward to justify the moral obligation of rich nations of the North to help poor nations of the South in climate change relief. I summarize some of them in the following lines.

(a) *The “polluter pays” (or corrective justice) approach*

This climate-justice account is based on causality and responsibility. It highlights that those who are not responsible for causing a problem should not have to pay to fix it; and those who are responsible for causing the harm are responsible for righting it.³⁷ Corrective justice is therefore at the heart of this account.³⁸ It requires the developed world—those nations who have contributed to the problem—to internalize the long-term costs of the activities that have caused the enhanced

³² Cited in *id.* at 81.

³³ Eric Posner and Cass Sustein, *Global Warming and Social Justice*, 31 REGULATIONS, 16 (Spring 2008).

³⁴ See PAUL G. HARRIS, *supra* note 29, at 35.

³⁵ See SIMON CANEY, HUMAN RIGHTS AND GLOBAL CLIMATE CHANGE. IN: ROLAND PIERIK AND WOUTER WERNER, COSMOPOLITANISM IN CONTEXT: PERSPECTIVES FROM INTERNATIONAL LAW AND POLITICAL THEORY 21-22 (Cambridge: Cambridge University Press, 2010).

³⁶ STEVE VANDERHEIDEN, *supra* note 31 at 45-46.

³⁷ See PAUL G. HARRIS, *supra* note 29 at 38-39.

³⁸ See ERIC POSNER AND DAVID WEISBACH, CLIMATE CHANGE JUSTICE 100 (New Jersey: Princeton University Press, 2010).

GHG effects.³⁹ In other words, due to their past contributions developed nations owe remedial action to those nations or those citizens most likely to be harmed by climate change.⁴⁰

The President of the Marshall Islands—which are located at an average of seven feet above sea level—depicts the polluter pays argument the following way:

The United States is responsible for 25 percent of all the CO₂ emissions in the world. How can it drown my nation and not do something about that? What gives it the right to do nothing as my nation goes under?⁴¹

The corrective justice account presents, however, several theoretical and practical difficulties. First, identifying the wrongdoers of climate change seems to be an almost impossible task.⁴² Even if many citizens of developed countries benefit from past GHG emissions, it is unclear how many benefitted and to what extent.⁴³

Second, climate change reveals that there is no identity between the injured victim and the claimant.⁴⁴ In effect, most of the victims of climate change live in the future, and therefore cannot be adequately redressed.⁴⁵

Third, it is virtually impossible to show that climate change is a direct consequence of someone else's action or inaction (i.e. that the GHG emissions in the United States caused the

³⁹ See EDWARD PAGE, *CLIMATE CHANGE, JUSTICE AND FUTURE GENERATIONS* 167 (Northampton, Edward Elgar Publishing Limited, 2006).

⁴⁰ See Eric Posner and Cass Sustein, *supra* note 33, at 14.

⁴¹ Cited in JAY INSLEE AND BRACKEN HENDRICKS, *APOLLO'S FIRE: IGNITING AMERICA'S CLEAN-ENERGY ECONOMY* (Island Press: 2008) at 5.

⁴² See ERIC POSNER AND DAVID WEISBACH, *supra* note 39 at 103-118.

⁴³ Eric Posner and Cass Sustein highlight the fact that the current stock of carbon dioxide in the air is a consequence of the behavior of people in the past who are actually dead, meaning that the actual wrongdoers cannot be punished. "Those responsible for much of the greenhouse gas effect are now dead and it seems unfair to shoulder their descendants with both the responsibility for their own environmental behavior and that of their ancestors". In addition, they argue that "holding Americans today responsible for the activities of their ancestors is not a fair or reasonable on corrective justice grounds because current Americans are not the relevant wrongdoers they are not responsible for the harm". See Eric Posner and Cass Sustein, *supra* note 33 at 18. By the same token, many citizens of developed countries today are not the direct descendants of GHG-emitting citizens of the past, so it is unclear if they have actually benefitted and to what degree. See ERIC POSNER AND DAVID WEISBACH, *supra* note 39 at 108.

⁴⁴ See ERIC POSNER AND DAVID WEISBACH, *supra* note 39 at 108.

⁴⁵ See *id.*

melting of ice in a village in Alaska).⁴⁶ As a matter of fact, there are a variety of difficulties in attempting to connect an individual climate-related harm to a particular emitter.⁴⁷

Fourth, intentional, reckless, or negligent action is required for a corrective justice claim to prosper.⁴⁸ But GHG-emitting activities cannot be classified as intentional, reckless, or negligent until a scientific consensus had been formed and became widely known among the public.⁴⁹ Such consensus did not occur until the 1990s.⁵⁰

Finally, GHG emissions brought about many benefits to present members of developing countries, so the responsibilities of present members of developed countries should be discounted to take account of such benefits.⁵¹

For all the above, it looks as if the corrective justice approach is inadequate to address climate justice.

(b) *The “ability to pay” (or distributive justice) approach*

⁴⁶ On climate change causation *see e.g. id.* at 109 and David A. Grossman, Tort based climate litigation. IN William C. G. Burns and Hari M. Osofky, *Adjudicating climate change: State, national and international approaches* (USA, Cambridge University Press, 2009) at 215.

⁴⁷ Douglas Kysar, however, asserts that it is possible to estimate current and past contributions of a particular emitter. He argues that plaintiffs do not need to rely on joint and several liability as there are metrics and methods available to standardize the warming potential of different gases and to quantify a particular defendant’s contribution. In this vein, he stresses that as long as the emissions levels of a particular defendant can be measured, that defendant’s contribution to climate change harm can also be estimated. In regards to historical emissions, plaintiffs may use other means to undertake such estimations (corporate records, tax filings, government lease documents, etc.). One study determined that Exxon Mobil is responsible of 5% of carbon dioxide emissions over the last 120 years. *See Douglas Kysar, What climate change can do about tort law?* __ *Envtl. L.* __ 26-32 (forthcoming 2011). Working paper cited with author’s permission. But even though one might consider the probability factor, “It is unclear that statistical relationships can be established with sufficient clarity to support a [juridical] claim”. ERIC POSNER AND DAVID WEISBACH, *supra* note 39 at 109. On the other hand, assessing which particular affluent country, and to what extent it caused harm is also a daunting task. *See PAUL G. HARRIS, supra* note 29 at 38-39.

⁴⁸ *See ERIC POSNER AND DAVID WEISBACH, supra* note 39 at 110.

⁴⁹ *See id.*

⁵⁰ “[U]ntil the 1990s there was widespread ignorance [of the enhanced-GHG nature and scale]”. EDWARD PAGE, *supra* note 40 at 169.

⁵¹ *See id.*

This climate-justice argument rests on the principle that “among a number of parties, all of whom are bound to contribute to some endeavor, the parties who have the most resources should contribute the most”.⁵² Accordingly, the question is whether rich nations have a special obligation to deal with climate change not because they are principally responsible for the problem, but simply because they are rich.⁵³

In line with Eric Posner and Cass Sustein, the distributive justice approach is problematic because, instead of helping current poor people, emission reductions would help poor people in the future.⁵⁴ These authors also claim that poor people in poor nations would prefer a cash transfer so they could use the money as they please. “Even if the rich have an obligation to help the poor, they should fulfill this obligation in the best possible way, whether this involves cash grants, development aids, trade rules or other mechanisms”.⁵⁵ Lastly, many of the beneficiaries of emission reductions are wealthy and many of the losers from emission reductions are poor.⁵⁶

Hence the distribute justice account seems also ill-suited to attain climate justice.

(c) *Other justice accounts*

In addition to the corrective and distributive justice accounts, other theories have been offered to try to justify the obligations of Northern countries toward Southern ones. First of all, the principle of “intergenerational justice” states that *current* generations have a moral obligation not to undermine the rights of *future* generations. It contends that climate change is unjust toward all, whether those whose interests are unprotected are currently alive or will be born in the

⁵² *Id.* at 170.

⁵³ ERIC POSNER AND DAVID WEISBACH, *supra* note 39 at 73-74.

⁵⁴ See Eric Posner and Cass Sustein, *supra* note 33 at 17.

⁵⁵ ERIC POSNER AND DAVID WEISBACH, *supra* note 39 at 73-74.

⁵⁶ See Eric Posner and Cass Sustein, *supra* note 33 at 17.

future.⁵⁷ In other words, “People alive at t1 are under a duty not to act in ways which prevent people at t1+50 from being able to enjoy their rights”.⁵⁸ This requires people in the present to limit their overall GHG emissions, accepting some costs now for future generations’ benefits later.⁵⁹ Accordingly, a way of fulfilling this “intergenerational obligation” is for current generations to invest in projects such as Ecuador’s, which plan to avoid carbon emissions in the long run.

Another point of view is that Ecuador—and any other nation whether in the North or South—should be compensated for providing the world with a public good when it refrains from extracting petroleum that causes carbon emissions.⁶⁰ Thus, the world should “compensate those who produce a positive externality and charge those who produce the negative externality. This is what the carbon market does. This is what, in a different way, the Yasuni-ITT initiative attempts to do”.⁶¹

More radical postures contend that trees should have legal standing. Christopher Stone argues that “we should have a system in which, when a friend of a natural object perceives it to be endangered, he can apply to a court for the creation of a guardianship”.⁶² Therefore, under this scheme paying Ecuador will be a way to respect nature’s rights. Here it is interesting to note that

⁵⁷ See SIMON CANEY, HUMAN RIGHTS AND GLOBAL CLIMATE CHANGE, IN ROLAND PIERIK AND WOUTER WERNER, *supra* note 35.

⁵⁸ *Id.* at 33.

⁵⁹ See STEVE VANDERHEIDEN, *supra* note 31 at 121.

⁶⁰ See GRACIELA CHICHILNISKY, *Foreword* to JOSEPH HENRY VOGEL, THE ECONOMICS OF THE YASUNI INITIATIVE: CLIMATE CHANGE AS IF THERMODYNAMICS MATTERED xvi (Anthem Press Ed., 2009).

⁶¹ *Id.* at xvii.

⁶² See CHRISTOPHER D. STONE, SHOULD TREES HAVE STANDING? LAW, MORALITY AND THE ENVIRONMENT 8 (New York: Oxford University Press, 3rd ed., 2010). He also questions whether climate change can have legal standing at 33.

2008 Ecuadorian Constitution recognizes nature as *subject* of law and not a mere *object* of law.⁶³

To conclude, human rights doctrines could also be invoked to justify the Yasuni-ITT Initiative as it purports the protection indigenous peoples living in the national park from the negative impacts of oil exploitation. Actually, for the past decades international organizations and NGOs have been working to formulate human rights standards applicable to the world's indigenous peoples.⁶⁴ As a result, several international instruments have emerged to restrict state's sovereignty in the treatment of the indigenous populations that inhabit its territory⁶⁵ (such as the United Nations Declaration on the Rights of Indigenous Peoples) or accommodated in order to embrace indigenous peoples' rights, such as the American Convention on Human Rights.⁶⁶

2. International justice

⁶³ Artículo 83.- Son deberes y responsabilidades de las ecuatorianas y los ecuatorianos, sin perjuicio de otros previstos en la Constitución y la ley: (...) 6. Respetar los derechos de la naturaleza, preservar un ambiente sano y utilizar los recursos naturales de modo racional, sustentable y sostenible. (*emphasis added*)

⁶⁴ See SHARON O'BRIEN, FEDERAL INDIAN POLICIES AND THE INTERNATIONAL PROTECTION OF HUMAN RIGHTS. IN: VINE DELORIA, JR (EDITOR), AMERICAN INDIAN POLICY IN THE TWENTIETH CENTURY (USA: University of Oklahoma Press 1985) at 35.

⁶⁵ "Although international law excludes indigenous peoples from its distribution of sovereign authority and renders them subject to the sovereign power of the states in which they live, international law. . . . purports to protect indigenous peoples from the exercise of sovereign power". Patrick Macklem, *Indigenous peoples recognition in international law: theoretical observations*, 20 MICH. J. INT'L L. 177 (2008).

⁶⁶ In general, these international instruments set forth the following obligations of states vis-à-vis indigenous peoples' rights: to officially title and demarcate indigenous ancestral land; to observe indigenous land tenure systems when recognizing indigenous ancestral lands; to restitute lands to those indigenous peoples who were dispossessed, or alternatively, to provide other lands or compensation; to conserve and protect indigenous peoples' right to environment; and to respect indigenous peoples' right to the productive capacity of their lands or territories and resources. See e.g. Jo M. Pasqualucci, *International indigenous land rights: a critique of the jurisprudence of the Inter-American Court of Human Rights in light of the United Nations Declaration on the Rights of Indigenous Peoples*, 27 WIS. INT'L L.J. 51 (2009); S. James Anaya and Robert A. Williams, *The Protection of Indigenous Peoples' Rights over Lands and Natural Resources Under the Inter-American Human Rights System*, 14 HARV. HUM. RTS. J. 33 (2001); and CLAIRE CHARTERS AND RODOLFO STAVENHAGEN (EDITORS), THE UN DECLARATION ON THE RIGHTS OF INDIGENOUS PEOPLES: HOW IT CAME TO BE AND WHAT IT HERALDS (Copenhagen: IWGIA, 2009).

Climate change is global in its causes and consequences. For this reason, collective international action is critical in driving an effective response on the scale required.⁶⁷ Many efforts in the international field have been expended toward addressing climate change. A number of the provisions of these international environmental agreements reflect the climate-justice accounts described in the Section above.

For example, the principle of “common but differentiated responsibility” is present in the 1992 Rio Declaration.⁶⁸ According to this principle, while all states are responsible for global environmental problems, some are “more responsible” than others, both for their past contributions and their abilities to pay.⁶⁹

In addition, in the 1992 United Nations Framework Convention on Climate Change (UNFCCC) states acknowledged that while all of them should be part of efforts to limit emissions of GHG, developed states would take the lead⁷⁰ and would help the world’s poor countries address both the causes and consequences of climate change.⁷¹

Article 3

⁶⁷ See Nicolas Stern, *The Stern Review on the economics of climate change*. Available at <http://siteresources.worldbank.org/INTINDONESIA/Resources/226271-1170911056314/3428109-1174614780539/SternReviewEng.pdf>

⁶⁸ Principle 7.- States shall cooperate in a spirit of global partnership to conserve, protect and restore the health and integrity of the Earth's ecosystem. In view of the different contributions to global environmental degradation, States have common but differentiated responsibilities. The developed countries acknowledge the responsibility that they bear in the international pursuit to sustainable development in view of the pressures their societies place on the global environment and of the technologies and financial resources they command. (*emphasis added*)

⁶⁹ See PAUL G. HARRIS, *supra* note 29 at 79-80.

⁷⁰ “The UNFCCC contains no binding commitments, and signatory nations agreed only to a nonbinding pledge to freeze GHG emissions at 1990 levels pending further study, but its symbolic importance in recognizing the importance of the issue and in initiating international political action to address climate change cannot be overstated. Additionally, the treaty set most of the normative ideals that continue to guide development and evaluation of the fairness of ongoing climate policy negotiations and development. Its declared commitment to equity in both its process and substantive policy outputs, though subsequent agreements display significant deficits in both of these regards, nonetheless remains the foundational ideal of climate policy development, and its normative language continues to serve as the basis for efforts to design a climate regime that realizes these goals”. STEVE VANDERHEIDEN, *supra* note 31 at 55-56.

⁷¹ See PAUL G. HARRIS, *supra* note 29 at 79-80.

1. The Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities. Accordingly, the developed country Parties should take the lead in combating climate change and the adverse effects thereof (*emphasis added*).

Further, the 1997 Kyoto Protocol also reflects this principle as it does not require developing countries to engage in emission reduction commitments in the assumption that the main wrongdoers are developed countries.⁷²

Many authors argue, however, that these international environmental law treaties have failed to provide an effective solution to climate change. The main critique is that the Kyoto Protocol has failed to call on the main emitters of the world like China or the United States,⁷³ the latter claiming that this is an unfair treaty.⁷⁴ In consequence, without the engagement of the world's most polluting nations these treaties are ineffective.

By the same token, the climate change regime has been characterized by “diplomatic delay, minimal action, and mutual blame”.⁷⁵ Here it is worth noting that the United States has conditioned its participation on future carbon cuts to China's engagement in similar obligations.⁷⁶ Conversely, China insists that developed countries like the United States move first

⁷² *Id.* at 82.

⁷³ “For many, the American Government remains the primary obstacle blocking the empowerment of an effective global climate regime”. *See id.* at 15.

⁷⁴ “I oppose the Kyoto Protocol because it exempts 80 percent of the world, including major population centers such as China and India, from compliance, and would cause serious harm to the U.S. economy. The Senate's vote, 95-0, shows that there is a clear consensus that the Kyoto Protocol is an unfair and ineffective means of addressing global climate change concerns”. Former president George W. Bush, 2001. Cited IN: STEVE VANDERHEIDEN, *supra* note 31 at 64.

⁷⁵ PAUL G. HARRIS, *supra* note 29 at 74.

⁷⁶ Critics argue that “the US should forge ahead on climate change initiatives, even in the absence of corresponding Chinese commitment. . . . [S]etting a positive example is the best option to encourage China to move forward as well”. Karin Mickelson, *Beyond a politics of the possible? South-North relations and climate justice*, 10(2) MELB. J. LNT. LAW 416 (2009).

and do more in the light of their historic contributions.⁷⁷ The result has been procrastination in the international fora.

The lack of scientific consensus regarding the causes and consequences of climate change has also served to slow down the process of reaching a worldwide comprehensive solution:

[T]he politicization of science by industry opponents of global climate policy efforts, together with sympathetic representatives in government, has stymied the development of fair and effective climate policy through a coordinated public relations and lobbying campaign designed to undermine the scientific basis of climate change, and thereby to convince the public that no mandatory action is needed.⁷⁸

In general, international environmental treaties like the UNFCCC or Kyoto Protocol divert all responsibilities to states (that is, excluding individuals and institutions). As Paul G. Harris maintains, to date international justice has failed to discourage consumption and pollution by affluent people, whether in the North or South.⁷⁹ As China develops millions of Chinese citizens become affluent and gain access to a vast number of GHG polluting goods. For example, the number of cars in China has more than doubled between 2000 and 2006, and still there is a huge gap to fill since China has one car per every forty people, whereas the United States has one car every two people. Yet these new emerging classes are not obligated to reduce their GHG emissions, becoming the new free-riders of air pollution (see *infra* Section III (b)).

According to John Vogler these environmental treaties are, in reality, “interstate institutions attempting to superintend what are often global problems. Although nation-states remain legally pre-eminent in the world system. . . . they cannot be expected to rise above their

⁷⁷ *Id.*

⁷⁸ STEVE VANDERHEIDEN, *supra* note 31 at 44.

⁷⁹ Paul G. Harris, *Climate Change and the Impotence of International Environmental Law: Seeking a Cosmopolitan Cure*, 16 PENN ST. ENVTL. L. REV. 323 (2008).

own short-term national [and electoral concerns]”.⁸⁰ Conversely, Roland Pierik and Wouter Werner have identified certain *global* features in these international environmental instruments, though still ruled by international justice rather than global justice:

Increasingly, international law has incorporated notions such as “the common bonds” and the “shared heritage” of all peoples, the idea of human dignity, or the notion that environmental protection is a “common concern of humankind”. Of course, this is not to say that all international institutions and regimes are now founded upon cosmopolitan principles or moving progressively towards ideals of global justice (emphasis added).⁸¹

As a final point, in line with Karin Michelson the North-South dichotomy underlying international justice is inadequate these days.⁸² She explains that countries like Brazil, India, and China should not be considered as “developing nations” anymore. She also emphasizes that the vulnerability to climate change cannot be defined in geographic terms (North-South), as evidenced by hurricane Katrina and indigenous peoples’ suffering in the far North. In the same line of reasoning, Posner and Sustain assert that the reliance on distributive and corrective justice “muddy the picture and threaten to interfere with efforts to negotiate an effective climate treaty in the future”.⁸³

In the previous paragraphs I have shown that inter-state justice is neither willing nor attuned to the requirements of a global battle against climate change.⁸⁴ So, instead of thinking of the global environmental problem as involving exclusively the duties of justice among states, “we should think of it as one that [also] involves actions and responsibilities among individuals

⁸⁰ JOHN VOGLER, *THE GLOBAL COMMONS: ENVIRONMENTAL AND TECHNOLOGICAL GOVERNANCE* (2d Ed), (West Sussex: John Wiley & Sons Ltd, 2000).

⁸¹ ROLAND PIERIK AND WOUTER WERNER, *supra* note 35.

⁸² Karin Michelson, *Beyond politics of the possible? South-North relations and climate justice* *Melbourne Journal of International Law*, Vol. 10, No. 2, Oct 2009: 411-423.

⁸³ Eric Posner and Cass Sustain, *supra* note 33 at 20.

⁸⁴ See Paul G. Harris, *supra* note 79 at 5.

and institutions”.⁸⁵ Thus an alternative to the inter-state doctrine is needed.⁸⁶ And that alternative is cosmopolitanism.

3. Cosmopolitan justice

Climate change cries out for a cosmopolitan response. A global problem with global causes and consequences should be addressed from a global perspective, and not from an international or inter-state one.⁸⁷ In Harris’ words, “Our future requires that our responses to the globalization of environmental changes and their consequences include a globalization of justice”.⁸⁸ This Section will show why the cosmopolitan justice serves to justify the compensation envisaged by Ecuadorians.

International justice views national borders as being the basis for justice.⁸⁹ Indeed, from a communitarian perspective “states have very few duties of justice towards one another, and even less so towards people living in another states”.⁹⁰ On the contrary, cosmopolitan justice asserts that “the ethical obligations and responsibilities are not defined or delineated by national borders”.⁹¹ Hence, while the communitarians rely on the moral obligations between members of local associations,⁹² for the cosmopolitans “it makes no difference whether a person lives here or there, provided that, wherever he lives, he lives a citizen of the world”.⁹³

⁸⁵ PAUL G. HARRIS, *supra* note 29 at 111.

⁸⁶ *See id.* at 94.

⁸⁷ *See id.* at 118.

⁸⁸ *Id.* at 184.

⁸⁹ *See* Paul G. Harris, *supra* note 79 at 6.

⁹⁰ PAUL G. HARRIS, *supra* note 29 at 56.

⁹¹ *Id.*

⁹² *See* SHARON ANDERSON-GOLD, *COSMOPOLITANISM AND HUMAN RIGHTS 1* (Cardiff: University of Wales Press, 2001). For Paul G. Harris, “communitarians would probably say that obligation is close to oneself – to one’s family, neighbors and nation. Communitarians emphasize that individuals are constituted, at least in large part, by the communities in which they live... To the extent that people have a moral obligation to one another, they need to

Cosmopolitans claim that all citizens of the world share a membership in one single community: the world as a whole.⁹⁴ Under this account, individuals develop multiple loyalties not only to one's own state but also to other human beings living far away.⁹⁵ Therefore, every person has moral duties toward all human beings since every human being is the ultimate unit of moral concern.⁹⁶ The reason for this is that human beings are all inextricably interconnected to the extent that "a violation of rights in one part of the world is felt everywhere".⁹⁷ In short, under the cosmopolitan regime a global citizen allegiance is to the community of human beings in the entire world.⁹⁸

Cosmopolitanism, though universalist and totalizing,⁹⁹ does not reject the idea that solutions to climate change involve states. While recognizing the role of states in climate change abatement, cosmopolitanism does not "absolve capable [affluent] individuals from explicit responsibility and obligation; nor should it prevent diplomats, activists and scholars, along with laypersons, from discussing it and attempting to implement it personally".¹⁰⁰ In sum, cosmopolitan justice "locates the obligation to act on climate change, and to aid those people

help people only in their own community or at most in their own country... The interstate system under which we live today is one based on communitarian principles, often in extreme. This Westphalian world view is one premised on a particular kind of communitarianism, which asserts that people's identities and their moral values arise not from some common humanity or universal values, but rather from shared traditions within established communities. PAUL G. HARRIS, *supra* note 29 at 29-30.

⁹³ SHARON ANDERSON-GOLD, *id.*

⁹⁴ See ROLAND PIERIK AND WOUTER WERNER, *supra* note 35.

⁹⁵ See PAUL G. HARRIS, *supra* note 29 at 30-31.

⁹⁶ *Id.*

⁹⁷ GARRET WALLACE BROWN, *GROUNDING COSMOPOLITANISM, FROM KANT TO THE IDEA OF A COSMOPOLITAN CONSTITUTION 1* (Edinburg: Edinburg University Press, 2009).

⁹⁸ See *id.* at 2.

⁹⁹ See PAUL G. HARRIS, *supra* note 29 at 30-31.

¹⁰⁰ *Id.* at ix.

who are suffering from it. . . . in capable (i.e. affluent) individuals in both affluent and poor states”¹⁰¹.

In the light of the above, the cosmopolitan justice account can serve to justify Ecuador’s call for citizens of the world to contribute to the Yasuni Fund. Ecuador’s proposal stems from the idea that national borders are not an adequate basis for climate change justice. So, if borders do not matter, the solutions should involve transnational solidarity among world citizens, and not states alone. Further, cosmopolitanism requires citizens to take actions *personally* because everyone has a basic right “not to be harmed by the pollution of others, whether they be next door or on the other side of the planet”.¹⁰² In this line, the Yasuni-ITT Initiative calls out for the contribution not only of state parties but also of a multiplicity of global actors, including private and public entities, non-governmental organizations (NGOs), and individuals. It purports to mobilize global citizens, regardless of their national commitments and allegiances, by invoking universal values.¹⁰³

On the other hand, the proposal implies that the world’s affluent people—and not only those from the North—have a moral duty to confront the negative effects of climate change toward all human beings. Affluent American and European citizens, together with affluent Ecuadorians and Chinese, are all summoned. This is why the initiative goes beyond the North-South dichotomy which has traditionally brought about mutual blame and delay. Conversely, the protagonists of the cosmopolitan regime purported by Correa are not only states but affluent individuals.

¹⁰¹ See Paul G. Harris, *supra* note 79 at 3.

¹⁰² *Id.* at 9.

¹⁰³ PAUL G. HARRIS, *supra* note 29 at vii.

What is more, Correa's program strongly acknowledges the urge of taking immediate action and not waiting for the outcome of lethargic and virtually immobile international negotiations, as states attempt to reach a new post-Kyoto framework. The initiative is therefore attuned to the current and compelling exigencies of abating climate change without further delay, as opposed to the inter-state justice approach.

All told, I believe that the cosmopolitan standpoint—which is inherent in the Yasuni-ITT Initiative—provides a better road map (or at least a subsidiary one) than the inter-state doctrine for dealing with climate justice.¹⁰⁴ Even so, the cosmopolitan regime has some flaws to overcome.

The world is still characterized by a lack of institutional *cosmopolitan* networks beyond state level. As Luis Cabrera states,

[f]ull acknowledgment of the demands of moral cosmopolitanism. . . . should commit us to strong institutional cosmopolitanism, specifically, to the creation of a network of strong democratic institutions above the state. The fully integrated institutional form would be a democratic global government capable of ensuring that any person born anywhere can lead a decent life (*emphasis added*).¹⁰⁵

So, in light of the lack of a cosmopolitan legal framework pursuant to climate justice, how are cosmopolitan obligations supposed to be set, enforced, and by whom?

The cosmopolitan regime relies primarily on the *voluntary* efforts of *world citizens* to take action regardless of borders. Whether domiciled in the North or South, whether the beneficiary of past GHG emissions or not, all affluent human beings are summoned. In the absence of a “democratic global government”, as Cabrera puts it, the global affluent citizens are required to voluntarily contribute to measures that abate climate change in an effort to avoid free-riding, taking responsibility for their own GHG emissions, and off-setting their individual carbon

¹⁰⁴ PAUL G. HARRIS, *supra* note 29 at 73.

¹⁰⁵ LUIS CABRERA, *POLITICAL THEORY OF GLOBAL JUSTICE: A COSMOPOLITAN CASE FOR THE WORLD STATE 2* (Oxfordshire: Routledge, 2004).

footprints (see *infra* Section III (b)). However, cosmopolitanism is not equipped with enforcement mechanisms.

On top of that, the cosmopolitan regime will require a definition or threshold for “affluence” in order to allocate responsibilities thoroughly. Yet this point requires further discussion beyond the scope of this paper. What is clear for now is that cosmopolitanism can seriously materialize in concrete measures that favor carbon sequestration to be undertaken by capable global citizens. Among such measures I can highlight the financing of conservation easements in the South, as I will discuss below.

4. Is Ecuador asking to be compensated to do something it is obliged to do?

Here I will briefly address the skeptical question whether Ecuador is, in actuality, driven by conservationist goals or if it is actually asking to be compensated for something it is obliged to do in the first place.

Ecuador is a signatory for different environmental treaties aimed at the protection of the Amazon’s biological diversity. Does this mean that Ecuador is asking for money to fulfill its international obligations? I think not as Ecuador’s international commitments do not compel it to forgo its oil reserves, even when dealing with sensitive areas such as the Amazon. Hence, the decision whether to exploit its natural resources is still a sovereign prerogative, even if conservation strategies must be implemented simultaneously pursuant to Ecuador’s international obligations.

As described above, the exploitation of the ITT oil fields appears to be complex and extremely expensive. For technical reasons I cannot discuss here, Ecuador would need to

construct a thermoelectric power plant and a pipeline to move the oil from the Amazon to the coast (see *supra* Section I.1). Skeptics will say in turn that Ecuador is seeking compensation as it has realized the unfeasibility of its oil exploitation project. Yet, as complicated as it may be, it seems that the exploitation of the natural resources is still feasible and, to some extent, several oil companies are willing to undertake this endeavor. In fact, different oil companies already operate in other blocks located in the Yasuni National Park, including Brazil's Petrobras, Canada's EnCana, and Spain's and Argentina's Repsol-YPF.¹⁰⁶ In other words, technicalities are not an impediment for the ITT oil project.

Additionally, in 2006 the Inter-American Commission on Human Rights (IACmHR) granted precautionary measures in favor of the Tagaeri and Taromenami indigenous peoples who inhabit the Ecuadorian Amazon jungle.¹⁰⁷ In view of this, the IACmHR requested that the Ecuadorian government adopt the measures necessary to protect the territory inhabited by these indigenous peoples. Skeptics will contend that Ecuador is obligated to protect the indigenous peoples by refraining from exploiting its oil reserves. However, the IACmHR pronouncement is not only a (non-binding) recommendation, but it does not prevent Ecuador from exploiting its oil reserves within the territories of indigenous peoples. In this regard, the Inter-American Court of Human Rights has ruled that the rights of indigenous peoples to their ancestral lands and resources does not prevent the state from granting concessions for the exploration and extraction of natural resources within indigenous territory when certain conditions are met.¹⁰⁸ In other

¹⁰⁶ Tracy C. Davis, *supra* note 4.

¹⁰⁷ The information available states that members of the Taromenami tribe were murdered during reprisals linked to illegal tree felling in the Yasuni Park and encroachments onto indigenous lands. See IACHR at <http://www.cidh.oas.org/medidas/2006.eng.htm>

¹⁰⁸ “[U]nder the American Convention, the rights of indigenous peoples to their ancestral lands and resources does not prevent the state from granting concessions for the exploration and extraction of natural resources within

words, if Ecuador undertakes the consultation processes with the native peoples and guarantees their rights, the eventual oil exploitation of the ITT oil fields will be legally vested.

In light of the above, I do not regard Ecuador's proposal as a countermeasure to the impossibility of exploiting the oil reserves due to its environmental and human rights obligations, nor to avoid complex expenditures needed to access oil reserves. Although some people may claim that Ecuador is asking for compensation for what it is legally obligated to do (that is, to preserve the forests and protect the indigenous tribes) it appears that the Yasuni-ITT Initiative purports extra-legal objectives, which certainly have a cost.

III. The critique

Considering the novelty of the Ecuadorian proposal, the academic literature on it is still limited. However, much of the available articles, legal or not, are devoted to praising Correa's model. For example, Tracy C. Davis underscores the potential of the program "to shift the existing environmental and development paradigms".¹⁰⁹ Leaving the oil underground, she argues, is "striking in its scope and creativity".¹¹⁰ In the same way, Graciela Chichilnisky considers the initiative to be "an innovative response from Latin America to the procrastination of the global negotiations for a post-Kyoto framework".¹¹¹ She goes further by affirming that the

indigenous territory when certain conditions are met. . . . In the *Saramaka People v. Suriname* case, [the Court said that] the free, prior, and informed consent of indigenous peoples is only necessary when the state is considering "large-scale development or investment projects that would have a major impact" on the territory of indigenous or tribal peoples". Jo M. Pasqualucci, *supra* note 66. Although the scope of the *Saramaka* case is still unclear, it seems that the circumstances in which indigenous peoples' consent is essential before a government can grant (large) concession rights over natural resources located within aboriginal lands, have been limited. Moreover, it appears that indigenous peoples are not vested with "veto powers" over the activities to be undertaken within their lands as authorized by the national government.

¹⁰⁹ Tracy C. Davis, *supra* note 4.

¹¹⁰ *Id.*

¹¹¹ GRACIELA CHICHILNISKY, *supra* note 60 at 2.

“Yasuni is the new economics of planet Earth”.¹¹² Similarly, Pamela Martin contends that the initiative is a lesson for academics and policymakers who are seeking innovative solutions to protect the environment.¹¹³ At last, Alberto Costa underlines the importance of the project as a way to promote the transformation of Ecuador’s economic model currently based on the exploitation of natural resources.¹¹⁴

As I will explain in this Section, my vision is less enthusiastic.

How really innovative is Ecuador’s scheme? The Yasuni-ITT Initiative originates from a well-known legal institution, the moratorium. Moratoriums entail “a suspension of activities determined by a governmental authority for numerous reasons. They are found at all levels of government in all manner of activities, from federal offshore oil leases, to a country’s moratorium on landfills or building permits”.¹¹⁵ Correa’s initiative seeks to establish an oil moratorium in the ITT fields, overlapped to the Yasuni National Park, for an unlimited period of time. Yet the very idea of approving an oil moratorium, in general, and in the Amazonian region of Ecuador, in particular, is not a new idea.¹¹⁶

In my view, the novelty of the model relies on two facts. First, the moratorium is intended to be perpetual; and second, Ecuador is conditioning its issuance to a minimum threshold of contributions to the Yasuni Fund. Hence the message goes as follows: if the international

¹¹² *Id.*

¹¹³ See Pamela Martin, *supra* note 16 at 2.

¹¹⁴ See Alberto Acosta et al. *supra* note 4.

¹¹⁵ See West’s Encyclopedia of American Law, 2nd edition.

¹¹⁶ “[L]earning from the previous campaign surrounding the Chevron Texaco case and others in the Southern Amazon, such as Sarayacu, activists, researchers, and scholars began calling for a moratorium on oil drilling in this region in the mid-1990s. In 2000, Alberto Acosta and Acción Ecológica. . . . called for a moratorium on oil extraction in the Amazon and a move toward alternative energy sources for the country. This laid the groundwork for a larger plan that included opposition to global climate change, support for those portions of the developing world not included in the Kyoto Protocol, and protection for the rainforest and for those uncontacted peoples living within it”. Pamela Martin, *supra* note 16 at 28.

community and the cosmopolitan citizens of the world want Ecuador to keep the oil in the soil for perpetuity, and thus avoid the release of millions of tons of carbon dioxide that would otherwise be burned and pollute the atmosphere, they must pay for it.¹¹⁷

In this Section I will analyze to what extent the Yasuni-ITT Initiative represents an adequate framework to abate climate change, with particular emphasis on a property-based approach.

(a) *The focus on the oil and not on the trees*

Ecuador is requiring as compensation half the opportunity cost of exploiting the ITT oil reserves. The calculation for the envisaged payment is not based on how much carbon dioxide the Amazonian rainforest will absorb or avoid (see *infra (b)*), but on the market value of the oil reserves.¹¹⁸

In my opinion, the Yasuni-ITT Initiative places the economic incentives in the wrong place. Indeed, instead of making Ecuador preserve its rainforests from land use transformation, the initiative is primarily structured around the oil. In other words, Ecuador is asking to be compensated for *not doing* something (that is, not exploiting oil reserves) rather than for *doing* something (that is, preserving the forest areas). While a conservationist approach would require *affirmative obligations* from Ecuador, forgoing the oil reserves simply implies passivity or inaction. As put by Mr. Sebastian Lesch, spokesman of the German Ministry of Economic and

¹¹⁷ As put by Joseph H. Vogel, “The Yasuni-ITT Initiative rests on the realpolitik that poor carbon-rich countries will extract their fuel reserves if not paid to do otherwise”. JOSEPH HENRY VOGEL, *supra* note 60 at 78.

¹¹⁸ “La modalidad desarrollada en Ecuador es el Pago por Conservación de Crudo en el Subsuelo. . . . Es [un] pago a manera de compensación, por el crudo que permanecerá en el subsuelo”. Orlando Perez, *Correa propone que le compren "petróleo simbólico"* (October 15, 2007), <http://www.ar.terra.com/terramagazine/interna/0,,EI8864-OI1988252.00.html> (last visited October 9, 2010).

Development Cooperation, in direct reference to the Yasuni-ITT Initiative, “nuestro objetivo es impulsar políticas activas en países activos, en vez de pagarles por no hacer nada”.¹¹⁹

Like the German officials, others have criticized the exaggerated emphasis that the initiative places on the oil payment,¹²⁰ and have questioned whether the funds obtained will be adequately channeled to protect indigenous peoples and preserve biodiversity, as purported.¹²¹ In this regard, the threshold of \$100 million to be raised before December 2011 as stipulated in the MOA is a clear manifestation of the excessive weight given to the economic aspect of the proposal by Ecuadorian authorities. Some may argue that the economic emphasis, and especially the “deadline” established by Ecuador, is a deal breaker.

But why did Ecuador structure its initiative around the oil and not the trees? There may be three possible answers. First, since Ecuador is not the legal owner of all the surface lands where the Yasuni Park is located, the government’s embarking into conservation strategies would require negotiating with indigenous peoples, both in terms of boundaries and “profit sharing”. This fact might have been regarded as a source of delay or a dead-end for the endeavor, especially considering that after the IACmHR issued its recommendation, the rights of the indigenous peoples have been in an international spotlight. Second, the wilderness and inaccessibility of the area not only renders conservation objectives extremely complex, but also

¹¹⁹ Tasmin Walker and Vinicio Chacón, *supra* note 28.

¹²⁰ “Una parte sustancial del debate reciente ha derivado hacia la necesidad de generar una “compensación” económica frente a la moratoria de extracción del petróleo. . . . [L]a conservación del ITT es importante en sí misma, independientemente de los humores y disponibilidad de pago de la comunidad internacional. La demanda de compensación económica internacional no puede ser usada como excusa para la inacción, sino que debe ser vista como una oportunidad para la acción nacional e internacional” (*emphasis added*). Alberto Acosta et al., *supra* note 4.

¹²¹ “[La] “compensación” no necesariamente asegura ni está directamente vinculada con las comunidades locales, o con una protección o restauración ambiental en las áreas deterioradas, o que han perdido capacidad de sustentación de las poblaciones. En otras palabras, se pueden sumar enormes cantidades de dinero desde el campo internacional, sin que eso resulte en políticas ambientales y sociales certeras y efectivas en la región amazónica”. *Id.*

prohibitive in terms of costs and resources. Third, the calculations of how many oil barrels are stored in the subsurface of the national park are already available thanks to oil prospecting, whereas the calculations of how much carbon can be absorbed are not only not available, but hard to determine (see *infra* Section IV). Perhaps most importantly, Ecuador might have perceived that by focusing on the oil it would maximize its cut.

As I should point out immediately, the focus on the oil is not only the weakest point of the whole project, but also may result in a deterrent to future international cooperation as Germany's reaction evidences.

(b) CGYs are not “environmental property rights”

The atmosphere is a “global commons”, that is to say, a resource that does not or cannot fall under sovereign jurisdiction of a particular state because of the physical impossibility of extending such control.¹²² Global commons are open to all and are free for the taking.¹²³ In fact, they can be used by all states and their nationals for resource extraction (in the case of the ocean) or waste disposal (in the case of the atmosphere).¹²⁴

¹²² See e.g. JOHN VOGLER, *supra* note 80. “The term ‘global commons’ serves to point out the fact that they are all part of a holistic planetary system and thus interconnected in a range of important ways”. DONALD NONINI (editor), THE GLOBAL IDEA OF 'THE COMMONS' (New York : Berghahn Books, 2007). The biosphere's three principle functions for mankind are: “It provides resources (like oil, coal, and wood), assimilates our waste products, and offers environmental services (such as ecosystem stabilization and climate regulation). The ecological balance, though, is important; emitting too much CO₂ can throw off the delicate system.” Robert DeLay, *Our Post-Kyoto Treaty Climate Change Framework: Open Market Carbon-Ranching as Smart Development*, 17 PENN ST. ENVTL. L. REV. 55.

¹²³ JOHN VOGLER, *supra* note 77.

¹²⁴ In other words, the atmosphere acts like a “common sink” by absorbing GHG from human activities. CHRISTOPHER JOYNER, IN P.J. SIMMONS AND CHANTAR DE JONGE OUDRAAT (editors), MANAGING GLOBAL ISSUES: LESSONS LEARNED 354 (Washington, D.C.: Carnegie Endowment for International Peace, 2001).

Considering human's self-interest nature, it is generally believed that users will deplete a commons if left unregulated or unowned.¹²⁵ Since none of the users of a commons can exclude anyone else from the resource, this circumstance encourages overuse and discourages investment. As a result, "all [users] become free riders, taking as much as they can and investing nothing, and turning otherwise renewable resources into wasting assets".¹²⁶ This is why determining *who* has access to common resources, and to what extent, is at the heart of this "tragedy of the commons".¹²⁷

Air pollution exemplifies this tragedy. Given that the atmosphere cannot be fenced¹²⁸ or parceled into shares¹²⁹, individuals, companies, and states will tend to "free-ride" by letting others take on the costs of mitigating the impacts of their pollution (in the form of carbon emissions) while they continue to enjoy the benefits of those activities.¹³⁰ In consequence, they impose the external costs of their activities on society in the form of reduced air quality and

¹²⁵ Anthony Russomanno, *The ethics of heat: Fundamentals and challenges in allocating the global commons*. U. ILL. L. REV. 551 (2009) at 4.

¹²⁶ Carol Rose, *Property rights, development imperatives, and environmental protection*, Seminar in Latin America on Constitutional and Political Theory (Buenos Aires, Argentina, June 29, 2008).

¹²⁷ CHRISTOPHER JOYNER, *supra* note 124. On the "tragedy of the commons", *see generally* Garret Hardin, *The Tragedy of the Commons*, Science, New Series, Vol. 162, No. 3859 (Dec. 3, 1968), 1243-1248; ELINOR OSTROM ET AL. (editors), *THE DRAMA OF THE COMMONS 3* (Washington, DC: National Academy Press, 2001); ELINOR OSTROM, *GOVERNING THE COMMONS: THE EVOLUTION OF INSTITUTIONS FOR COLLECTIVE ACTION* (Cambridge University Press, 1990); THRAINN EGGERTSSON, *OPEN ACCESS VERSUS COMMON PROPERTY*. IN: TERRY L. ANDERSON AND FRED S. MCCHESENEY (EDITORS), *PROPERTY RIGHTS: COOPERATION, CONFLICT AND LAW* (Princeton, N.J.: Princeton University Press 2003); and LOUIS DE ALESSI, *PRIVATE PROPERTY RIGHTS AS THE BASIS FOR FREE MARKET ENVIRONMENTALISM*. IN: PETER HILL AND ROGER MEINERS (editors), *WHO OWNS THE ENVIRONMENT?* 29 (Lanham, Md.: Rowman & Littlefield, 1998).

¹²⁸ TERRY ANDERSON AND DONALD LEAL, *FREE MARKET ENVIRONMENTALISM* 165 (Boulder: Westview Press, 1991). *See also* Garret Hardin, *supra* note 125.

¹²⁹ STEVE VANDERHEIDEN, *supra* note 31 at 55-56 at 79.

¹³⁰ *See* AARON MALTAIS, cited in PAUL G. HARRIS, *supra* note 29 at 91. In this line, "Every ton of coal and every gallon of gas we use send CO₂ into our atmosphere, gratis, with absolutely no tribute, no cost, no payment of any kind. We can no longer afford this luxury. It will only be through smart policies that we rein these "external" costs that have been passed on to us all. . . . The principle of "no free lunch" applies to all of us as well. We are all CO₂ emitters, and we cannot live off of this "free lunch", believing that is up to someone else to build a clean-energy future". JAY INSLEE AND BRACKEN HENDRICKS, *supra* note 38 at 34-35.

disruption of global climate regulation services.¹³¹ As put by Posner and Weisbach, “Whenever people engage in activities that emit carbon. . . they deplete the resource but do not pay a price for the hard they impose on others.”¹³²

The atmosphere can only absorb a limited amount of carbon dioxide.¹³³ Since 1750 global atmospheric concentrations of carbon dioxide and other GHG have been increasing exponentially, and now exceed by far the atmospheric concentrations prior to industrialization.¹³⁴ Climate change is therefore the result of the atmosphere reaching its carrying capacity to absorb GHG.¹³⁵ The global dimensions of the tragedy are obvious given that the atmosphere provides the planet’s respiratory function by absorbing carbon dioxide and emitting oxygen,¹³⁶ which are essential functions to human biological, cultural, and social reproduction. This is why climate change presents itself as a *global* tragedy of the commons.

Is it possible to overcome this tragedy? The answer is either to impose regulation or to privatize the commons.¹³⁷ Regulation refers to government regulation imposing restrictions on access and use of the commons, either through command-and-control measures or market-based incentives, whereas privatizing the commons relies on converting the resource from non-property to private property.¹³⁸ As mentioned before, this paper will focus on the latter.

¹³¹ *See id.*

¹³² ERIC POSNER AND DAVID WEISBACH, *supra* note 39 at 42-43.

¹³³ *Id.*

¹³⁴ Laurie A. Wayburn and Anton A. Chiono, *The role of federal policy in establishing ecosystem service markets*, 20(2) *Duke Envntl Law & Policy Forum* (2002) at 390.

¹³⁵ *See* Eric Posner and Cass Sustein, *supra* note 33 at 2.

¹³⁶ *See* STEVE VANDERHEIDEN, *supra* note 31 at 55-56.

¹³⁷ Terry L. Anderson and J. Bishop Grewell, *Property rights solution for the global commons: Bottom-Up or Top-Down?* 10 *DUKE ENVNTL. L. & POL’Y F.* 73 AT 13.

¹³⁸ Daniel H. Cole, *Clearing the air: four propositions about property rights and environmental protection*, 10 *DUKE ENVNTL. L. & POL’Y F.* 103, AT 3. This author suggests, though, that both approaches actually constitute property-based solutions in that each involves the imposition of property rights on formerly open-access resources.

Property rights can thus help individuals internalize their externalities.¹³⁹ In the past years, there has been a growing recognition that environmental concerns are essentially property rights problems.¹⁴⁰ In fact, property rights create powerful incentives to preserve the value of what people own.¹⁴¹ In Terry L. Anderson and Donald Leal’s words, the key to overcoming market failure—and climate change is the greatest and widest-ranging market failure¹⁴²—is to establish well-specified,¹⁴³ enforceable,¹⁴⁴ and transferable¹⁴⁵ property rights (what Professor Carol M. Rose calls the “modernist” features of property rights).¹⁴⁶

Efforts to enhance conservation strategies through the creation of property rights in environmental resources are being broadly recommended.¹⁴⁷ According to Anderson, “If we wish to continue to improve the environment, ultimately we are going to have to turn the

¹³⁹ See ROSE ANNE DEVLIN AND R. QUENTIN GRAFTON, *ECONOMIC RIGHTS AND ENVIRONMENTAL WRONGS* 18 (Cheltenham, UK: Edward Elgar Publishing Inc., 1998) at 38.

¹⁴⁰ See PETER HILL AND ROGER MEINERS (editors), *supra* note 127 at xi.

¹⁴¹ See TERRY ANDERSON AND DONALD LEAL, *supra* note 128 at 3.

¹⁴² See Nicolas Stern, *supra* note 67.

¹⁴³ “If property rights cannot be defined, they obviously cannot be exchanged. So the physical attributes of the resource must be specified in a clear and concise manner and must be susceptible to measurement”. See TERRY ANDERSON AND DONALD LEAL, *supra* note 128 at 21. Further, “definition makes it clear which individuals have what rights”. TERRY L. ANDERSON AND LAURA E. HUGGINS, *PROPERTY RIGHTS: A PRACTICAL GUIDE TO FREEDOM AND PROSPERITY* (Hoover Institution Press: 2003) at 20. In this regard, rights must also be capable of registration in widely-available information systems. See Carol Rose, *supra* note 126 at 13.

¹⁴⁴ “Whenever the use of property cannot be monitored or enforced, conflicts are inevitable and trades are impossible”. See TERRY ANDERSON AND DONALD LEAL, *supra* note 128 at 21. Moreover, “Rights must be enforceable through public policing and juridical systems that are available to potential owners to defend the boundaries of the right and prevent other incompatible uses”. Carol Rose, *supra* note 126 at 13.

¹⁴⁵ “Property rights should be widely tradable as legal restrictions on the sale of property preclude potential gains”. See TERRY ANDERSON AND DONALD LEAL, *supra* note 128 at 21. This means that they should be relatively simple in form so that wide audiences understand them and willingly engage in economic transactions. See Carol Rose, *supra* note 126 at 13.

¹⁴⁶ See Carol Rose, *supra* note 126.

¹⁴⁷ See Jonathan H. Adler, *Back to the future of conservation: changing perceptions of property rights & environmental protection* 1 NYU J.L. & LIBERTY 987 (2005) at 12. “Over the last decade there has been a sea change in environmental law and policy, marked by growing interest in market-based instruments of environmental protection. In particular, approaches that explicitly commodify environmental impacts by creating markets for their sale are on the rise. These environmental trading markets (ETMs) now operate in a range of regulatory settings where parties exchange credits to emit air pollutants, extract natural resources, and develop habitat. In fact, every major environmental policy review in the last five years has called for even greater use of ETMs. Markets for environmental commodities represent the new wave of environmental protection”. James Salzman, *Creating markets for ecosystem services*, 80 N.Y.U. L. Rev. 870 at 2.

environment into an asset; make it something that people, who are the stewards, are rewarded for producing”.¹⁴⁸ Examples of these “new” forms of property rights in environmental resources are conservation easements and tradable emission rights, also referred to as “environmental property rights”.¹⁴⁹

Although conservation easements and tradable emission rights appear as “new” forms (or “evolved” forms of property rights) they rely on the “modernist” property features characterized by Anderson and Leal. Accordingly, “environmental property rights” like tradable emission rights must be well-defined, relatively simple, and uniform to understand. For them to work, it should be possible to monitor and measure emissions, and the amounts and types of emissions should be a matter of public record enforceable by administrators and courts.¹⁵⁰ Furthermore, it is worth noticing that these new forms of property rights will come *later* in the development of property rights because they are more complex, have less political support, rely on sophisticated monitoring systems, and are expensive forms of “public infrastructure”.¹⁵¹

Having explored the concept of “environmental property rights”, in the following lines I argue that the CGYs created by the Yasuni-ITT Initiative are not well-defined, enforceable, and

¹⁴⁸ Terry L. Anderson, *Markets And The Environment: Friends Or Foes?* 55 CASE W. RES. 81 (2004) at 6.

¹⁴⁹ See Carole Rose *supra* note 126. However, notice that other authors name these new property rights “quasi-property rights”, “regulatory rights”, or “licensed property. For LEIGH RAYMOND “licensed property” (tradable emission rights) can be distinguished from private property in that the former are subject to future cancellation or modification by the government without compensation to the owner, whereas the latter are permanent rights. However secure, exclusive and well defined, he argues that these are property that have been *licensed* to private owners rather than given or sold to them as a fully vested legal right. See LEIGH RAYMOND, PRIVATE RIGHTS IN PUBLIC RESOURCES: EQUITY AND PROPERTY ALLOCATION IN MARKET-BASED ENVIRONMENTAL POLICY 14 (Washington: RFF Press, 2003). By contrast, for other authors “the resulting right represents a hybrid between a purely public and a purely private right, which has been described as a regulatory result. As a result, emission rights are somewhere between an administrative grant and private property”. MATTHIEU WEMAERE, CHARLOTTE STRECK AND THIAGO CHAGAS, LEGAL OWNERSHIP AND NATURE OF KYOTO UNITS AND EU ALLOWANCES AT 37. IN DAVID FREESTONE AND CHARLOTTE STRECK (editors), LEGAL ASPECTS OF CARBON TRADING, KYOTO, COPENHAGEN AND BEYOND (Oxford University Press, 2009) at 44.

¹⁵⁰ See Carol Rose, *supra* note 126 at 22

¹⁵¹ *Id.* at 21-24.

transferable “environmental property rights”. In fact, even though the Yasuni Fund aims to contribute to abate global warming through the creation of a new currency (the CGYs), the problem with the design of the proposal is that, in actuality, contributors to the fund will not *own* anything at the end of the day. I will unpack these ideas next.

First of all, the content of the CGYs is not clear and cannot be measured or registered. What are the CGYs? They are certificates issued by a sovereign state (Ecuador) containing the unilateral promise to forgo part of its oil reserves (the ITT oil reserves) for perpetuity. However, the CGYs do not represent a portion of the oil reserves at stake, an oil barrel, or even a real avoided carbon emission. Contributors to the Yasuni Fund are buying nothing more than a bona fide promise from Ecuador. Sadly enough, it is a promise that the Ecuadorian government may, and I am convinced that it certainly will, breach sometime in the near future subject to the swings of political pendulums.

It is true that the CGYs will include reference to the metric tons of avoided carbon according to the price of the EUAs market at the time of the transaction. Does this make them an avoided carbon emission? I think not, since that feature is either merely referential (depending on *how much* you pay, and *when* you pay, you will buy more or fewer avoided carbon emissions) or subject to the future recognition of CGYs as carbon credits under current or post-Kyoto regimes. Thus the weakness of the CGYs relies on the fact that they have been created in reference to other carbon markets, and that their value depends on whether other carbon markets accept them

as inter-exchangeable currency in the future¹⁵² (what some refer to as the “linking” of emissions trading regimes).¹⁵³

In order to see the problem more clearly, I will now compare the CGYs with carbon credits issued under the Kyoto Protocol’s Clean Development Mechanism (CDM). A “Certified Emission Reduction” (CER) is a unit representing a ton of carbon dioxide-equivalent sequestered or abated. It represents an entitlement to release a certain quantity of GHG into to the atmosphere.¹⁵⁴ A CER is an *effective* and *actual* ton of carbon reduction because it is issued after the implementation of a given CDM project in a developing country that is party to the Kyoto Protocol and has effectively reduced carbon emissions due to the “additionality”¹⁵⁵ of that project. CERs “represent a reduction of GHG emissions resulting from a defined project activity, calculated on the basis of the comparison between the level of verified actual emissions and the baseline scenario”.¹⁵⁶ Further, in this scheme carbon reductions are real and measurable units,¹⁵⁷ which are monitored, verified, and issued by independent entities. In addition, CERs are widely recognized in both the Kyoto and voluntary carbon markets and are easily exchangeable as a way

¹⁵² For a discussion on whether an “emission tradable right” qualifies as a currency, a commodity or a security, *see e.g.* Jillian Button, *Carbon: commodity or currency? the case for an international carbon market based on the currency model*, 32 HARV. ENVTL. L. REV. 571.

¹⁵³ “Emission trading schemes are linked if a participant in one scheme can use a carbon unit issued under another scheme to meet compliance obligations. Thus, as a result of linking, units are considered equivalent for compliance purposes without requiring some form of individual review and approval prior to each transaction”. MICHAEL MEHLING, LINKING OF EMISSIONS TRADING SCHEMES. IN DAVID FREESTONE AND CHARLOTTE STRECK (editors), *supra* note 149 at 112.

¹⁵⁴ *See* MATTHIEU WEMAERE, CHARLOTTE STRECK AND THIAGO CHAGAS, *supra* note 149 at 37.

¹⁵⁵ “Additionality” is a principal condition for the eligibility of a project under the CDM. A CDM project activity is *additional* if anthropogenic emissions of greenhouse gases by sources are reduced below those that would have occurred in the absence of the registered CDM project activity. In other words, additionality is the requirement that the GHG emissions after implementation of a CDM project activity are lower than those that would have occurred in the most plausible alternative scenario to the implementation of the CDM project activity, such as the business-as-usual case (that is, the continuation of current emission levels in the absence of the CDM project activity). Adapted from CDM Rulebook, available at <http://www.cdmrulebook.org/84>

¹⁵⁶ MATTHIEU WEMAERE, CHARLOTTE STRECK AND THIAGO CHAGAS, *supra* note 149 at 43.

¹⁵⁷ *See id.* at 44.

to help Annex I parties fulfill their reduction targets. In short, CERs are well-defined, enforceable, and transferable rights.

By contrast, the CGYs are not the product of a *real, effective, and measurable* sustainable development project aimed to reduce carbon emissions. They do not represent a ton of avoided carbon because the certificate is issued according to the face value in US dollars of the contribution, not the actual reduction. The amount is then *converted* to referential carbon tons according to the amount paid in a given time. This is why the CGYs are *non-effective* and *non-actual* avoided carbon reductions issued by Ecuador (which by the way is certainly not an independent body as the one issuing CERs). In sum, the CGYs are ill-defined, non-measurable, and non-recordable unilateral promises. Simply put, the CGYs are paper-rights.

Second, the CGYs are not well suited to assure that Ecuador will ultimately comply with its obligation to forgo the oil reserves in the future.¹⁵⁸ In my opinion, the incentives are not correctly aligned. The CGYs cannot be enforced by courts as they do not represent a well-defined, measurable, and recorded right. No court, domestic or international, could solve any controversy around a CGY transaction or, especially, could dare to reverse a potential decision of Ecuador to exploit the ITT oil reserves. As a sad anticipation of what will happen sooner or later, the mere text of the certificate includes a provision stating that “in the event that the Government defaults on its commitment and decides to initiate oil prospecting in the Yasuni ITT oil fields, the CGYs will entitle the holders to be reimbursed by the Government”.¹⁵⁹ As they do not represent a right or a sufficient title, the CGYs cannot stop Ecuador from breaching the oil

¹⁵⁸ “The skeptic will fear that Ecuador will take the money now and drill later. For this reason, the guarantee designed into the Yasuni-ITT Initiative will help keep the incentives aligned should the political pendulum swing and some future government repudiate the commitments made by the Correa government” JOSEPH HENRY VOGEL, *supra* note 60 at 25.

¹⁵⁹ *See* Trust Fund TOR at § 26-30.

moratorium. Finally, given that a CGY is not a clear and recognizable currency to the rest of the world, it cannot be easily and widely transferred across borders.

For all the above, I consider that the CGYs do not represent “environmental property rights”, and are therefore insufficient to attain the objectives of the initiative.

(c) *Lack of institutional framework*

As pointed out in the previous Section, one of the weaknesses of the Yasuni-ITT Initiative is the fact that it is a unilateral effort lacking an institutional framework. Unlike carbon credit transactions under the Kyoto Protocol, the CGYs lack the institutional skeleton that gives CERs its definition, measure, recordability, and tradability features. Although it is true that some markets emerge without an institutional support, like the voluntary market of carbon credits, it is also true that such markets have emerged parallel to and inspired by the Kyoto CERs market.

The lack of an institutional framework may prove to be a real obstacle for the replication of the proposal in other Amazonian states, as purported by Ecuador and the UNDP. The eventual success of the project relies on the future availability (and willingness) of other carbon markets to validate, homologate or convert the CGYs as exchangeable currency equivalent to CERs or carbon credits, whatever the *conversion rate* the parties agree on. Simply put, the CGYs are conditioned to the future (and contingent) “linking” of carbon emission trading schemes.

Certainly, unilateral efforts are courageous, especially when they originate from developing nations. But in the absence of institutional support, unilateral endeavors like Ecuador’s risk becoming ineffective or condemned to have domestic relevance, if any.

(d) *Lack of ripeness of property rights in Ecuador*

Following Professor Rose's line of reasoning, "environmental property rights" are sophisticated and complex forms of property rights, which mean that they "are likely to come last of all in the infrastructure train of roads, property rights and environmental rights".¹⁶⁰ As mentioned before, these kinds of property rights rely on "modernist" property features (see *supra* Section III.2).

The problem with Ecuador, as with many other developing nations, is that its property boundaries are not settled yet. Consequently, Ecuador is not ready to *evolve* to a new generation of property rights. As a matter of fact, the boundaries of indigenous peoples' territories, the Yasuni National Park and the ITT oil reserves are not yet completely defined in legal and physical terms (see *supra* Section I.1). On the contrary, in the Amazonian region of Ecuador there is a convergence of conflicting and overlapping interests between communities, state, and oil companies.

Furthermore, Ecuador's natural resources legal regime exacerbates the lack of predictability and rule of law. In Ecuador the law creates a difference between subsurface titleholders (natural resources belong to the nation, meaning that there is no private property over them), and surface titleholders (it allows private property but does not grant control over subsurface resources).

In Ecuador, current use-specific national laws pose a number of conflicts, rendering insecure rights by lack of exclusive ownership. Cultural systems vary widely in their land ownership systems, creating equitable concerns. Subsurface rights infringe upon surface rights, precluding exclusive ownership. Enforcement of any existing property rights is compounded by conflicting laws and a weak judiciary (*emphasis added*).¹⁶¹

¹⁶⁰ Carol Rose, *supra* note 126 at 23.

¹⁶¹ Kristen Hite, *Back to the Basics: Improved Property Rights can Help Save Ecuador's Rainforests*, 16 GEO. INT'L ENVTL. L. REV. 763 (2004) at 5.

Moreover, the government is entitled to grant surface easements guaranteeing subsurface extraction in favor of oil companies.¹⁶² In the Amazon, this provision affects primarily indigenous peoples who find themselves coexisting with surrounding oil exploitation projects licensed by the government, but have no legal right to oppose to the carrying out of such activities of “national interest”. In addition, oil extraction within national parks may be permitted by the government on legal grounds.¹⁶³

Overall, Ecuador’s property regime is characterized by a number of incompatible and competing uses emerging as a result of conflicting laws, the impossibility of surface users to exclude subsurface uses, and weak law enforcement.¹⁶⁴ It goes without saying that the existence of numerous rights holders frustrates a socially desirable outcome. This situation resembles the so-called “tragedy of the anti-commons”, that is, a situation where too much property rights wrecks markets.¹⁶⁵

In this context, where “modernist” property infrastructure is not (yet) in place, new forms of property rights are unlikely to appear. This means that property rights cannot naturally evolve to the next generation of rights because the Amazon lacks the minimum modernist features

¹⁶² *See id.* at 10.

¹⁶³ *See id.*

¹⁶⁴ *See id.* at 12.

¹⁶⁵ *See* MICHAEL HELLER, *THE GRIDLOCK ECONOMY, HOW TOO MUCH OWNERSHIP WRECKS MARKETS, STOPS INNOVATION, AND COSTS LIVES* (New York: Basic Books, 2008). In this line, “because too many people each may have the right to use or to exclude, the resource may be wasted in a tragedy of the . . . anticommons.” Michael A. Heller, *The Boundaries of Private Property*, 108 *YALE L.J.* 1163. “The anticommons is defined simply as the inefficient use of a specified piece of property that arises when multiple parties have the right to exclude all others from using that property, either in part or in whole. In a sense, the anticommons is the mirror image of the commons, which occurs when multiple owners have an unlimited right to use a limited resource. Whereas a commons typically results in the overutilization of the shared resource, an anticommons generally results in the underutilization of the shared resource.” Robert L. Scharff, *A Common Tragedy: Condemnation and the Anticommons*, 47 *NAT. RESOURCES J.* 165.

described above. Hence before moving toward a new system Ecuador has a pending task to finalize the construction of the property “infrastructure” in the Amazon region.¹⁶⁶

(e) Disregard of indigenous peoples’ rights

Since 2007 different Ecuadorian agencies, in collaboration with non-governmental organization have been discussing the Yasuni-ITT Initiative. I have no information on whether indigenous peoples were consulted in the structuring of the proposal. What is clear, though, is that indigenous peoples are not currently part of the management of the Yasuni Fund, nor have they been empowered to participate in the decision making of which projects are to be executed with the collaborations. As Davis contends,

it is not clear, however, how President Correa proposes to handle the rights of indigenous peoples who call the ITT oilfield and surrounding areas home. While he has indicated that his proposal would protect these people’s traditional way of life, the details of this aspect of the proposal have not yet fully emerged (*emphasis added*).¹⁶⁷

Here I see two main contingencies. First, the lack of consultation and participation of indigenous peoples affect the legitimacy of the project, and may also amount to a violation of Ecuador’s international human rights obligations. This is why the exclusion of indigenous peoples from forest conservation strategies makes little sense, especially when they are the natural guardians of the forest they inhabit.

[A]greement seems to be forming around the notion that many of the past problems with forest protection could have been avoided if free, prior, and informed consent had been extended to those who know the forest best: indigenous communities and cultures that have lived harmoniously in forests for many centuries. Thus, the key questions may be whether decisions affecting indigenous peoples’ lives will continue to be made without their meaningful (as opposed to *pro-forma*)

¹⁶⁶ For more on property infrastructure and roads, see Carol Rose, *supra* note 126 at 23.

¹⁶⁷ Tracy C. Davis, *supra* note 4.

participation or whether indigenous communities have the right to speak for the forests and their deep connection with them (*emphasis added*).¹⁶⁸

Second, indigenous peoples may eventually sue the government in an attempt to obtain an interest over the Yasuni Fund. Although the legality of their claim may be contested (after all, indigenous peoples own the surface lands but not the oil reserves), this may result in further delays and more negotiations, deterring international cooperation through the UNDP.

Furthermore, it is worth noting that any decision that Ecuador undertakes with regard to the Yasuni National Park has the potential to impinge on indigenous peoples' free exercise of their ancestral territories, impairing their legal title and the bundle of rights recognized therein. This is why any alternative to abate climate change using the lands of indigenous peoples, and most importantly, using the natural resources located therein, must actively involve them.

In this Section I have tried to show that Correa's proposal is ill-suited to attain the objective of abating climate change. Notwithstanding its cosmopolitan breath, the proposal has several structural problems that seriously affect its scope and transcendence, as proven by the slow support that the project has received to date by other nations. Although the Yasuni-ITT Initiative is already in place, I think there are other alternative models that may, from a property-based perspective, attain the same objectives in forest conservation, protection of indigenous peoples, and carbon sequestration in a more efficient manner. I will address these alternatives in the following and final Section.

IV. The alternatives

¹⁶⁸ Donald M. Goldberg and Tracy Badua, *Do people have legal standing? Indigenous peoples, global warming and human rights*, 11 BARRY L. REV. 59.

In this Section I propose three alternatives to Correa's model. First, selling the oil reserves; second, valorizing the ecosystem services; and third, establishing a conservation easement.

(a) Selling the oil reserves

Ecuador's proposal is based on an oil moratorium which relies entirely on the bona fide of the government. An alternative way is to sell the ITT oil reserves. By a relatively simple purchase contract, Ecuador could transfer—at market price—the ITT oil reserves to a third party, say, an NGO, a multilateral organism, a corporation, a trust, or any other legal vehicle. By transferring the property to an independent vehicle, the decision of whether to exploit the oil reserves is taken away from the political control of Ecuador. In this way, the contingency of a future Ecuadorian government breaching the oil moratorium is eliminated significantly. (Note that this alternative model cannot eliminate the political contingency completely, as the risk of expropriation or a taking is latent anyway).

On the other hand, this model has the advantage of creating well-defined, enforceable, and tradable rights. The contributor would not have a paper-right (like a CGY), but rather would hold a share, a quota, an interest or other entitlement over the oil reserves, or even a number of oil barrels, according to the vehicle chosen for the transaction. Hence in this property-based scheme there are well-defined rights (the contributor owns part of the oil reserves), enforceable (controversies are solved by state courts or arbitration according to the contract) and transferable (rights can be transferred freely to other parties).

However promising, selling the oil reserves is not legal under in Ecuador, since natural resources belong to the state and are inalienable pursuant to Ecuador's Constitution.¹⁶⁹ In consequence, while the state is entitled to award concessions contracts to explore and exploit natural resources to private parties, it cannot award private property over the oil reserve itself. For the aforementioned reasons, selling the oil reserves has to be discarded as a feasible alternative to the Yasuni-ITT model.

(b) *Valorizing the ecosystem services*

Forests ecosystems sequester and store vast amounts of carbon dioxide. Indeed, half of the global terrestrial carbon pool is stored in forests.¹⁷⁰ When forest areas are cleared for agricultural or other purposes carbon stored within these ecosystems is released.¹⁷¹ But land use change also sacrifices the future sequestration of carbon by these ecosystems.¹⁷² This is why while afforestation and reforestation are important efforts, for reasons related to land use patterns, younger forests do not store as much carbon as mature forests.¹⁷³ Thus the preservation of primary forests is pivotal in carbon offsetting.

¹⁶⁹ Art. 317.-

Los recursos naturales no renovables pertenecen al patrimonio inalienable e imprescriptible del Estado. En su gestión, el Estado priorizará la responsabilidad intergeneracional, la conservación de la naturaleza, el cobro de regalías u otras contribuciones no tributarias y de participaciones empresariales; y minimizará los impactos negativos de carácter ambiental, cultural, social y económico. (*Emphasis added*)

¹⁷⁰ See David Takacs, *Carbon Into Gold: Forest Carbon Offsets, Climate Change Adaptation, and International Law*, 15 HASTINGS W.-N.W. J. ENV. L. & POL'Y 39.

¹⁷¹ See *id.*

¹⁷² See Laurie A. Wayburn and Anton A. Chiono, *supra* note 134 at 391.

¹⁷³ See *id.* at 392. "Newly planted forestland (which might currently be grazing or agricultural land) is worth less in the short-term as a carbon sink than intact forestland. However, the carbon sink value of newly planted forestland would increase each year as the trees mature until the land matches the annual carbon sink value of an intact forest." Robert DeLay, *supra* note 122 at 8.

Carbon sequestration carried out by primary forests is an example of what ecologists and economists call “ecosystem services”.¹⁷⁴ They are defined as

the processes of ecosystems that directly or indirectly support human wellbeing. These services may be grouped into four broad categories according to the functions they perform: regulation, habitat, production and information functions. Regulation functions relate to the capacity of ecosystems to regulate essential ecological processes as the regulation of global climate. . . . While all of these services are important, regulation functions are essential to a healthy [and] functioning biosphere (emphasis added).¹⁷⁵

Ecosystem services are generally taken for granted. Currently, efforts to valorize ecosystem services are undertaken in different parts of the world. Examples include incentivizing landowners of tropical areas to preserve primary forest mass (that is, a commitment not to cut down the trees) or to reforest previously logged areas. Although such mechanisms were not adequately addressed under the Kyoto Protocol, current discussions within the UNFCCC include programs like Reducing Emissions from Deforestation and Forest Degradation in Developing Countries (REDD).

This “forest carbon offset” approach is relatively simple, has proven relatively successful and has been considered for future international agreements.¹⁷⁶

The forests of the global South offer an alluring financial and ecological sink: If you can pay poor governments and/or poor people to reforest or not deforest, and you can get credit for the resulting saved carbon credit that you can use to offset your emissions, you can both sell your emissions reduction credits, and continue business as usual in the North.¹⁷⁷

¹⁷⁴ “Largely taken for granted, healthy ecosystems provide a variety of such critical services. Created by the interactions of living organisms with their environment, these “ecosystem services” provide both the conditions and processes that sustain human life--purifying air and water, detoxifying and decomposing waste, renewing soil fertility, regulating climate, mitigating droughts and floods, controlling pests, and pollinating plants”. James Salzman, *supra* note 144 at 2.

¹⁷⁵ Laurie A. Wayburn and Anton A. Chiono, *supra* note 131 at 393.

¹⁷⁶ “A project developer plants trees to reforest a degraded ecosystem, or ensures that a forest that would have been degraded or felled is, instead, preserved. The developer can then sell the carbon, in the form of carbon credits now sequestered in the trees and soil, for a contracted period of time”. *See* David Takacs, *supra* note 170.

¹⁷⁷ *Id.*

The application of the “forest carbon offset” approach to the Yasuni National Park would find great sympathy in the international community, even in a context of uncertainty concerning the post-Kyoto rules, as it is considered an internationally-accepted measure to mitigate climate change.¹⁷⁸ Therefore, it is imperative to valorize and compensate the ecosystem services provided by the Yasuni National Park for carbon sequestration. World citizens are all free riders, profiting from the clean air and carbon offsetting the Amazon forest provides, but not sharing the costs for its preservation:

Many of the benefits provided by forests are currently considered part of the global commons and are freely available for everybody. Forests purify air. . . . and act as carbon storehouses - all of which humans treat as unlimited and free services. Typically, no legal rights and consequently no monetary value are assigned to these services (*emphasis added*).¹⁷⁹

In this alternative model the incentives are placed correctly. It fosters Ecuador to conserve, protect, and restore its forests in order to obtain the carbon credits that it can later sell to developed nations. Developing policy mechanisms that provide incentives for forest protection “would help minimize the current market failures that allow for the destruction of tropical forests worldwide”.¹⁸⁰ The money obtained could be invested in public programs and policies aimed at enforcing environmental legislation, providing support for economic alternatives to felling of the trees.¹⁸¹

¹⁷⁸ JAN FEHSE, FOREST CARBON AND OTHER ECOSYSTEM SERVICES: SYNERGIES BETWEEN THE RIO CONVENTIONS. IN CHARLOTTE STRECK ET AL. (EDITORS), CLIMATE CHANGE AND FORESTS: EMERGING POLICY AND MARKET OPPORTUNITIES (Baltimore MD: Brookings Institution Press, 2008) at 59.

¹⁷⁹ CHARLOTTE STRECK ET AL., CLIMATE CHANGE AND FORESTRY: AN INTRODUCTION. IN: *Id.* at 7.

¹⁸⁰ ROSIMEIRY PORTELA, ET AL., THE IDEA OF MARKET-BASED MECHANISMS FOR FOREST CONSERVATION AND CLIMATE CHANGE, IN: *id.* at 23.

¹⁸¹ STEPHAN SCHWARTZMAN AND PAULO MOUTINHO, COMPENSATED REDUCTIONS, IN: *id.* at 231.

One of the crucial questions that emerges in the context of REDD is how the rights of indigenous peoples and local communities will be protected.¹⁸² This model will require involving indigenous peoples in the program, not only to avoid potential human rights contingencies but to ensure the conservation objectives in the long run. Since REDD programs would demand protection of forests, “these initiatives may affect the property rights of indigenous peoples, who may find that access or use has been restricted or curtailed altogether on lands used for these projects”.¹⁸³ Thus, REDD programs ought to consider indigenous peoples’ rights such as sharing in the financial benefits of REDD, the rights to participate in decision-making around REDD schemes, and the rights to have their knowledge about forestry resources respected.¹⁸⁴ I understand that this will not be simple or cheap, as the transaction costs of negotiating with each indigenous community are significant.

Notwithstanding the above, carbon offsetting is not a panacea. There are some significant difficulties related to valorizing and compensating ecosystem services as complex as carbon sequestration. First of all, no one can assure that the trees will stand forever. Sooner or later they will be cut down for agricultural uses, or will be lost to fire, pests or other disruptions.¹⁸⁵ The forest mass cannot be permanently guaranteed. The point is that even though carbon sequestration through avoided deforestation may have temporary benefits, as well as act as a bridge to clean energy,¹⁸⁶ carbon offsetting would not provide a *permanent* solution.

¹⁸² Rosemary Lyster, *REDD+, Transparency, Participation and Resource Rights: the Role of Law* (June 2010) at <http://ssrn.com/abstract=1628387>

¹⁸³ Donald M. Goldberg and Tracy Badua, *supra* note 168.

¹⁸⁴ Rosemary Lyster, *supra* note 182.

¹⁸⁵ ROBERT O’SULLIVAN AND RICK SAINES, INTERNATIONAL MARKET SOLUTIONS TO TROPICAL RAINFORESTS. IN: DAVID FREESTONE AND CHARLOTTE STRECK (editors), *supra* note 149 at 591.

¹⁸⁶ *See* Robert DeLay, *supra* note 122 at 9.

Second, this model has a risk of creating a “leakage effect”, that is to say, restoring a forest in one place would lead someone else to deforest elsewhere due to market pressures. Moreover, the government may preserve one forest from planned logging and instead offer timber concessions elsewhere.¹⁸⁷ In addition, logging companies put out of business in one country may instead cut timber in a neighboring country.¹⁸⁸

Third, monitoring and certification costs can be considerably expensive. They not only require putting in place surveillance technology, but also calculating carbon absorption over time, which poses serious technical challenges, particularly under different climate change scenarios.¹⁸⁹

Fourth, this scheme requires allocating potential carbon credits. In Ecuador, this is troublesome as it is not yet clear who will be entitled to carbon credits vis-à-vis the conflicting rights between indigenous peoples and the government. As mentioned before (*supra* Section I.1), the Yasuni National Park partially overlaps indigenous peoples’ territories that are actually in possession of areas of the forest. Hence allocation of potential carbon credits is troublesome.

Finally, and most importantly, this model relies on the actions of the government. As in the Yasuni-ITT Initiative, there is a latent and unavoidable risk that the government could decide in the future to use the lands to increase its agricultural frontier. When political actors control the solution, there is an enormous risk of a deviation in the objectives.

Although the valorization of ecosystem services is not a bad idea, I will explore a final alternative, namely, the establishment of a conservation easement over the Yasuni National Park.

¹⁸⁷ See David Takacs, *supra* note 170 at 9.

¹⁸⁸ See *id.*

¹⁸⁹ See *id.*

(c) *Establishing a conservation easement*

Conservation easements present a powerful alternative to traditional command-and-control approaches, as broad prohibitions to clear forest lands have proven to be ineffective methods to deter deforestation in the Amazon.¹⁹⁰ Through the conveyance of conservation easements, landowners would receive enough economic incentives to preserve natural forests instead of clearing them.

In the United States, conservation easements are the fastest-growing method for protecting land and attaining land protection goals,¹⁹¹ even though they are not exempted from criticism.¹⁹²

A conservation easement is

a non-possessory interest in a parcel of land created by deeds executed with the same formalities associated with real estate conveyances. . . . [It is a] non-regulatory, voluntary conservation tool. Essentially. . . . rights typically removed from the land by a conservation easement include development and mining. Those that remain with the land are generally those seen as nondestructive and otherwise conducive to the protection of the resource itself (*emphasis added*).¹⁹³

[It imposes] limitations or affirmative obligations the purposes of which include retaining or protecting natural, scenic, or open-space values of real property, assuring its availability for agricultural, forest, recreational, or open-space use, protecting natural resources, maintaining or enhancing air or water quality, or preserving historical, architectural, archaeological, or cultural aspects of real property.¹⁹⁴

¹⁹⁰ See Kristen Hite, *supra* note 161.

¹⁹¹ See JULIE ANN GUSTANSKI AND ROSERICK H. SQUIRES (editors), *PROTECTING THE LAND: CONSERVATION EASEMENTS PAST, PRESENT AND FUTURE* 22 (Canada: Island Press, 2000).

¹⁹² “The response in both the legal academic literature and the popular press to the rapid growth in the number of private land trusts and the total acreage protected by conservation easements has been mixed. Legal scholars disagree about the efficacy and efficiency of conservation easements, the likelihood of their durability, the flexibility with which they suit diverse current conservation norms, their ability to adapt to shifting conservation norms in the future, and their distributional fairness. For some, conservation easements represent a cheap, flexible, decentralized, and cost-effective way to protect land with important conservation attributes. Others believe that conservation easements, and their rapid recent growth, constitute an under-examined and unwise use of limited public funds and conservation resources -- one that causes potentially unfair distributional side effects in the present and that may lock future generations into inefficient and undesirable conservation commitments in the future”. Zachary Bray, *Reconciling development and natural beauty: the promise and dilemma of conservation easements*, 34 HARV. ENVTL. L. REV. 119.

¹⁹³ *Id.* at 14-15.

¹⁹⁴ Melissa Waller Baldwin, *Conservation easements: a viable tool for land preservation*, 32 LAND & WATER L. REV. 89.

Generally speaking, conservation easements are a mixture of different legal concepts: they have some attributes of contracts, some of real property easements, and some of charitable trusts.¹⁹⁵ In the United States conservation easements are mainly statutory creatures.¹⁹⁶ Although conservation easements vary between states, they are generally characterized by the following features:¹⁹⁷ (i) They grant a right or interest in real property, in the form of a restriction, easement, covenant, or condition to protect natural or scenic value; promote forest, recreational or agricultural use; enhance air or water quality; preserve historical or archaeological features; protect habitat or biodiversity. (ii) The landowner is not deprived of possession, but the easement implies a collection of restrictions and affirmative obligations, limiting the exercise of certain ownership rights according to the preservation objectives. (iii) They can be conveyed for a fixed term or perpetuity, and they bind present and future owners of the property with regard to the restricted activity.¹⁹⁸ (iv) They can be recorded in the Public Registry and be enforced in courts, though arbitration is the common option of the parties. (v) They are subject to certain tax benefits.¹⁹⁹

Having written the above, I propose conveying a conservation easement over the surface lands comprised by the ITT reserves within the Yasuni National Park, which are both public and

¹⁹⁵ See C. TIMOTHY LINDSTROM, *A TAX GUIDE TO CONSERVATION EASEMENTS* 5 (Washington DC: Island Press, 2008).

¹⁹⁶ See *id.*

¹⁹⁷ See JULIE ANN GUSTANSKI AND ROSERICK H. SQUIRES (editors), *supra* note 191 at 26-54.

¹⁹⁸ Melissa Waller Baldwin, *supra* note 194.

¹⁹⁹ “The federal and state governments have seen the necessity and importance of preserving land for environmental purposes. Therefore, they reward those landowners who donate some rights in their property enabling that property to be used by a government agency or charitable organization for the public benefit. The federal government has passed laws that provide large tax incentives, which allow for the taxpayer to keep more of his money. The taxpayer can reap the benefits of these laws in the area of his personal federal income tax, federal gift tax, federal estate tax and state's property tax.” Maureen Rudolph and Adrian Gosch, *A practitioner's guide to drafting conservation easements and the tax implications*, 4 GREAT PLAINS NAT. RESOURCES J. 143.

communal lands. The natural candidates for conservation market-makers are environmental NGOs like The Nature Conservancy,²⁰⁰ which may offer payments to Ecuador and/or to the indigenous peoples for conservation easements, that is, by entering into a contract whereby they compromise to preserve the forest. In addition to NGOs, global affluent citizens can contribute to the financing of conservation easements. Of course, establishing a conservation easement will not be feasible until conflicting interests around the Yasuni National Park are settled. This demands that boundaries are clearly defined and surface lands titled and recorded (see *supra* (b)).

In my opinion, a conservation easement approach is an ideal tool that focuses on the trees and not on the oil reserves. First, conservation easements are well-defined (the limitations on the rights of the landowner are clearly established on a contract which is recordable in the public registry, bind present and future owners, and can even be fixed for perpetuity); enforceable (the rights of both parties can be enforced by courts or arbitration tribunal); and tradable property rights (the contractual rights can be transferred freely to other parties, without affecting the main conservation obligations stipulated in the contract). These “modernist” features—which are latent in conservation easements—will guarantee long-term conservation results, by contrast to the uncertainty engendered by Correa’s proposal.

Second, provided the economic incentives are well placed, conservation easements can be sufficiently lucrative to the government of Ecuador for it to respect its contractual obligations to protect the forests. In other words, if preserving the forest is sufficiently profitable, there are enough reasons why Ecuador can forgo its right to exploit the ITT oil reserves. Moreover,

²⁰⁰ See Kristen Hite, *supra* note 161.

nothing impedes combining a conservation easement with carbon offsetting measures.²⁰¹ Simply put, it is possible to include carbon emission rights for avoided GHG emissions in conservation easement schemes, thus increasing the revenues for the surface land owners.

Third, a conservation easement will not affect indigenous peoples' possession of the lands, in contrast to Correa's proposal. Notice, however, that establishing a conservation easement does require the cooperation of indigenous peoples to fulfill the conservation objectives in a comprehensive manner (see *supra* (b)).²⁰²

To sum up, conservation easements are well-suited property-based instruments to materialize the cosmopolitan values. Such measures demand the voluntary and personal contributions of all capable citizens to help abate climate change. In other words, conservation easements may serve as an instrument for cosmopolitan climate justice.

Conclusion

Climate change affects all human beings regardless of where they live and what citizenship they hold. Immediate and effective *global* measures are required to solve this *global* "tragedy of the commons". From a cosmopolitan justice approach, I have shown that each individual has the moral duty toward all human beings to help abate global warming by reducing their GHG emissions, engaging in carbon-offsetting voluntary programs, and thus mitigating the excruciating and transnational effects of climate change.

²⁰¹ See James L. Olmsted, *Carbon Dieting: Latent Ancillary Rights to Carbon Offsets in Conservation Easements*, 29 J. LAND RESOURCES & ENVTL. L. 121.

²⁰² As mentioned before, the conservation strategies comprising indigenous peoples' ancestral lands that ignore their participation rights are more than questionable. By engaging indigenous peoples (as the owners or possessors of the surface lands comprised in conservation easements contracts) this instrument can prove not only to respect native peoples' rights but also to give surety to the program's sustainability in the long run.

Notwithstanding my critique, one virtue of the Yasuni-ITT Initiative is that it represents a call from the developing world to the developed world for the immediate adoption of globally effective measures within the UNFCCC fora, such as the adoption of REDD or similar programs, amid this period of diplomatic procrastination. The Amazonian countries desperately claim for the valorization of the ecosystem services that their forests provide to the world for free. It is about time the global citizens stop free riding and begin to pay for the carbon absorption and climate regulation services provided by the largest rainforest on Earth, an essential facet in the existence of human kind.