

FROM KYOTO TO QUITO: REASSESSING OIL MORATORIUM AS AN EFFECTIVE CLIMATE CHANGE POLICY FROM A PROPERTY-BASED APPROACH

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I. INTRODUCTION

Leaving oil reserves unexploited in exchange for economic compensation has recently been 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”¹ and for having the “potential to become a paradigm for global rainforest conservation programs.”² In 2007, Ecuador became the first nation-state to adopt this alternative when President Rafael Correa announced his decision not to exploit the Ishpingo Tambococha Tiputini (ITT) oil fields—one of the largest in the country that overlaps the Yasuní National Park and indigenous lands—in exchange for a “fair compensation.”³ Ecuador, a country where a third of the state’s resources depend upon the exploitation of oil, is seeking compensation from the international community for at least half of the revenue that would have otherwise come from extracting the oil of the ITT (namely \$3.6 billion).⁴ Avoided carbon emissions, forest and biodiversity conservation, and the protection of indigenous peoples are among the advantages underscored by the proponents of the Yasuní-ITT Initiative, which is said to “lay the foundations for a *more human and fair civilization*.”⁵

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¹ See Graciela Chichilnisky, *Foreword* to JOSEPH HENRY VOGEL, *THE ECONOMICS OF THE YASUNÍ INITIATIVE: CLIMATE CHANGE AS IF THERMODYNAMICS MATTERED*, at xii, xvi (2009).

² Kelly Hearn, *Deep in Ecuador’s Rainforest, A Plan to Forego an Oil Bonanza*, YALE ENV’T 360 (Sept. 13, 2010), http://e360.yale.edu/feature/deep_in_ecuadors_rainforest_a_plan_to_forego_an_oil_bonanza/2315/.

³ See Rafael Correa, President of the Republic of Ecuador, Speech at the 62d Period of Sessions of the General Assembly of the United Nations: High Level Dialogue On Climate Change (Sept. 24, 2010).

⁴ Hearn, *supra* note 2.

⁵ Speech by President Rafael Correa, *supra* note 3 (emphasis added).

This paper argues, however, that forgoing a country's oil reserves though a moratorium will prove to be ineffective climate change policy in the long-run because it represents a nonenforceable, unilateral promise, which is subject to the political pendulum. Rather than relying on state-planned solutions, Amazonian states such as Ecuador should move toward market-based arrangements that favor carbon sequestration strategies by preserving forests through "environmental property rights."

Part II provides an overall background on the creation and boundaries of the Yasuní National Park, the ITT oil reserves, and the territories of its indigenous peoples. It then describes the main features of the Yasuní-ITT Initiative based on the agreements entered into between Ecuador and the United Nations in 2009, which set forth the creation of a trust fund to channel international contributions to the program.

Part III discusses the reasons supporting Ecuador's claim to the international community. It also describes different climate-justice theories that have been offered to justify compensation from the Global North to the Global South. This paper focuses particularly on the inconsistencies of the inter-state justice approach that vindicates compensation based on developed nations' historical emissions and ability to pay, which, to date, are the underlying justification to main international treaties on climate change. This paper concludes that Correa's proposal is justifiable from a cosmopolitan justice standpoint.

Part IV criticizes the Yasuní-ITT Initiative by stressing that a property-based approach would reduce the likelihood that a post-Correa government would decide to disregard the oil moratorium in the future. This critique raises the following arguments: (1) the Initiative's excessive focus is on the oil and not on the trees, (2) the fact that it does not create "environmental property rights," (3) the lack of institutional framework supporting the program, (4) the lack of ripeness of the property rights regime in Ecuador, and (5) the Initiative's potential to impinge on indigenous peoples' rights over their ancestral territories.

Finally, Part V proposes three alternatives to President Correa's model: (1) selling the oil reserves, (2) paying Ecuador for the ecosystem services that the Yasuní National Park provides, and (3) establishing conservation easements in the Amazon. This paper concludes that the last of these alternatives is the most feasible option and should be taken into account in future climate change policy in Amazonian states.

II. THE YASUNÍ-ITT INITIATIVE⁶

A. General Background

The Yasuní National Park is located in the Amazon Region and is the largest protected area in Ecuador comprising 982,000 hectares (see Figure 1). It was created in 1979 and is considered one of the most diverse areas in the world.⁷ In 1989, the Yasuní National Park was declared a World Biosphere Reserve by the United Nations Educational, Scientific and Cultural Organization (UNESCO) for its unique biodiversity.⁸ Currently, the Ministry of Environment of Ecuador, an entity facing a limited budget

⁶ 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); Laura Rival, *Ecuador's Yasuni-ITT Initiative: The Old and New Values of Petroleum*, 70(2) ECOLOGICAL ECONOMICS 358 (2010); Matt Finer, Remi Moncel and Clinton N. Jenkins, *Leaving the Oil Under the Amazon: Ecuador's Yasuni-ITT Initiative*, 42(1) BIOTROPICA 63 (2010), at 64; Matt Finer, Clinton N. Jenkins, Stuart L. Pimm, Brian Keane, and Carl Ross, *Oil and Gas Projects in the Western Amazon: Threats to Wilderness, Biodiversity, and Indigenous Peoples*, PLOS ONE 3(8) (August 13, 2008) <http://www.plosone.org/article/info:doi/10.1371/journal.pone.0002932>; Daniel Gordon, *Ecuador Seeks Oil 'Compensation'*, BBC NEWS (Sept. 27, 2007), <http://news.bbc.co.uk/2/hi/americas/7000345.stm>; Alexandra Valencia, *Ecuador, for Pay, Will not Drill in Amazon Reserve*, REUTERS (Aug. 3, 2010), <http://www.reuters.com/article/idUSTRE6724S820100803>; Alberto Acosta et al., *Dejar el Crudo en Tierra o la Búsqueda del Paraíso Perdido* (May 12, 2009), available at http://www.apdh.ec/index.php?option=com_jcollection&view=item&id=5%3Adejar-el-crudo-en-tierra-o-la-busqueda-del-paraiso-&Itemid=77; Alberto Acosta, *La Iniciativa Yasuni-ITT en la Búsqueda del Paraíso Perdido* (Feb. 17, 2010), available at <http://www.amazoniaporlaveda.org/es/files/descargas/ITT-USFQ.pptx>; Alberto Acosta, Professor & Former Minister of Energy & Mines of Ecuador, Conference at the University of Maryland, Yasuní, *Building the Road to the Impossible: Leaving the Crude Oil Underground* (May 23, 2007), available at http://www.amazoniaporlaveda.org/es/files/descargas/presentacion_itt_acosta_eng.ppt; OILWATCH, *KEEP OIL UNDERGROUND THE ONLY WAY TO FIGHT CLIMATE CHANGE* (2007), available at http://www.amazoniaporlaveda.org/es/files/keep_oil_underground.pdf; SOS YASUNÍ, <http://www.sosYasuni.org/en> (last visited Nov. 9, 2011); YASUNÍ-ITT, <http://Yasuni-itt.gob.ec/> (last visited Nov. 9, 2011).

⁷ See Hearn, *supra* note 2, ("An average upland hectare in Yasuní 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."); and Margot S. Bass, Matt Finer, Clinton N. Jenkins, Holger Kreft, Diego Cisneros-Heredia, Shawn F. McCracken, Nigel C. A. Pitman, Peter H. English, Kelly Swing, Gorky Villa, Anthony Di Fiore, Christian Voigt, Thomas Kunz, and Andy Hector, *Global Conservation Significance of Ecuador's Yasuni National Park*, PLOS ONE 5(1) at 12 (Jan. 19, 2010), <http://www.plosone.org/article/info:doi/10.1371/journal.pone.0002932>.

⁸ See United Nations Educ., Scientific and Cultural Org. (UNESCO) (Jan. 12, 2011), <http://www.unesco.org/mabdb/br/brdir/directory/biores/asp?code=ECU+02&mode=all>; Scientific and Cultural Org. (Jan. 12, 2011), <http://www.unesco.org/mabdb/br/brdir/directory/biores/asp?code=ECU+02&mode=all>; see also *Biosphere Reserves — Learning Sites for Sustainable Development*, UNITED NATIONS EDUC. SCI. & CULTURAL ORG., <http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/biosphere-reserves/> (noting that a Biosphere Reserves are "sites of excellence where new and optimal practices to manage nature and human activities are tested and demonstrated.").

and personnel, manages the park.⁹ The biodiversity value of the Yasuni National Park is simply priceless.¹⁰ Interestingly, in a region challenged by climate change-induced drought, the Yasuni is expected to maintain wet, rainforest conditions.¹¹

The park hosts several indigenous peoples such as the Huaorani, Tagaeri and Taromenane tribes.¹² Studies indicate that almost 10,000 people inhabit the area.¹³ In 1999, the government declared 780,000 hectares of the park an “intangible zone” —an area free of extractive activities— to protect the Huaorani people (*see* Figure 1).¹⁴

Although the government has officially recognized the Huaorani peoples’ right over a portion of this area, specific provisions stipulate this ownership does not comprise the subsoil, which is state property.¹⁵

The Ecuadorian government has zoned 65% of the Amazon for oil activities, including the Yasuni National Park.¹⁶ In fact, several oil companies already operate within the park.¹⁷ Road construction by oil companies “have facilitated colonization, deforestation, fragmentation, and overhunting of large fauna in the northwestern section of the park and illegal logging in the south and west”.¹⁸ Petroecuador, the Ecuadorian state-owned company, currently administers the ITT oil field, which is located in

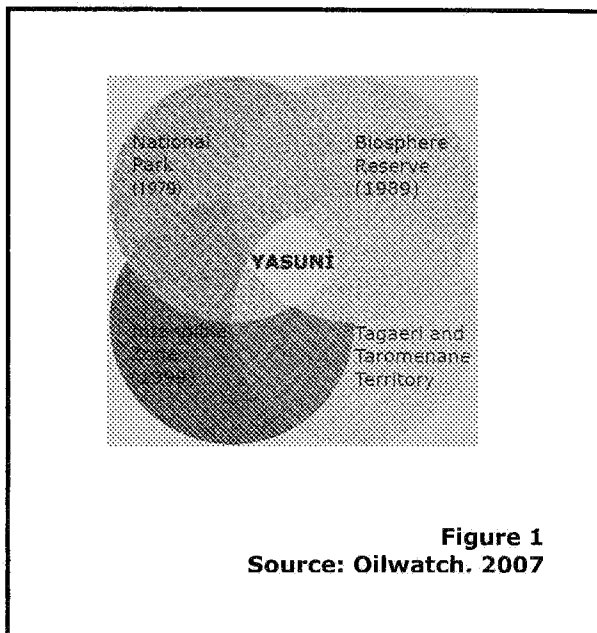


Figure 1
Source: Oilwatch. 2007

⁹ See KEEP OIL UNDERGROUND THE ONLY WAY TO FIGHT CLIMATE CHANGE, *supra* note 7, at 18.

¹⁰ See Rival, *supra* note 6, at 360.

¹¹ See Finer, Moncel and Jenkins, *supra* note 6, at 64.

¹² Davis, *supra* note 6, at 245. See also Rival, *supra* note 6, at 359.

¹³ *Id.*

¹⁴ KEEP OIL UNDERGROUND THE ONLY WAY TO FIGHT CLIMATE CHANGE, *supra* note 6, at 19.

¹⁵ OILWATCH, CONSERVING CRUDE OIL IN THE SUBSOIL 12 (Apr. 12, 2007), available at http://www.sosYasuni.org/en/files/ow_itt_proposal_v8-ingles.pdf. (The Huaorani people are prohibited from obstructing “mining or hydrocarbon exploration and/or exploitation activities undertaken by the national government and/or legally authorized individuals or companies”).

¹⁶ See Finer, Jenkins, Pimm, Keane, and Ross, *supra* note 6, at 4.

¹⁷ See Davis, *supra* note 6.

¹⁸ Bass et al, *supra* note 7, at 2.

the heart of the park (see Figure 2).¹⁹ The oilfield contains 846 million barrels of heavy crude reserves that represent more than twenty percent of the total oil reserves of the country.²⁰ Considering the high density of the crude, the project to exploit the reserves includes a thermoelectric plant, as well as an oil conversion plant to produce light oil and facilitate transportation.²¹ The crude contained in the ITT fields would produce 107,000 barrels a day,²² which actually represent ten days of world oil consumption.²³ Experts claim that the exploitation of the ITT oil fields will generate significant negative social and environmental impacts, threatening the park's wilderness characters and its largely intact mega-faunal assemblage".²⁴

B. The Initiative

Ecuador 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.²⁵ In exchange, Ecuador has asked the international community to compensate the country for at least half of the revenue that otherwise would have come from extracting the oil, namely \$3.6 billion over a thirteen-year period.²⁶

After arduous domestic and international debate,²⁷ in August 2010, the United Nations Development Program (UNDP) and the government of Ecuador agreed on the terms for the establishment of the Yasuní Trust Fund. The signing of the "Memorandum of Agreement for Management and Other Support Services Related to the Ecuador Yasuní-ITT Fund,"

¹⁹ See Carlos Larrea, Professor at Universidad Andina Simon Bolivar, Presentation: Conservation or Oil Extraction in Yasuní National Park? A Transcendental Challenge, available at http://www.sosYasuni.org/en/index.php?option=com_content&view=article&id=111:will-it-be-conservation-or-oil-extraction-in-the-Yasuninational-park&catid=15:campaign (last visited Nov. 9, 2011).

²⁰ *Id.*

²¹ *Id.*

²² *Id.*

²³ See Rival, at 361.

²⁴ Bass et al., *supra* note 7, at 15. See also *Dejar el Crudo en Tierra o la Búsqueda del Paraíso Perdido*, *supra* note 6; and Finer, Jenkins, Pimm, Keane, and Ross, *supra* note 6, at 2.

²⁵ See *Ecuador Yasuni-ITT Trust Fund*, UNITED NATIONS DEV. GROUP, <http://mdtf.undp.org/Yasunii> (last visited Nov. 10, 2011).

²⁶ Hearn, *supra* note 2; Presentation by Larrea, *supra* note 16.

²⁷ See generally, Pamela L. Martin, *Global Governance from the Amazon: Leaving Oil Underground in Yasuní National Park, Ecuador*, available at http://www.sosYasuni.org/en/files/global_governance_from_the_amazon_pamela_martin_isa_2010.pdf (last visited Nov. 9, 2011) (discussing the social movements, both domestic and international, behind the elaboration of the Yasuní-ITT initiative).

dated August 3, 2010 (MOA), and the “Ecuador Yasuní-ITT Fund Terms of Reference,” dated July 28, 2010 (TOR), marked two landmark events in the history of the Yasuní-ITT Initiative.²⁸ The UNDP will manage the Yasuní Fund 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, including states, non-governmental organizations (NGOs), corporations, and individuals.²⁹ The funds raised will be used to finance strategic sustainable development programs as stated in the Ecuadorian national development plan guidelines.³⁰

As a guarantee for keeping the oil in the soil for perpetuity, the government will issue “Yasuní Guarantee Certificates” (YGCs) in United States dollars equivalent to the face value of each contribution.³¹ The YGCs 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.³² They will not earn interest, nor will there be an expiration or maturity date.³³ The maximum total number of YGCs 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.³⁴

The TOR establishes that the contributions to the Yasuní Fund must reach a minimum threshold of \$100 million by the end of 2011; otherwise, the contributions will be reimbursed to donors.³⁵ The TOR provides that “if in the future the world carbon market accepts the YGCs as equivalents of Emission Permits, the Government will issue YGCs for sale to private and/or public entities in mitigating green house gases (GHGs) through avoidance of oil and gas extractions from megabiodiverse areas that are highly socially and environmentally sensitive.”³⁶ In the event that the government defaults on its commitment and decides to initiate oil prospecting in the Yasuní ITT oil fields, the YGCs will entitle the holders to be reimbursed by the government.³⁷

The purpose of the proposal is to help abate climate change by avoiding the release of 407 million tons of carbon dioxide—a consequence

²⁸ See generally Memorandum of Agreement for Management and Other Support Services Related to the Ecuador Yasuní ITT Fund, Gov’t of Ecuador & United Nations Dev. Programme (Aug. 03, 2010), available at <http://mdtf.undp.org/document/download/4494> (hereinafter MOA); Terms of Reference for Ecuador Yasuní ITT Trust Fund, Gov’t of Ecuador & United Nations Dev. Programme (July 28, 2010), available at <http://www.pnud.org.ec/Noticias2010/EcuadorYasuniITTTTrustFundTermsofReference.pdf> (hereinafter TOR).

²⁹ MOA, *supra* note 28, at para. 4.

³⁰ *Id.* at para. 7.

³¹ TOR, *supra* note 28, at para. 26.

³² *Id.*

³³ *Id.*

³⁴ TOR, *supra* note 28, at para. 28.

³⁵ *Id.* at para. 30.

³⁶ *Id.* at para. 37.

³⁷ *Id.* at para. 29.

of burning the ITT oil reserves— into the atmosphere.³⁸ It will also avoid biodiversity destruction and deforestation, protect fresh water from the possible oil operations in the area, respect indigenous peoples' rights, and initiate a post-oil economy by changing the energy matrix of the country.³⁹

To date the regional government of Wallonia (Belgium), and the governments of Chile, China, and Spain have committed to contribute to the Yasuní Fund.⁴⁰ Surprisingly, shortly after the signature of the MOA and notwithstanding its initial posture fostering President Correa's proposal,⁴¹ Germany announced that the country would no longer support the Yasuní Fund.⁴² In relation to the civil society, the Avina Foundation has also channeled funds to finance this project.⁴³

III. WHY SHOULD THE INTERNATIONAL COMMUNITY PAY ECUADOR?

President Correa's proposal asks 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.

A. Climate Justice

Climate change has increasingly become an inescapable phenomenon for everyone, but its effects are especially unavoidable for the poor.⁴⁴ Indeed, poor nations are more vulnerable to climate change than developed

³⁸ *Id.* at para 5.

³⁹ See *id.*

⁴⁰ See, e.g., *Chile Realiza Primer Aporte a Proyecto Yasuní ITT*, EL UNIVERSO (Sept. 15, 2010), <http://www.eluniverso.com/2010/09/15/1/1356/chile-realiza-primer-aporte-proyecto-Yasuni-itt.html>; *Ecuador Yasuní Capital Window*, UNITED NATIONS DEV. GROUP, <http://mdtf.undp.org/factsheet/fund/3EYC0> (last visited Nov. 9, 2011); *Gobierno Regional de Wallonia — Bélgica Compromete Contribución para Iniciativa Yasuni-ITT*, YASUNÍ -ITT (Dec. 10, 2010), <http://Yasuni-itt.gob.ec/blog/2010/12/10/gobierno-regional-de-wallonia-belgica-compromete-contribucion-para-iniciativa-Yasuni-itt/>; *Más Instituciones se Unen a la Iniciativa Yasuní ITT*, YASUNÍ-ITT (Dec. 3, 2010), <http://Yasuni-itt.gob.ec/blog/2010/12/03/mas-instituciones-se-unen-a-la-iniciativa-Yasuni-itt/>; and *España Concreta Contribución a la Iniciativa Yasuní ITT*, YASUNÍ – ITT (Nov. 11, 2010), <http://Yasuni-itt.gob.ec/blog/2010/11/11/espana-concreta-contribucion-a-la-iniciativa-Yasuni-itt/>.

⁴¹ See *Dejar el Crudo en Tierra o la Búsqueda del Paraíso Perdido*, *supra* note 6.

⁴² See Tasmin Walker & Vinicio Chacón, *Alemania Retira Apoyo a Fondo Ecuatoriano para no Explorar Petróleo*, DW-WORLD (Sept. 27, 2010) <http://www.dw-world.de/dw/article/0,,6043578,00.html>.

⁴³ See, e.g., *AVINA Formalizó Entrega de USD 100 Mil para Iniciativa Yasuní ITT* (Jan. 2011), <http://www.avina.net/esp/10-AVINA-formalizo-entrega-de-USD-100-mil-para-iniciativa-Yasuni-ITT.note.aspx>.

⁴⁴ PAUL G. HARRIS, *WORLD ETHICS AND CLIMATE CHANGE: FROM INTERNATIONAL TO GLOBAL JUSTICE* 35 (2010).

ones⁴⁵ and are expected to suffer its consequences disproportionately.⁴⁶ The Intergovernmental Panel on Climate Change (IPCC) says that the consequences of climate change “will fall disproportionately upon developing countries and poor persons within all countries, and thereby exacerbate inequities in health status and access to adequate food, clean water, and other resources.”⁴⁷ In contrast to poor nations, wealthy nations “have more adaptive capacity [as] a small percentage of their economies depend on agriculture[,] [which is] a sector highly vulnerable to climate change. [And] wealthy nations are generally in the cooler, higher latitudes, which also decreases their vulnerability [to climate change].”⁴⁸

Thus, climate change is a profound matter of justice,⁴⁹ and “raises questions concerning the distribution of environmental burdens and benefits” among world nations.⁵⁰ As Steve Vanderheiden states, “[a]nthropogenic climate change presents a case of the world’s affluent benefiting at the expense of the world’s poor”⁵¹ Accordingly, different climate-justice theories have been put forward to justify the moral obligation of rich nations of the Global North to help poor nations of the Global South in climate change relief. This Section summarizes some of them.

⁴⁵ See *id.* at 25 (“[T]he 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”).

⁴⁶ See STEVE VANDERHEIDEN, *ATMOSPHERIC JUSTICE: A POLITICAL THEORY OF CLIMATE CHANGE* 45 (2008). But see Joel B. Smith et al., *Vulnerability to Climate Change and Reasons for Concern: A Synthesis*, in *CLIMATE CHANGE 2001: IMPACTS, ADAPTATION AND VULNERABILITY* 913, 916 (James J. McCarthy et al. eds., 2001) (noting the effects are not uniform in all developing countries) (“The impacts of climate change will not be evenly distributed among the peoples of the world. There is high confidence that developing countries will be more vulnerable to climate change than developed countries, and there is medium confidence that climate change would exacerbate income inequalities between and within countries. There also is medium confidence that a small temperature increase would have net negative impacts on market sectors in many developing countries and net positive impacts on market sectors in many developed countries. However, there is high confidence that with medium to high increases in temperature, net positive impacts would start to decline and eventually would turn negative, and negative impacts would be exacerbated. Estimates of distributional effects are uncertain because of aggregation and comparison methods, assumptions about climate variability, adaptation, levels of development, and other factors.”).

⁴⁷ VANDERHEIDEN, *supra* note 46, at 81.

⁴⁸ See Eric A. Posner and Cass R. Sunstein, *Global Warming and Social Justice*, 31 REGULATIONS 14, 16 (Spring 2008).

⁴⁹ See HARRIS, *supra* note 44, at 35.

⁵⁰ See Simon Caney, *Human Rights and Global Climate Change*, in *COSMOPOLITANISM IN CONTEXT: PERSPECTIVES FROM INTERNATIONAL LAW AND POLITICAL THEORY* 19, 21-22 (Ronald Pierik & Wouter Werner eds., 2010); and Karen L. O’Brien & Robin M. Leichenko, *Winners and Losers in the Context of Global Change*, 93 ANNALS ASS’N AM. GEOGRAPHERS, no. 1, 2003 at 89. (“The effects of [climate] changes are distributed unequally both within and across national boundaries. Greater inequality in the distribution of the costs and benefits of global change implies that, while some sectors are integrating smoothly into the global economic system and are capable of adapting to environmental change, others are becoming marginalized and vulnerable to environmental change.”).

⁵¹ VANDERHEIDEN, *supra* note 46, at 45-46.

1. The “Polluter Pays” (or Corrective Justice) Approach

This climate-justice account is “based on [historical] causality and responsibility.”⁵² It reasons that “those not responsible for causing a problem should not have to pay to fix it; and, in contrast, those who did cause the harm are responsible for righting it.”⁵³ Corrective justice is therefore at the heart of this account.⁵⁴ It requires the developed world — those nations who have contributed to the problem — “to internalise the long-term costs of the activities that have caused the enhanced greenhouse effect.”⁵⁵ In other words, due to “their historical accountability”,⁵⁶ developed nations owe remedial action to those nations or citizens most likely to be harmed by climate change.⁵⁷ The president of the Republic of the Marshall Islands, a country which is located an average of seven feet above sea level, depicts the “polluter pays” argument the following way: “The United States is responsible for [twenty-five] percent of all the [carbon dioxide] 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?”⁵⁸

The corrective justice account presents, however, several theoretical and practical difficulties. First, estimating the extent of the harm caused by climate change is immensely difficult due to the existing scientific uncertainties.⁵⁹ Second, identifying the wrongdoers of climate change seems to be an almost impossible task.⁶⁰ Even if many citizens of developed countries benefit from past GHG emissions, it is unclear how many benefitted and to what extent.⁶¹ What is more, this principle is not

⁵² HARRIS, *supra* note 44, at 38.

⁵³ *Id.*

⁵⁴ See ERIC A. POSNER & DAVID WEISBACH, CLIMATE CHANGE JUSTICE 100 (2010).

⁵⁵ See EDWARD A. PAGE, CLIMATE CHANGE, JUSTICE AND FUTURE GENERATIONS 167 (2006).

⁵⁶ See Simon Caney, *Cosmopolitan Justice, Responsibility, and Global Climate Change*, 18 Leiden Journal of International Law 747, 753 (2005).

⁵⁷ See Posner & Sunstein, *supra* note 48, at 14.

⁵⁸ JAY INSLEE & BRACKEN HENDRICKS, APOLLO’S FIRE: IGNITING AMERICA’S CLEAN-ENERGY ECONOMY 5 (2008).

⁵⁹ Simon Caney, *Climate Change and the Duties of the Advantaged*, 13 Critical Review of International Social and Political Philosophy, 203, 206 (2010).

⁶⁰ See POSNER & WEISBACH, *supra* note 54, at 103.

⁶¹ See Posner & Sunstein, *supra* note 48, at 18 (noting that 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. “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 also POSNER & WEISBACH, *supra* note 54, at 108 (noting that many citizens of developed

helpful to address the issue of who is to pay when the polluter is no longer alive.⁶² Third, climate change reveals that there is no identity between the injured victim and the claimant:⁶³ most victims of climate change will live in the future, and therefore cannot be adequately redressed.⁶⁴ Fourth, it is virtually impossible to show that climate change is a direct consequence of someone else's actions or inactions (e.g., that the GHG emissions in the United States caused the melting of ice in a village in Alaska.)⁶⁵ As a matter of fact, there are a variety of difficulties in attempting to connect an individual climate-related harm to a particular emitter.⁶⁶ Fifth, a corrective justice claim requires intentional, reckless, or negligent action to prosper.⁶⁷ But GHG-emitting activities cannot be classified as intentional, reckless, or negligent until a scientific consensus forms and becomes widely known among the public.⁶⁸ Such consensus did not occur until the 1990s.⁶⁹ Finally, activities that produce GHG emissions have brought many benefits to current citizens of developing countries, thus indicating the responsibilities of developed countries should be reduced to account for such benefits.⁷⁰ For all the above, the corrective justice approach seems inadequate to address climate justice.

countries today are not the direct descendants of GHG-emitting citizens of the past, so it is unclear if they have actually benefited and to what degree); and Caney, *supra* note 59, at 211 ("One problem with the Polluter Pays Principle is that it cannot cope with the effects on the climate that result from the emissions of earlier generations").

⁶² See Caney, *supra* note 56, at 756.

⁶³ See POSNER & WEISBACH, *supra* note 54, at 108.

⁶⁴ See *id.*

⁶⁵ See *id.* at 109; see also David A. Grossman, *Tort Based Climate Litigation*, in ADJUDICATING CLIMATE CHANGE: STATE, NATIONAL AND INTERNATIONAL APPROACHES 193, 215 (William C. G. Burns & Hari M. Osofsky eds., 2009).

⁶⁶ See, e.g., POSNER & WEISBACH, *supra* note 54, at 110 ("It is unclear that statistical relationships can be established with sufficient clarity to support a claim sounding in corrective justice."); and HARRIS, *supra* note 44, at 39 (noting that determining which particular affluent country, and to what extent it caused harm is also a daunting task). But see Douglas Kysar, *What Climate Change Can Do About Tort Law?* 1 *Env'tl. L.* 1, 36-37. (Professor 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 five percent of carbon dioxide emissions over the last 120 years).

⁶⁷ POSNER & WEISBACH, *supra* note 54, at 110.

⁶⁸ See *id.*; see also Caney, *supra* note 59, at 208; and Caney, *supra* note 56, at 762.

⁶⁹ See PAGE, *supra* note 55, at 169 (noting that there was "widespread ignorance of the enhanced greenhouse effect's nature and scale until the 1990s.").

⁷⁰ *Id.*

2. The “Ability to Pay” (or Distributive Justice) Approach

Should “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?”⁷¹ According to the ability to pay approach, “resources should be redistributed from rich nations and rich people to poor nations and poor people.”⁷² This account is not focused on who caused harm, but who can actually rectify it.⁷³ “[B]y contrast with the Polluter Pays Principle it is a forward-looking, rather than a backward-looking principle.”⁷⁴

Eric Posner and Cass Sunstein claim, however, that the distributive justice approach is problematic because, instead of helping current low-income people, emission reductions would help poor people in the future.⁷⁵ The authors also maintain that “[p]oor people in poor nations would . . . prefer a cash transfer so they could use the money as they see fit.”⁷⁶ Lastly, “many of the beneficiaries of emission reductions are wealthy and many of the losers from emission reductions are poor.”⁷⁷ Hence the distributive justice account is also ill suited to attain climate justice.

3. Other Justice Accounts

Some claim that climate justice should rely on the principle of “intergenerational justice,” which states that *current* generations have a moral obligation not to undermine the rights of *future* generations.⁷⁸ The principle claims climate change is unjust toward all, “whether those whose interests are unprotected . . . are currently alive or will be born in the future.”⁷⁹ In other words, “[p]eople alive at [time 1] are under a duty not to act in ways which prevent people at [time 1+ 50 years] from being able to enjoy their rights.”⁸⁰ This requires people in the present “to limit [their]

⁷¹ POSNER & WEISBACH, *supra* note 54, at 73.

⁷² Posner & Sunstein, *supra* note 48, at 14.

⁷³ See Caney, *supra* note 59, at 213.

⁷⁴ *Id.*

⁷⁵ *Id.* at 17.

⁷⁶ *Id.* at 17; see also POSNER & WEISBACH, *supra* note 54, at 74 (“The rich indeed 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.”).

⁷⁷ Posner & Sunstein, *supra* note 48, at 17.

⁷⁸ See Caney, *supra* note 50, at 30.

⁷⁹ *Id.* at 21.

⁸⁰ *Id.* at 33.

overall GHG emissions, accepting some costs now for [future generations'] benefit[s] later.”⁸¹

Other postures contend that trees should have legal standing.⁸² Christopher D. Stone argues, “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.”⁸³ Under this scheme, paying Ecuador would be a way to respect nature’s rights. Here it is interesting to note that the 2008 Ecuador Constitution recognizes nature as a *subject* of law and not as a mere *object* of law.⁸⁴

To conclude, human rights doctrines could be invoked to justify the Yasuní-ITT Initiative. On one hand, it allegedly purports to protect indigenous peoples living in the national park from the negative impacts of oil exploitation. Several international instruments, such as the United Nations Declaration on the Rights of Indigenous Peoples, have emerged to restrict a state’s sovereignty in the treatment of the indigenous populations that inhabit its territory.⁸⁵ By the same token, other treaties that were not originally designed to protect indigenous peoples have been accommodated to embrace their rights.⁸⁶ On the other, climate change jeopardizes the human right to life, health, and subsistence of all individuals,⁸⁷ hence the need to mitigate GHG emissions, and the Yasuní Initiative seems to be an option for it.

⁸¹ VANDERHEIDEN, *supra* note 46, at 121.

⁸² See generally CHRISTOPHER D. STONE, SHOULD TREES HAVE STANDING? TOWARD LEGAL RIGHTS FOR NATURAL OBJECTS (1972).

⁸³ *Id.* at 17.

⁸⁴ CONSTITUCION DE LA REPUBLICA DEL ECUADOR [CONSTITUTION] Oct. 20, 2008, art. 83(6) (“Ecuadorians have the following duties . . . To respect the rights of nature, preserve a healthy environment and use natural resources rationally, sustainably[,] and durably.”).

⁸⁵ See Patrick Macklem, *Indigenous Recognition in International Law: Theoretical Observations*, 20 MICH. J. INT’L L. 177, 187 (2008) (“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.”).

⁸⁶ See, e.g., MAKING THE DECLARATION WORK: THE UNITED NATIONS DECLARATION ON THE RIGHTS OF INDIGENOUS PEOPLE (Claire Charters & Rodolfo Stavenhagen eds., 2009); S. James Anaya & 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 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).

⁸⁷ SIMON CANEY, CLIMATE CHANGE, HUMAN RIGHTS AND MORAL THRESHOLDS IN GARDNER ET AL. (ED), CLIMATE ETHICS (Oxford University Press, 2010).

B. Inter-state or International Justice

The causes and consequences of climate change are global.⁸⁸ For this reason, collective international action is critical to formulate an effective response on the scale required.⁸⁹ Many efforts in the international field have been expended toward addressing climate change.⁹⁰ A number of the provisions of these international environmental agreements reflect the climate-justice accounts described in Section III.

For example, the principle of “common but differentiated responsibility” is present in the 1992 Rio Declaration on Environment and Development.⁹¹ “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.⁹² On the other hand, the 1992 United Nations Framework Convention on Climate Change (UNFCCC) acknowledges that while all states should be part of efforts to limit emissions of GHGs, developed states “would take the lead to help the world’s poor countries address both the causes and consequences of climate change.”⁹³ Furthermore, the 1997 Kyoto Protocol also reflects this principle,

⁸⁸ Nicolas Stern, *Stern Review: The Economics of Climate Change*, <http://siteresources.worldbank.org/INTINDONESIA/Resources/226271-1170911056314/3428109-1174614780539/SternReviewEng.pdf> (last visited Nov. 9, 2011).

⁸⁹ *Id.*

⁹⁰ *Id.*

⁹¹ United Nations Conference on Environment and Development, Rio de Janeiro, Braz., June 3-14, 1992, *Rio Declaration on Environment and Development*, U.N. DOC.A/CONF.151/26/Rev.1 (Vol.1), Annex I (Aug. 12, 1992) (“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.”).

⁹² HARRIS, *supra* note 44, at 80.

⁹³ *Id.*; see also United Nations Framework Convention on Climate Change, art.3, May 9, 1992, S. TREATY DOC. NO. 102-38, 1771 U.N.T.S. 107 (“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.”); and VANDERHEIDEN, *supra* note 46, at 56 (“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.”).

as it does not require developing countries to engage in emission reduction commitments in the assumption that the main wrongdoers are developed countries listed in Annex 1 of the treaty.⁹⁴

Many authors argue, however, that international environmental law treaties fail to address binding GHG emissions cuts.⁹⁵ The main critique is that the Kyoto Protocol neglects to call on the main emitters of the world, especially the United States,⁹⁶ which claims the treaty is unfair.⁹⁷ In addition, countries such as Brazil, China, or India have not undertaken any compromise to reduce their GHG emissions, as they are not listed in Annex 1 of the treaty.⁹⁸ The consequence is that, without engaging the world's most polluting nations, these treaties prove to be inefficient mechanisms to mitigate GHG emissions. It is worth noting that the United States has conditioned its participation on future carbon cuts on China's engagement in similar obligations.⁹⁹ Conversely, China insists that developed countries, such as the United States, "move first and do more" in the light of their past contributions.¹⁰⁰ The result has been procrastination in the international fora, evidencing that the climate change regime is characterized by "diplomatic delay, minimal action . . . and mutual blame."¹⁰¹

Some attribute that the lack of scientific consensus regarding the causes and consequences of climate change as a factor that has slowed 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

⁹⁴ See HARRIS, *supra* note 44, at 82.

⁹⁵ Paul G. Harris, *Introduction: Cosmopolitanism and Climate Change Policy*, in, ETHICS AND GLOBAL ENVIRONMENTAL POLICY: COSMOPOLITAN CONCEPTIONS OF CLIMATE CHANGE 1 (Paul G. Harris ed., 2011).

⁹⁶ See VANDERHEIDEN, *supra* note 46, at 15-16 (noting that for many "the U.S. government remains the primary obstacle blocking the empowerment of an effective global climate regime.").

⁹⁷ See *id.* at 64 (statement of U.S. President George W. Bush and his reason for the United States withdrawal from the Kyoto Protocol in 2001, "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.").

⁹⁸ See *id.* at 14 ("Not included within the initial round of binding emissions reductions were mandatory emissions caps for the world's developing nations, including China, India, and Brazil . . .").

⁹⁹ See Karin Mickelson, *Beyond a Politics of the Possible? South-North Relations and Climate Justice*, 10 MELBOURNE J. INT'L L., no. 2, 2009 at 411, 416 ("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.").

¹⁰⁰ See *id.*

¹⁰¹ HARRIS, *supra* note 44, at 40.

designed to undermine the scientific basis of climate change, and thereby to convince the public that no mandatory action is needed.¹⁰²

Others argue that the North-South dichotomy underlying international justice is inadequate. For Karin Michelson, countries such as Brazil, India, and China should no longer be considered “developing nations,” emphasizing that the vulnerability to climate change cannot be defined in geographic terms (“North” or “South”), as evidenced by Hurricane Katrina and indigenous peoples’ suffering in the far North.¹⁰³ Furthermore, Posner and Sunstein 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.”¹⁰⁴

Overall, international environmental treaties like the UNFCCC or Kyoto Protocol have gone wrong due to their inter-state approach to solve a global problem. According to John Vogler, these treaties are “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 own short-term national and electoral concerns.”¹⁰⁵ The problem with the inter-state approach is that it diverts all responsibilities to states, excluding individuals and institutions. As Paul G. Harris maintains, international justice has failed to discourage consumption and pollution by the rise of millions of new consumers, whether in the North or South.¹⁰⁶ As China develops, millions of Chinese citizens become affluent and gain access to a vast number of GHG polluting goods.¹⁰⁷ Yet, these new emerging classes in developing countries are not

¹⁰² VANDERHEIDEN, *supra* note 46, at 44.

¹⁰³ Mickelson, *supra* note 99, at 416-17.

¹⁰⁴ Posner & Sunstein, *supra* note 48, at 20.

¹⁰⁵ JOHN VOGLER, *THE GLOBAL COMMONS: ENVIRONMENTAL AND TECHNOLOGICAL GOVERNANCE* 215-16 (2d ed. 2000) (In contrast, others have identified certain global features in international environmental instruments, though still ruled by international justice rather than global justice); *see, e.g.* COSMOPOLITANISM IN CONTEXT: PERSPECTIVES FROM INTERNATIONAL LAW AND POLITICAL THEORY, *supra* note 46, at 6 (noting that 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).

¹⁰⁶ Paul G. Harris, *Climate Change and the Impotence of International Environmental Law: Seeking a Cosmopolitan Cure*, 16 PENN ST. ENVTL. L. REV., no. 2, Winter 2008, at 323, 326.

¹⁰⁷ *Id.* *See* INSLEE & HENDRICKS, *supra* note 53, at 15 (arguing that the number of vehicles in China has more than doubled between 2000 and 2006, and still there is a huge gap to fill because China has 10 cars for every 1,000 people, whereas the United States has 500 cars for every 1,000 people).

obligated to reduce their GHG footprint, becoming the new “free riders” of air pollution.¹⁰⁸

The previous paragraphs show that inter-state justice is neither willing nor attuned to the requirements of a global battle against climate change.¹⁰⁹ 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 and institutions.”¹¹⁰ Consequently, an alternative solution to the inter-state doctrine is needed,¹¹¹ and that alternative is cosmopolitanism.

C. Cosmopolitan Justice

“Climate change cries out for a cosmopolitan response. It is a global problem with global causes and consequences,” and should be addressed from a global perspective; not from an international or inter-state one.¹¹² Harris states, “[o]ur future requires that our responses to the globalization of environmental changes and their consequences include a globalization of justice.”¹¹³ This Section illustrates why cosmopolitan justice serves to justify the compensation envisaged by Ecuadorians.

International justice views national borders as being the basis for justice.¹¹⁴ From this perspective, “states have very few duties of justice towards one another, and even less . . . towards people living in other states.”¹¹⁵ But as national borders lose their significance, it seems each time more incoherent to insist on their traditional role as a moral limit.¹¹⁶ This is why, in contrast to inter-state justice, cosmopolitan justice asserts that “the ethical obligations and responsibilities are not defined or delineated by national borders.”¹¹⁷ Hence, for the cosmopolitans “it makes no difference

¹⁰⁸ See Harris, *supra* note 95, at 344 (noting that “[w]hen there were relatively few affluent people in the developing world . . . we could overlook their impact on climate change and let them ‘free ride’ on the limited obligations of their states, much as the rich have always been free riders.”).

¹⁰⁹ See *id.* at 333.

¹¹⁰ HARRIS, *supra* note 44, at 111.

¹¹¹ See *id.* at 94.

¹¹² See *id.* at 118.

¹¹³ *Id.* at 184.

¹¹⁴ See Harris, *supra* note 95, at 335; and Thomas Pogge, *¿Qué es la Justicia Global?* 9 (2007), http://www.flacoandes.org/web/imagesFTP/1269876752.Que_es_la_Justicia_Global.pdf.

¹¹⁵ HARRIS, *supra* note 44, at 56 (“[T]he 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. . . .”). See also SHARON ANDERSON-GOLD, COSMOPOLITANISM AND HUMAN RIGHTS 1 (2001); see also HARRIS, *supra* note 44, at 29-30.

¹¹⁶ See Pogge, *supra* note 114, at 5-6.

¹¹⁷ *Id.* See also Edward Page, *Cosmopolitanism, climate change, and greenhouse emissions trading*, *International Theory* (2011), 3:1, 37-69, at 44.

whether a person lives here or there, provided that, wherever he lives, he lives a citizen of the world.”¹¹⁸

Moral cosmopolitans claim that all “citizens of the world share a membership in one single community” — the world as a whole.¹¹⁹ Under this account, individuals develop “multiple loyalties not only to one’s own state but also to other human beings living far away.”¹²⁰ Therefore, every person has moral duties toward all human beings since every human being is the ultimate unit of moral concern.¹²¹ This is because human beings are all inextricably interconnected to the extent that “a violation of rights in *one* part of the world is felt *everywhere*.”¹²² In short, under the cosmopolitan regime, a global citizen’s allegiance is to the community of human beings in the entire world.¹²³

Cosmopolitanism, though universalizing and totalizing, does not reject the idea that solutions to climate change involve states.¹²⁴ 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.”¹²⁵ Cosmopolitanism “can locate [the] . . . obligation to act on climate change, and to aid those people who are suffering from it, in capable individuals in both affluent and poor states.”¹²⁶

In light of the above, the cosmopolitan justice account can serve to justify Ecuador’s call for global citizens to contribute to the Yasuní 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 “[e]veryone 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

¹¹⁸ ANDERSON-GOLD, *supra* note 115, at 1 (quoting Marcus Aurelius, an ancient Roman cosmopolitan).

¹¹⁹ COSMOPOLITANISM IN CONTEXT: PERSPECTIVES FROM INTERNATIONAL LAW AND POLITICAL THEORY, *supra* note 46, at 1.

¹²⁰ HARRIS, *supra* note 44, at 31.

¹²¹ *See id.* *See also* Page, *supra* note 117, at 44.

¹²² GARRET WALLACE BROWN, GROUNDING COSMOPOLITANISM: FROM KANT TO THE IDEA OF A COSMOPOLITAN CONSTITUTION 1 (2009).

¹²³ *See id.* at 2.

¹²⁴ *See* Harris *supra* note 95, at 335 and 343.

¹²⁵ HARRIS, *supra* note 44, at ix.

¹²⁶ Harris, *supra* note 95, at 324.

planet.”¹²⁷ In this line, the Yasuní-ITT Initiative calls for the contribution not only of state parties but also of a multiplicity of global actors, including private and public entities, NGOs, and individuals. That is to say, it purports to mobilize global citizens, regardless of their national commitments and allegiances by invoking universal values.¹²⁸

Ecuador’s 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. This is why the initiative goes beyond the North-South dichotomy, which has traditionally brought about mutual blame and delay in climate change negotiations. Conversely, the protagonists of the cosmopolitan regime purported by President Correa are not only states but also affluent individuals and institutions that are able to engage in carbon offsetting markets.¹²⁹ Moreover, this 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 mitigating GHG emissions without further delay.

All told, the cosmopolitan standpoint, which is inherent in the Yasuní-ITT Initiative, provides a better road map (or at least a subsidiary one) than the inter-state doctrine for dealing with climate justice.¹³⁰ It is a measure to reinforce human solidarity in a divided world.¹³¹ Even so, it faces important challenges in a world still characterized by the lack of *institutional cosmopolitan* networks beyond state level.¹³² Indeed, how are cosmopolitan obligations supposed to be set, enforced, and by whom in the absence of a “democratic global government?”¹³³

¹²⁷ *Id.* at 338.

¹²⁸ See HARRIS, *supra* note 44, at vii.

¹²⁹ Page, *supra* note 117, at 45 (“It could, in fact, be argued that emissions trading is inherently cosmopolitan in envisaging a universal community of emissions allowance sellers and buyers whose autonomous valuations determine how the global emissions cap is to be distributed”).

¹³⁰ See *id.* at 73.

¹³¹ Laura Rival, *The Yasuni-ITT Initiative: Oil Development and alternative forms of wealth making in the Ecuadorian Amazon*, Conference organized by the Smith School of Enterprise and the Environment, University of Oxford, November 29, 2011.

¹³² See Luis Cabrera, *The Cosmopolitan Imperative: Global Justice through Accountable Integration*, 9 J. ETHICS 1/2 171, 173 (2005); and Harris, *supra* note 95, at 8.

¹³³ LUIS CABRERA, POLITICAL THEORY OF GLOBAL JUSTICE: A COSMOPOLITAN CASE FOR THE WORLD STATE 2 (2004) (“Full acknowledgment of the demands of moral cosmopolitanism also 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”).

The cosmopolitan regime relies primarily on *voluntary* efforts of global citizens to take action regardless of borders.¹³⁴ All affluent human beings are summoned, whether domiciled in the Global North or Global South, whether the beneficiary of past GHG emissions or not. Yet, in the absence of cosmopolitan institutions,¹³⁵ cosmopolitan obligations are unenforceable. Therefore, contributions from affluent citizens are seen as voluntary measures of those taking responsibility for their own GHG emissions, off-setting their individual carbon footprints, and avoiding perpetuating themselves as climate change free-riders.

In addition, the cosmopolitan regime would require a definition or threshold for “affluence” to allocate responsibilities thoroughly. Certainly, “the better placed an individual is to do what is right, the greater the onus on him to do what is right”.¹³⁶ Yet, an affluence criterion may be difficult to determine, as it varies from polity to polity. Although this point is beyond the scope of this paper, it is clear that cosmopolitanism can seriously materialize in concrete measures that favor carbon offsetting to be undertaken by capable global citizens.

D. Is Ecuador Asking for Compensation to do Something it is Obligated to do?

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

Considering that the Yasuní National Park was created in 1979, one could legitimately expect it to be already immune to oil development projects.¹³⁷ Yet, since its creation, successive Ecuadorian governments have continued to promote oil development in the park.¹³⁸ Why should the international community pay for Ecuador’s contradictory policies? The truth is that “President Correa’s offer [is] a crucial turning point in the long-

¹³⁴ See Cabrera, *supra* note 132, at 172 (noting “[m]oral cosmopolitans tend to focus on the duties of individuals to make charitable donations, or on the obligations of states to make larger voluntary transfers within the existing system.”).

¹³⁵ See *id.* at 175 (noting that “institutional cosmopolitanism advocates the restructuring of the global system to bring states under the authority of just supranational institutions, including possibly the institutions of a global government, to ensure that cosmopolitan distributional obligations will be fulfilled.”).

¹³⁶ Harris, *supra* note 95, at 6, citing James Garvey.

¹³⁷ See Finer, Moncel and Jenkins, *supra* note 6, at 64-65.

¹³⁸ See *id.*

standing drive to drill in Yasuní".¹³⁹ This is why it deserves international attention.

Ecuador is a signatory of 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? The answer is likely "no" as Ecuador's international commitments do not compel it to forgo its oil reserves, even when dealing with sensitive areas such as the Amazon. The decision whether to exploit its natural resources is still a sovereign prerogative.

The exploitation of the ITT oil fields appears to be complex and extremely expensive. On the one hand, the high permeability of the subsoil would prevent the full recovery of heavy crude.¹⁴⁰ On the other, due to the poor quality of the oil, Ecuador would need to construct a thermoelectric power plant and a pipeline to move the oil from the Amazon to the coast. 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 natural resources is still viable. In fact, different oil companies already operate in other blocks located in the Yasuní National Park, including Brazil's Petrobras, Canada's EnCana, and Spain's and Argentina's Repsol-YPF.¹⁴¹ In other words, technicalities are not an impediment for the ITT oil project.

Additionally, in 2006 the Inter-American Commission on Human Rights (IACHR) granted precautionary measures in favor of the Tagaeri and Taromenami indigenous peoples who inhabit the Ecuadorian Amazon jungle.¹⁴² As a result of this, the IACHR requested that the Ecuadorian government adopt the measures to protect the land inhabited by these indigenous peoples.¹⁴³ Skeptics will contend that Ecuador is obligated to protect the indigenous peoples by refraining from exploiting its oil reserves. However, the IACHR pronouncement is not only a non-binding recommendation,¹⁴⁴ but also 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

¹³⁹ *Id.*

¹⁴⁰ See Rival, *supra* note 6, at 360.

¹⁴¹ Davis, *supra* note 6, at 248.

¹⁴² INTER-AMERICAN COMM'N OF HUMAN RIGHTS, PRECAUTIONARY MEASURES 2006, available at <http://www.cidh.oas.org/medidas/2006.eng.htm> (last visited Nov. 7, 2011) ("The information available states that members of the Taromenami tribe were murdered during reprisals linked to illegal tree felling in the Yasuní Park and encroachments onto indigenous lands. . .").

¹⁴³ *Id.*

¹⁴⁴ See, e.g., Caballero-Delgado & Santana v. Colombia, Merits, Inter-Am. Ct. H.R. (ser. C) ¶ 67 (Dec. 8, 1995); and Loayza-Tamayo v. Peru, Merits, Inter-Am. Ct. H.R. (ser. C) ¶ 80 (Sept. 17, 1997).

natural resources within indigenous territories when certain conditions are met.¹⁴⁵ In other words, if Ecuador undertakes the consultation processes with native peoples and guarantees their rights, the eventual oil exploitation of the ITT oil fields would vest legally.

In light of the above, Ecuador's proposal is not a countermeasure to the impossibility of exploiting oil reserves due to environmental and human rights obligations, nor to avoid complex expenditures needed to access oil reserves.

IV. THE CRITIQUE

The academic literature on the Ecuadorian proposal is devoted to praising President Correa's model for its "revolutionary and visionary approach."¹⁴⁶ For example, Tracy C. Davis underscores the potential of the program "to shift the existing environmental and development paradigms."¹⁴⁷ Leaving the oil underground, she argues, is "striking in its scope and creativity."¹⁴⁸ Laura Rival stresses that this is a "highly creative challenge from the part of a small developing country heavily dependent on oil to the chaotic international order emerging out of the Kyoto Protocol."¹⁴⁹ 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.¹⁵⁰ Chichilnisky elaborates further by affirming that 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 Yasuní-ITT initiative attempts to do. . . . Yasuní is the new economics of plant Earth."¹⁵¹ Similarly, Pamela L. Martin contends the Initiative is "a lesson for academics and policymakers . . . who are seeking innovative solutions to protect [the environment]."¹⁵² Furthermore, Alberto Costa underlines the importance of the project as a way to promote the transformation of Ecuador's economic model currently based on the

¹⁴⁵ See *Saramaka People v. Suriname*, Preliminary Objections, Merits, Reparations, and Costs, Inter-Am. Ct. H.R. (ser. C) ¶125-28 (Nov. 28, 2007).

¹⁴⁶ See *Finer, Moncel and Jenkins*, *supra* note 6, at 63.

¹⁴⁷ *Davis*, *supra* note 6, at 243.

¹⁴⁸ *Id.* at 258.

¹⁴⁹ *Rival*, *supra* note 6, at 362.

¹⁵⁰ *Chichilnisky*, *supra* note 1, at xv.

¹⁵¹ *Id.* at xvii-xviii.

¹⁵² *Martin*, *supra* note 27, at 2.

exploitation of natural resources.¹⁵³ As this Section will explain, my vision is less enthusiastic.

How truly innovative is Ecuador's scheme? The Yasuní-ITT Initiative originates from a well-known legal institution—the moratorium.¹⁵⁴ Moratoriums are “a suspension of activit[ies] or an authorized period of delay,” and are determined by a governmental authority for numerous reasons.¹⁵⁵ Moratoriums 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.¹⁵⁶ President Correa's initiative seeks to establish an oil moratorium in the ITT fields, overlapping the Yasuní National Park, for an unlimited period of time.¹⁵⁷ It is founded on the belief, shared by many, that leaving oil reserves unexploited through state regulation—not the market—is an effective way of tackling climate change.¹⁵⁸

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.¹⁵⁹ The novelty of the model relies, though, 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 Yasuní Fund. Hence the message goes as follows: if the international 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

¹⁵³ KEEP OIL UNDERGROUND THE ONLY WAY TO FIGHT CLIMATE CHANGE, *supra* note 6, at 7.

¹⁵⁴ 7 WEST'S ENCYCLOPEDIA OF AMERICAN LAW 116-17 (2d ed.).

¹⁵⁵ *Id.*

¹⁵⁶ *See id.*

¹⁵⁷ KEEP OIL UNDERGROUND THE ONLY WAY TO FIGHT CLIMATE CHANGE, *supra* note 6, at 65 (noting “[I]n the Ishpingo-Tambococha-Tiputini field in the Yasuni National Park, about 920 million barrels of heavy oil would remain in the ground in perpetuity or in a moratorium sine die. . .”).

¹⁵⁸ *See id.* Finer, Moncel and Jenkins, *supra* note 6, at 63 (“[F]orgoing extraction of oil and gas reserves in remote or sensitive places could be an important piece to a larger global strategy designed to limit carbon emissions”); Gary Bridge, *Past Peak Oil*, in GLOBAL POLITICAL ECOLOGY (Richard Peet, Paul Robbins, and Michael Watts eds., 2010) (“*Contra* the claims of peak oil, the problem is not one of trying to get more oil (or coal or gas) out of the ground, but of finding ways to keep it shut in); and POLLY HIGGINS, ERADICATING ECOCIDE: LAWS AND GOVERNANCE TO PREVENT THE DESTRUCTION OF OUR PLANET (2010) at XI ([T]ackling the problem at the root is referred to as turning off the ‘upstream’, closing off the source. This means stopping the processes that extract and deplete the natural capital in its raw state. Do that and the downstream operations that are dependent on the life-force of the upstream operations shudder to a halt”).

¹⁵⁹ *See* Martin, *supra* note 27, at 28 (“[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.”) (internal citations omitted).

dioxide that would otherwise be burned and pollute the atmosphere, they must pay for it.¹⁶⁰

This Section analyzes to what extent the Yasuní-ITT Initiative represents an adequate framework to abate climate change.

A. The Focus on the Oil and not on the Trees

Ecuador requires 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 if preserved, or on the unique value of the biodiversity it hosts, but on the market value of the oil reserves.¹⁶¹ For this reason, the Yasuní-ITT Initiative places the economic incentives in the wrong place: it is primarily structured around the oil, instead of making Ecuador preserve its rainforests from land use transformation.

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 and biodiversity). While a conservationist approach would require *affirmative obligations* from Ecuador, forgoing the oil reserves simply implies passivity or inaction. This is why some consider this initiative as a “funding capture” or “begging for subsidies instead of living from one’s honest productive work.”¹⁶² As put by Sebastian Lesch, spokesman of the German Ministry of Economic and Development Cooperation, in direct reference to the Yasuní-ITT Initiative, “[o]ur objective is to promote active policies in active countries, in lieu of paying them for not doing anything.”¹⁶³

Like the German officials, others have criticized the exaggerated emphasis that the initiative places on the oil payment¹⁶⁴ and have questioned whether the funds obtained will be adequately channeled to

¹⁶⁰ See VOGEL, *supra* note 1, at 78 (“The Yasuní-ITT Initiative rests on the *realpolitik* that poor carbon-rich countries will extract their fuel reserves if not paid to do otherwise.”).

¹⁶¹ See Orlando Perez, *Correa Propone que le Compren “Petróleo Simbólico”*, TERRA MAG. (Oct. 15, 2007), <http://www.ar.terra.com/terramagazine/interna/0,,EI8864-OI1988252,00.html> (claiming that the type of arrangement developed by Ecuador is a compensation for keeping the oil in the subsoil).

¹⁶² See Rival, *supra* note 6, at 363.

¹⁶³ Walker & Chacón, *supra* note 42.

¹⁶⁴ See *Dejar el Crudo en Tierra o la Búsqueda del Paraíso Perdido*, *supra* note 6 (“Recent debate has focused on the need to compensate Ecuador for the oil moratorium. . . . The preservation of the ITT is important by itself, regardless of the state of mind and willingness to pay of the international community. The demand for international compensation cannot be used as an excuse to justify inaction. It shall be viewed as an opportunity to act national and internationally.”) (author’s translation).

protect indigenous peoples and preserve biodiversity, as purported.¹⁶⁵ In this regard, the threshold of \$100 million to be raised before December 2011,¹⁶⁶ 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? Ecuador might have perceived that by focusing on the oil it would maximize its cut. Indeed, an important factor to bear in mind is that the calculations of how many oil barrels are stored in the subsurface of the park — a complex task in itself¹⁶⁷ — are already available thanks to oil prospecting, whereas the calculations of how much carbon can be absorbed are not only unavailable, but hard to determine (see *infra* Section V). 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. YGCs are not “Environmental Property Rights”

The atmosphere is a “global commons,” — a resource that does not or cannot fall under sovereign jurisdiction of a particular state because of the physical impossibility of extending such control.¹⁶⁸ Global commons are open to all and “free for the taking.”¹⁶⁹ They can be used by all states and their nationals for resource extraction or waste disposal.¹⁷⁰ Considering human’s self-interested nature, it is generally believed that users will deplete the commons if left unregulated or unowned.¹⁷¹ As no users of the commons can exclude another individual from a resource,¹⁷² this

¹⁶⁵ See *id.* (“Economic compensation does not necessarily assure that it is directly connected to local communities or to the restoration of environmentally degraded areas. . . . In other words, even though we can obtain large amounts of monies from international sources, this will not result in effective social and environmental policies for the Amazon region.”).

¹⁶⁶ TOR, *supra* note 28, para. 30.

¹⁶⁷ See Elinor Ostrom et. al., *Revisiting the Commons: Local Lessons, Global Challenges*, 284 SCI. 278, 278 (1999) (“Resources that are intrinsically difficult to measure or that require measurement with advanced technology, such as stocks of ocean fishes or petroleum reserves, are difficult to manage no matter what the scale of the resource.”).

¹⁶⁸ See, e.g., VOGLER, *supra* note 105, at 4; and Robert DeLay, *Our Post-Kyoto Treaty Climate Change Framework: Open Market Carbon-Ranching as Smart Development*, 7 PENN ST. ENVTL. L. REV. 55, 67 (2008).

¹⁶⁹ VOGLER, *supra* note 105.

¹⁷⁰ See Christopher Joyner, *Global Commons: The Oceans, Antarctica, the Atmosphere, and Outer Space*, in MANAGING GLOBAL ISSUES: LESSONS LEARNED 354, 361 (P.J. Simmons & Chantar de Jonge Oudraat eds., Carnegie Endowment for International Peace 2001) (noting that the atmosphere acts like a “common sink” by absorbing GHG from human activities).

¹⁷¹ See Anthony Russomanno, *The Ethics of Heat: Fundamentals and Challenges in Allocating the Global Commons*, 2009 U. ILL. L. REV. 551, 571 (2009).

¹⁷² Carol Rose, *Property Rights, Development Imperatives, and Environmental Protection* (Mar. 2008), available at <http://www.law.yale.edu/documents/pdf/sela/Rose.pdf>.

characteristic 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.”¹⁷³ This is why “determining who has access to common resources, and to what extent, is at the heart” of Garret Hardin’s “tragedy of the commons.”¹⁷⁴

Air pollution exemplifies this tragedy. Given that the atmosphere cannot be fenced or parceled into shares,¹⁷⁵ “individuals, companies, and states . . . [will tend] to “free-ride” by letting others take on the costs of mitigat[ing]”¹⁷⁶ the impacts of their pollution (in the form of carbon emissions) “while they continue to enjoy the benefits of those activities. . . .”¹⁷⁷ In consequence, they impose the external costs of their activities on society in the form of reduced air quality and disruption of global climate regulation services.¹⁷⁸ As noted by Posner and Weisbach, “[w]henver people engage in activities that emit carbon . . . they deplete the resource but do not pay a price for the harm they impose on others.”¹⁷⁹

Furthermore, the atmosphere can absorb just a limited amount of carbon dioxide.¹⁸⁰ Since 1750, global atmospheric concentrations of carbon dioxide and other GHG have increased exponentially and now exceed by far the atmospheric concentrations prior to industrialization.¹⁸¹ Global warming is therefore the result of the atmosphere reaching its carrying capacity to absorb GHG.¹⁸² The global dimensions of the tragedy are

¹⁷³ *Id.*

¹⁷⁴ Joyner, *supra* note 151, at 356-57 (on the “tragedy of the commons,”); *see generally* Garrett Hardin, *The Tragedy of the Commons*, 162 *SCIENCE* 1243 (1968); ELINOR OSTROM, *GOVERNING THE COMMONS: THE EVOLUTION OF INSTITUTIONS FOR COLLECTIVE ACTION* (1990); THE DRAMA OF THE COMMONS (2001); Thrainn Eggertsson, *Open Access Versus Common Property*, in *PROPERTY RIGHTS: COOPERATION, CONFLICT AND LAW* 73 (Terry L. Anderson & Fred S. McChesney eds., 2003); and Louis De Alessi, *Private Property Rights as the Basis for Free Market Environmentalism*, in *WHO OWNS THE ENVIRONMENT?* 29 (Peter Hill & Roger Meinert eds., 1998).

¹⁷⁵ Hardin, *supra* note 152, at 1245.

¹⁷⁶ HARRIS, *supra* note 44, at 91.

¹⁷⁷ *Id.*; *see also* INSLEE & HENDRICKS, *supra* note 53, at 34-35 (“Every ton of coal and every gallon of gas we use send [carbon dioxide] 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 [carbon dioxide] emitters, and we cannot live off of this ‘free lunch’, believing that is up to someone else to build a clean-energy future.”).

¹⁷⁸ *See* INSLEE & HENDRICKS, *supra* note 53, at 34.

¹⁷⁹ POSNER & WEISBACH, *supra* note 54, at 43.

¹⁸⁰ *See id.*

¹⁸¹ Laurie A. Wayburn & Anton A. Chiono, *The Role of Federal Policy in Establishing Ecosystem Service Markets*, 20 *DUKE ENVTL. L. & POL’Y F.* 385, 390 (2002).

¹⁸² *See Revisiting the Commons: Local Lessons, Global Challenges*, *supra* note 145, at 278 (“[G]lobal climate[] [is] [] largely self-healing in response to a broad range of human actions, until these actions exceed some threshold.”).

obvious given that the atmosphere provides the planet's respiratory function by absorbing carbon dioxide and emitting oxygen, which are essential functions to human biological, cultural, and social reproduction.¹⁸³ Thus, climate change represents a *global* tragedy of the commons.

According to Hardin, the answer to this tragedy is either to impose regulation or to privatize the commons.¹⁸⁴ The former refers to government regulation imposing restrictions on access and use of the commons, either through command-and-control measures or market-based incentives, whereas the latter relies on converting the resource from non-property to private property.¹⁸⁵ This paper focuses on the market-based perspective.

In the past years, there has been a growing awareness that environmental concerns entangle property rights issues.¹⁸⁶ Property rights can help individuals internalize their externalities,¹⁸⁷ as they create powerful incentives to preserve the value of what people own.¹⁸⁸ As stated by Terry L. Anderson and Donald Leal's, the key to overcoming market failure — climate change is the "greatest and widest-ranging" market failure¹⁸⁹ — is to establish (1) well-specified,¹⁹⁰ (2) enforceable,¹⁹¹ and (3) transferable¹⁹² property rights. These are what Professor Carol M. Rose calls the "modernist" features of property rights.¹⁹³

¹⁸³ See VANDERHEIDEN, *supra* note 46, at 71.

¹⁸⁴ See Hardin, *supra* note 152, at 1245; Terry L. Anderson & J. Bishop Grewell, *Property Rights Solution for the Global Commons: Bottom-Up or Top-Down?* 10 DUKE ENVTL. L. & POL'Y F. 73, 78; but also Elinor Ostrom, GOVERNING THE COMMONS: THE EVOLUTION OF INSTITUTIONS FOR COLLECTIVE ACTION, *supra* note 155, at 14 (criticizing the public-private dichotomy).

¹⁸⁵ See Daniel H. Cole, *Clearing the Air: Four Propositions About Property Rights and Environmental Protection*, 10 DUKE ENVTL. L. & POL'Y F. 103, 106-07 (1999) (suggesting that both approaches actually constitute property-based solutions in that each involves the imposition of property rights on formerly open-access resources).

¹⁸⁶ WHO OWNS THE ENVIRONMENT?, *supra* note 152, at xi.

¹⁸⁷ See ROSE ANNE DEVLIN & R. QUENTIN GRAFTON, ECONOMIC RIGHTS AND ENVIRONMENTAL WRONGS 37-38 (1998).

¹⁸⁸ See *id.*; see also TERRY ANDERSON & DONALD LEAL, FREE MARKET ENVIRONMENTALISM 165 (1991).

¹⁸⁹ Stern, *supra* note 79, at 1.

¹⁹⁰ ANDERSON & LEAL, *supra* note 166, at 20 ("If physical attributes of the resources must be specified in a clear and concise manner; they must be measurable . . . If property rights to resources cannot be defined, then they obviously cannot be exchanged for other property rights."); TERRY L. ANDERSON & LAURA E. HUGGINS, PROPERTY RIGHTS: A PRACTICAL GUIDE TO FREEDOM AND PROSPERITY 20 (2003) ("Definition makes it clear which individuals have what rights"); and Rose, *supra* note 150, at 13 (arguing that rights must also "be capable of registration in widely-available information systems.").

¹⁹¹ ANDERSON & LEAL, *supra* note 166, at 20 ("Whenever the use of property cannot be monitored or enforced, conflicts are inevitable and trades are impossible."); Rose, *supra* note 150, at 13 ("[P]roperty rights... must be enforceable through public policing and juridical systems that are available to potential owners from all over the globe.").

¹⁹² ANDERSON & LEAL, *supra* note 166, at 21 ("Although well-defined and enforced rights allow the owner to enjoy the benefits of using his property, legal restrictions on the sale of that property preclude the potential for gains from trade."); and Rose, *supra* note 150, at 13 (claiming that property rights should be relatively simple in form so that wide audiences understand them and willingly engage in economic transactions).

¹⁹³ Rose, *supra* note 150, at 13.

Efforts to enhance conservation strategies through the creation of property rights in environmental resources are being broadly recommended.¹⁹⁴ Examples of these “new” forms of property rights in environmental resources (also referred to as “environmental property rights,” “quasi-property rights,” “regulatory rights,” or “licensed property”) are tradable emission rights in the carbon markets or individual transferrable quotas (ITQs) in the fishing industry.¹⁹⁵ Even though tradable emission rights or ITQs appear as “new” or “evolved” forms of property rights, they rely on the “modernist” property features characterized by Anderson and Leal. Accordingly, “environmental property rights” must be well-defined, relatively simple, and uniform to understand. For these property rights to work, “emissions [should] be monitored and measured; and the amounts and types of emissions [should] be a matter of public record” enforceable by administrators and courts.¹⁹⁶

Having explored the concept of “environmental property rights,” in the following lines this paper argues that the YGCs created by the Yasuní-ITT Initiative are not well-defined, enforceable, and transferable rights. In fact, even though the Yasuní Fund aims to contribute to mitigate GHG emissions through the creation of a new currency (the YGCs), 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.

¹⁹⁴ See Jonathan H. Adler, *Back to the Future of Conservation: Changing Perceptions of Property Rights & Environmental Protection* 1 N.Y.U. J.L. & LIBERTY 987 (2005) at 12; see also James Salzman, *Creating Markets for Ecosystem Services*, 80 N.Y.U. L. REV. 870 at 2 (2005) (“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.”); and Terry L. Anderson, *The Roles of Markets and Governments: Markets and the Environment: Friends or Foes*, 55 CASE W. RES. L. REV. 81, 91 (2004).

¹⁹⁵ See, e.g., Rose *supra* note 150, at 6; LEIGH RAYMOND, PRIVATE RIGHTS IN PUBLIC RESOURCES: EQUITY AND PROPERTY ALLOCATION IN MARKET-BASED ENVIRONMENTAL POLICY 14 (2003) (distinguishing “licensed property,” i.e. tradable emission rights, 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); and Matthieu Wemaere, et al., *Legal Ownership and Nature of Kyoto Units and EU Allowances*, in LEGAL ASPECTS OF CARBON TRADING, KYOTO, COPENHAGEN AND BEYOND 35, 44 (David Freestone and Charlotte Streck eds., 2009) (“The resulting right represents a hybrid between a purely public and a purely private right, which has been described as a ‘regulatory’ right. As a result, emission rights are somewhere between an administrative grant and private property.”).

¹⁹⁶ Rose, *supra* note 150, at 22.

The content of the YGCs is not clear and thus cannot be measured or registered. YGCs 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 YGCs do not represent a portion of the oil reserves at stake, an oil barrel, or even a truly avoided carbon emission. Contributors to the Yasuní Fund are buying nothing more than a bona fide promise from Ecuador. Sadly enough, it is a promise that the Ecuadorian government may breach sometime in the near future—despite the fact that such an action would jeopardize its credibility¹⁹⁷—subject to the swings of political pendulums and the excruciating needs of every poor nation. In fact, although oil exploitation within national parks or intangible areas in Ecuador has been constitutionally restricted since 2008, it can still be approved, though exceptionally, by the National Assembly in the name of *national interest*.¹⁹⁸

It is true that the YGCs 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 this feature is either merely referential (depending on *how much* and *when* you pay, you will buy more or fewer avoided carbon emissions) or subject to the future recognition of YGCs as carbon credits under current or post-Kyoto regimes. Thus, the weakness of the YGCs relies on the mere 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 future;¹⁹⁹ what some refer to as the “linking” of emissions trading regimes.²⁰⁰ This linking is not straightforward and requires political maneuver.²⁰¹

To see the problem more clearly, I will now compare the YGCs with “Certified Emission Reduction” (CER) issued under the Kyoto Protocol’s Clean Development Mechanism (CDM). A CER is a unit

¹⁹⁷ Lavinia Warnars, *The Yasuni-ITT Initiative: A New Model to Implement Human Rights and Biological Diversity Conventions and Frameworks?* Policy Matters 17, (2010) http://www.terralingua.org/wp-content/uploads/downloads/2011/03/policy_matters_17_pg_55_77.pdf.

¹⁹⁸ See CONSTITUCION DE LA REPUBLICA DEL ECUADOR [CONSTITUTION] Oct. 20, 2008, art. 407.

¹⁹⁹ 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 (2008) (discussing whether an “emission tradable right” qualifies as a currency, a commodity or a security).

²⁰⁰ See Michael Mehling, *Linking of Emissions Trading Schemes*, in LEGAL ASPECTS OF CARBON TRADING: KYOTO, COPENHAGEN AND BEYOND, *supra* note 177, at 112 (“[E]mission 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.”) (internal citation omitted).

²⁰¹ See Rival, *supra* note 7, at 362 (“For most carbon trade specialists. . . obtaining funds for avoided emissions from avoided oil extraction is not compatible with the EU ETS, or with any of the emerging trading regimes. The circulation of CGYs, they thus claim, requires a political decision.”)

representing a ton of carbon dioxide sequestered or abated.²⁰² “[CERs] represent[] an entitlement to release a certain quantity of GHG[s] . . . into to the atmosphere.”²⁰³ A CER is an *effective* and *actual* ton of carbon reduction because it is issued after the implementation and monitoring 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” of that project.²⁰⁴ 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.”²⁰⁵ Further, carbon reductions are “real and measurable units,”²⁰⁶ which are monitored, verified, and issued by independent entities. CERs are widely recognized in the Kyoto and voluntary carbon markets and are easily exchangeable as a way to help Annex I parties fulfill their reduction targets.²⁰⁷ In short, CERs are well-defined, enforceable, and transferable rights.

By contrast, the YGCs 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 YGCs are *non-effective* and *non-actual* avoided carbon reductions issued by Ecuador, which is certainly not an independent body as it is the one issuing CERs. The YGCs are therefore ill-defined, non-measurable, and non-recordable unilateral promises. Simply put, the YGCs are paper-rights.

Second, the YGCs are not well suited to assure that Ecuador will ultimately comply with its obligation to forgo the oil reserves in the future.²⁰⁸ The incentives are not correctly aligned. No court, domestic or

²⁰² Wemaere, et al., *supra* note 177, at 37.

²⁰³ *Id.*

²⁰⁴ CDM RULEBOOK, <http://www.cdmrulebook.org/84> (last visited Nov. 9, 2011). (“‘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.)” (emphasis added).

²⁰⁵ Wemaere, et al., *supra* note 177, at 43.

²⁰⁶ *See id.* at 44.

²⁰⁷ *See id.* at 35-37.

²⁰⁸ *See* THE ECONOMICS OF THE YASUNÍ INITIATIVE: CLIMATE CHANGE AS IF THERMODYNAMICS MATTERED, *supra* note 1, at 25 (“The skeptic will fear that Ecuador will take the

international, could solve any controversy around a YGC transaction or, even worse, could dare to reverse a potential decision of Ecuador to exploit the ITT oil reserves in spite of its prior engagement. As a sad anticipation of what will happen sooner or later, the mere text of the certificate includes a provision stating, “[i]n the event that the Government defaults on its commitment and decides to initiate oil prospecting in the Yasuní ITT oil fields, the YGCs will entitle the holders to be reimbursed by the Government.”²⁰⁹ As they do not represent a right or a sufficient title, the YGCs cannot stop Ecuador from breaching the oil moratorium. Furthermore, given that an YGC 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 reasons, YGCs do not represent “environmental property rights,” and are therefore insufficient to attain the objectives of the initiative.

C. Lack of Institutional Framework

As discussed in the previous Section, one of the weaknesses of the Yasuní-ITT Initiative is that it is a unilateral effort lacking an institutional framework. Unlike carbon credit transactions under Kyoto Protocol, the YGCs 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.²¹⁰ The eventual success of the project relies on the future availability (and willingness) of other carbon markets to validate, homologate or convert the YGCs as exchangeable currency equivalent to CERs or carbon credits,

money now and drill later. For this reason, the guarantee designed into the Yasuní-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.”).

²⁰⁹ TOR, *supra* note 28, at para. 29.

²¹⁰ Many authors advocate the transplantation of the Yasuní scheme to other mega-diverse countries. See e.g. Finer, Moncel and Jenkins, *supra* note 7, at 63 (“If successful, [the Yasuní Initiative] could have major implications throughout the tropics, especially in areas with conflicts between natural resource extraction and biodiversity protection”); Warnars, *supra* note 197, at 55-59 (“[The Yasuní Initiative] may provide lessons for application of similar initiatives in other countries. . . . [It] can be replicated by other developing countries containing significant fossil fuel reserves in highly biologically and culturally sensitive areas such as Bolivia, Colombia, Peru, and the Philippines.”); and Laura Rival, *The Yasuni-ITT Initiative: Oil Development and alternative forms of wealth making in the Ecuadorian Amazon*, Conference organized by the Smith School of Enterprise and the Environment, University of Oxford, November 29, 2011 (claiming that the Yasuní Initiative is a model for other biodiversity rich countries caught in the dilemma of choosing between oil exploitation or preserving the forest).

whatever the *conversion rate* the parties agree on. Simply put, the YGCs are conditioned on the future (and contingent) “linking” of carbon emission trading schemes.

Unilateral efforts are courageous, mainly 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

Environmental property rights are sophisticated and complex forms of property rights, which means they “are likely to come last of all in the infrastructure train of roads, property rights, and environmental rights” because they are more complex, have less political support, rely on sophisticated monitoring systems, and are “expensive forms of public infrastructure.”²¹¹ The problem with Ecuador, as with many other developing nations, is that its property boundaries are not yet settled. As a matter of fact, the boundaries of indigenous peoples’ territories, such as the Yasuní National Park and the ITT oil reserves, are not yet completely defined in legal and physical terms. In the Amazonian region of Ecuador, there is a convergence of conflicting and overlapping interests between communities, state, and oil companies.²¹²

Overall, Ecuador’s property regime is characterized by a number of “incompatible [and] competing uses [that] emerge as a result of conflicting laws,” the impossibility of surface users to exclude subsurface uses, and weak law enforcement.²¹³ 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 many property rights wreck markets.²¹⁴

²¹¹ Rose, *supra* note 150, at 21, 23 and 24.

²¹² See Kristen Hite, Note, *Back to the Basics: Improved Property Rights can Help Save Ecuador’s Rainforests*, 16 GEO. INT’L ENVTL. L. REV. 763 (2004) (arguing that 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).

²¹³ See *id.* at 786.

²¹⁴ See MICHAEL HELLER, THE GRIDLOCK ECONOMY: HOW TOO MUCH OWNERSHIP WRECK MARKETS, STOPS INNOVATION, AND COSTS LIVES 2 (2008); Michael A. Heller, *The Boundaries of Private Property*, 108 YALE L.J. 1163, 1197 (“If people fragment private property so that too many people can exclude each other, then the resource may be wasted in a tragedy of the anticommons.”); Robert L. Scharff, *A Common Tragedy: Condemnation and the Anticommons*, 47 NAT. RESOURCES J. 165, 166-67 (“The anticommons is defined simply as the inefficient use of a specified piece of property

In this context, where “modernist” property infrastructure is not yet in place, new forms of property rights are difficult to appear. This means that property rights cannot *naturally* evolve to the next generation of rights because the Amazon lacks the minimum modernist features described above. Hence, before moving toward a new system, Ecuador faces the pending task of finalizing the construction of its “property infrastructure.”

E. Disregard of Indigenous Peoples' Rights

Since 2007 different Ecuadorian agencies, in collaboration with non-governmental organizations, have been discussing the Yasuní-ITT Initiative. This paper provides 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 Yasuní Fund, nor have they been empowered to participate in making the decision as to what projects are to be executed with the funds raised. 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.²¹⁵

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. Any decision that Ecuador undertakes with regard to the Yasuní 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.²¹⁶ For this reason, the exclusion of indigenous peoples from forest conservation strategies makes little sense,

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.”).

²¹⁵ Davis, *supra* note 6, at 254.

²¹⁶ Indigenous peoples' dissatisfaction for being excluded from the negotiating table on Reduced Emissions from Deforestation and Degradation (REDD) was recently evidenced in the UNFCCC COP 17 held in Durban. See International Workgroup for Indigenous Affairs, *Cop 17: Implement safeguards on REDD Plus, indigenous caucus demands*, available at: http://www.iwgia.org/news/search-news?news_id=421

especially when they are the natural guardians of the forest they inhabit.²¹⁷ Second, indigenous peoples may eventually sue the government in an attempt to obtain an interest over the Yasuní Fund. Although the legality of their claim may be contested (after all, indigenous peoples may own or possess the surface lands but not the oil reserves), this may result in further delays and more negotiations, deterring international cooperation through the UNDP.

For these reasons, 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.

F. Other Flaws

Here I will briefly comment on three other weaknesses of the project. First, although the Yasuní National Park has an enormous importance due to its biodiversity and ecosystem services, it occupies but a small area in the Amazon forest. Given the modesty of its size, effective conservation strategies should embrace larger areas of the tropical forests, which would require celebrating alliances with other Amazonian nations and coordinating land use planning.²¹⁸

Second, there is a risk of leakage: while Ecuador may forgo its oil reserves within the park, oil companies will move (and are already moving) to other environmentally sensitive areas, driven by record oil prices and growing global demand.²¹⁹ Indeed, the park not only faces the environmental threat of oil extraction activities within Ecuador, but also from neighboring Peru.

Finally, the Yasuní-ITT Initiative does not address the possibility of horizontal oil extraction. There is no certainty as to whether Ecuador's

²¹⁷ See Donald M. Goldberg & Tracy Badua, *Do People Have Legal Standing? Indigenous Peoples, Global Warming and Human Rights*, 11 BARRY L. REV. 59, 59-60 (2008) ("[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*) participation or whether indigenous communities have the right to speak for the forests and their deep connection with them.").

²¹⁸ Laura Rival, *The Yasuni-ITT Initiative: Oil Development and alternative forms of wealth making in the Ecuadorian Amazon*, Conference organized by the Smith School of Enterprise and the Environment, University of Oxford, November 29, 2011.

²¹⁹ See Finer, Jenkins, Pimm, Keane, and Ross, *supra* note 7; and Laura Rival, *The Yasuni-ITT Initiative: Oil Development and alternative forms of wealth making in the Ecuadorian Amazon*, Conference organized by the Smith School of Enterprise and the Environment, University of Oxford, November 29, 2011.

moratorium would be unaffected in the event that the ITT fields can be exploited outside the boundaries of the park.

E. Summary

In this Section, this paper has evidenced that President Correa's proposal is ill suited to attain the objective of abating climate change. Notwithstanding its cosmopolitan breadth, 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. To be fair, some authors regard the Yasuní Initiative as a policy experiment, a unique pilot-model, positing that we need trial and error to get somewhere.²²⁰ Precisely, this is the right time to make the necessary adjustments if this scheme is to be replicated in other Amazonian countries. There are other alternative options that may, from a property-based perspective, attain the same objectives in forest conservation, protection of indigenous peoples, and carbon sequestration in a more effective manner. These alternatives will be addressed in the following and final Section.

V. THE ALTERNATIVES

This Section proposes three alternatives to President Correa's model including: selling the oil reserves, valorizing ecosystem services, and establishing conservation easements.

A. Selling the Oil Reserves

Ecuador's proposal is based on an oil moratorium, which relies entirely on the good faith of the government. An alternative approach is to sell the ITT oil reserves. By using a relatively simple purchase contract, Ecuador could transfer, at market price, the ITT oil reserves to a third party, such as, an NGO, corporation, trust, or any other legal vehicle. By transferring the property of the oil reserves 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, though, that this alternative model cannot eliminate the

²²⁰ See e.g. Rival, *supra* note 7, at 362; Elinor Ostrom, *Polycentric systems for coping with collective action and global environmental change*, Global Environmental Change 20 (2010) 550–557, at 556 (“Rather than only a global effort, it would be better to self-consciously adopt a polycentric approach to the problem of climate change in order to gain benefits at multiple scales as well as to encourage experimentation and learning from diverse policies adopted at multiple scales.”); and Warnars *supra* note 197, at 59.

political contingency completely, as the risk of expropriation or a taking is latent anyway).

This model has the advantage of creating well-defined, enforceable, and tradable rights. The contributor would not have a paper-right (such as a YGC), 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, granting him the right to exclude others. Thus, in this property-based scheme, rights are well-defined (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.²²¹ While the state is entitled to award contracts to explore and exploit natural resources to private parties, it cannot award private property over the oil reserves itself. Unless a constitutional amendment is undertaken, selling the oil reserves has to be discarded as a feasible alternative to the Yasuní-ITT model. Of course, the acquisition of the exploitation rights from PetroEcuador for conservation purposes is a legal alternative to the alienation of the oil reserves, though the costs may be prohibitive for conservation NGOs.

B. Valorizing Ecosystem Services

Deforestation causes 3.6 to 4.5 billion tons of carbon dioxide emissions per year.²²² This represents around seventeen percent of total global emissions, which is more than the global transport sector.²²³ This is why "[i]f society is . . . serious about climate change mitigation, there is little choice but to develop programs that increase the carbon stock in forests."²²⁴ Forest ecosystems sequester and store vast amounts of carbon

²²¹ CONSTITUCION ECUADOR [CONSTITUTION] Oct. 20, 2008, art. 317 ("Nonrenewable natural resources are part of the unalienable heritage of the State and are not subject to a statute of limitations. In the management of these resources, the State shall give priority to responsibility between generations, the conservation of nature, the charging of royalties or other non-tax contributions and corporate shares; and shall minimize the negative impacts of an environmental, cultural, social and economic nature.").

²²² Brent Sohgen, *Forestry Carbon Sequestration*, in SMART SOLUTIONS TO CLIMATE CHANGE: COMPARING COSTS AND BENEFITS 114 (Bjørn Lomborg ed., 2010).

²²³ *Id.*

²²⁴ *Id.*

dioxide.²²⁵ When forest areas are cleared for agricultural or other purposes the carbon stored within these ecosystems is released²²⁶ and their ability to sequester more carbon in the future is lost.²²⁷ Carbon sequestration carried out by primary forests is an example of what ecologists and economists call “ecosystem services.”²²⁸ Ecosystem services are “processes of ecosystems that directly or indirectly support human well-being . . . such as the regulation of global climate.”²²⁹ Ecosystem services are generally taken for granted. Most countries and citizens are free riding by profiting from the clean air and carbon offsetting the Amazon forest provides, but not sharing the costs for its preservation.²³⁰

Currently, efforts to valorize ecosystem services are undertaken in different parts of the world. Although such mechanisms were not adequately addressed under the Kyoto Protocol, current discussions within the UNFCCC include programs like REDD.²³¹ One way of valorizing ecosystem services is to pay Ecuador to preserve forest mass. This “forest carbon offset” approach is relatively simple and has been considered for future international agreements.²³² In this scheme poor governments are compensated to reforest or not deforest in exchange for emission credits to be traded in voluntary carbon markets.²³³

The application of the “forest carbon offset” approach to the Yasuní 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.”²³⁴ This alternative model places the incentives correctly. It fosters

²²⁵ See David Takacs, *Carbon Into Gold: Forest Carbon Offsets, Climate Change Adaptation, and International Law*, 15 HASTINGS W.-N.W. J. ENVTL. L. & POL’Y 39, 56 (2009) (“Half of the global terrestrial carbon pool is stored in forests.”).

²²⁶ See *id.*

²²⁷ See Wayburn & Chiono, *supra* note 181, at 391.

²²⁸ See Salzman, *supra* note 194, at 872 (“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.”).

²²⁹ Wayburn & Chiono, *supra* note 181, at 393.

²³⁰ See Charlotte Streck et al., *Climate Change and Forestry: An Introduction*, in CLIMATE CHANGE AND FORESTS: EMERGING POLICY AND MARKET OPPORTUNITIES 7 (Charlotte Streck et al. eds., 2008) (“Many of the benefits provided by forests are currently considered part of the global commons and are freely available for everybody.”).

²³¹ See *id.* at 6-7.

²³² See Takacs, *supra* note 196, at 56-57 (“[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.”).

²³³ See *id.* at 59.

²³⁴ Jan Fehse, *Forest Carbon and Other Ecosystem Services: Synergies between the Rio Conventions*, in CLIMATE CHANGE AND FORESTS: EMERGING POLICY AND MARKET OPPORTUNITIES, *supra* note 201, at 59.

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.”²³⁵ The money obtained could be invested in “public programs and policies aimed at enforcing environmental legislation, thus providing support for economic alternatives to felling of the forests.”²³⁶

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,²³⁷ given that “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.”²³⁸ This avoided deforestation approach would require involving indigenous peoples in the program, not only to avoid potential human rights contingencies, but also to ensure the conservation objectives in the long run. Thus, REDD programs ought to consider indigenous peoples’ rights such as sharing in the financial benefits, the rights to participate in decision-making, and the rights to have their knowledge about forestry resources respected.²³⁹ To be clear, I understand that this will not be simple or cheap, as the transaction costs of negotiating with each indigenous community are significant.

Yet, carbon offsetting is not a panacea solution. There are some considerable difficulties related to valorizing and compensating ecosystem services as complex as carbon sequestration. First, 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.²⁴⁰ So, even though carbon offsetting through avoided deforestation may have temporary benefits, as well as act as a bridge to clean energy, it would not provide a *permanent* solution.²¹⁷ Second, this model has a risk of creating a “leakage effect”: restoring a forest in one place would lead someone else to

²³⁵ Rosimeiry Portella et al., *The Idea of Market-Based Mechanisms for Forest Conservation and Climate Change*, in CLIMATE CHANGE AND FORESTS: EMERGING POLICY AND MARKET OPPORTUNITIES, *supra* note 201, at 23.

²³⁶ Stephan Schwartzman & Paulo Mouthinho, *Compensated Reductions: Rewarding Developing Countries for Protecting Forest Carbon*, in CLIMATE CHANGE AND FORESTS: EMERGING POLICY AND MARKET OPPORTUNITIES, *supra* note 201, at 231.

²³⁷ See Rosemary Lyster, *REDD+, Transparency, Participation and Resource Rights: The Role of Law*, 14 ENVTL. SCI. & POL’Y, no. 2, March 2011, at 118-12.

²³⁸ Goldberg & Badua, *supra* note 191, at 66.

²³⁹ See Lyster, *supra* note 208.

²⁴⁰ See Robert O’Sullivan & Rick Saines, *International Market Solutions to Tropical Rainforests*, in LEGAL ASPECTS OF CARBON TRADING: KYOTO, COPENHAGEN, AND BEYOND, *supra* note 177, at 591.

²¹⁷ See DeLay, *supra* note 146, at 74.

deforest elsewhere due to market pressures. “[The] government may preserve one forest from planned logging and instead offer timber concessions elsewhere[,] [while] logging companies [put out of business]. . . in one country may instead cut timber in a neighboring country.”²⁴¹ 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 in varying climate change scenarios.²⁴² 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, oil companies and the government. Finally, and most importantly, this model relies on the actions of the government. As in the Yasuní-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 deviation in the objectives.

The valorization of ecosystem services shall not be completely discarded as sound environmental policy. Even so, there is another way of attaining the same objectives in a more efficient manner: the establishment of conservation easements over the Yasuní National Park.

C. Establishing Conservation Easements

“Conservation easements [] present a powerful alternative to traditional command and control approaches,” as broad prohibitions to clear forestlands have proven to be ineffective methods to deter deforestation in the Amazon.²⁴³ For an Amazonian landowner, it seems to be more lucrative to deforest and sell timber or agricultural products than to maintain the trees standing.²⁴⁴ This is why the conveyance of conservation easements would provide private landowners enough economic incentives to preserve natural forests instead of clearing them.

Conservation easements are legal instruments that help valorize ecosystem services provided by the forest by incentivizing landowners not to cut down the trees or to reforest previously logged areas in exchange for compensation. In the United States, conservation easements are the fastest-growing method for protecting land and attaining land protection goals,²⁴⁵

²⁴¹ Takacs, *supra* note 196, at 58.

²⁴² *See id.*

²⁴³ *See Hite, supra* note 212, at 788.

²⁴⁴ *See Salzman, supra* note 194, at 960; and MONICA GRILL, GLOBAL WARMING FORESTS: DEGRADATION AND DEFORESTATION, WORLD JURIST ASSOCIATION, ADDRESSING CLIMATE CHANGE, A SURVEY OF NATIONAL AND INTERNATIONAL LAWS (2010).

²⁴⁵ *See* PROTECTING THE LAND: CONSERVATION EASEMENTS PAST, PRESENT AND FUTURE 22 (Julie Ann Gustanski & Roserick H. Squires eds., 2000); and Zachary Bray, *Reconciling Development*

though they are not exempt from criticism.²⁴⁶ A conservation easement is a non-possessory interest in a parcel of land²⁴⁷ created by deeds that remove certain “destructive” uses from the land. It imposes perpetual contractual limitations²⁴⁸ and affirmative obligations to protect natural, scenic, or open-space values of real property, thus assuring its availability for forest conservation.²⁴⁹ This ensures they “can continue to harbor the carbon already sequestered and to sequester more carbon as time passes.”²⁵⁰ Simply put, this property-based instrument implies that economic incentives are more efficient than mere governmental prohibitions to adjust people’s conduct.

Conservation easements are a mixture of different legal concept. They include some attributes of contracts, real property easements, and charitable trusts.²⁵¹ In the United States, conservation easements are mainly statutory creations.²⁵² Although conservation easements vary between states, they are generally characterized by the following features:²⁵³ First, 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

and Natural Beauty: The Promise and Dilemma of Conservation Easements, HARV. ENVTL. L. REV. 119, 125 (2010) (noting that in 2005 the total acreage protected in the United States by state and local land trusts was 37 million acres, that is, more than sixteen times the size of Yellowstone National Park).

²⁴⁶ See Bray, *supra* note 216, at 136 (“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.”) (internal citations omitted).

²⁴⁷ See Daniel L. Aaronson & Michael B. Manuel, *Conservation Easements and Climate Change*, 8 SUSTAINABLE DEV. L. & POL’Y 27 (Winter 2008) (“[I]t allows its holder, typically a land trust, to protect land without the necessity of owning and managing the property.”).

²⁴⁸ See generally Nancy A. McLaughlin, *Conservation Easements: Perpetuity and Beyond*, 34 ECOLOGY L.Q. 673 (2007) (highlighting the “perpetual” nature of conservation easements, but also the difficulties thereof).

²⁴⁹ Melissa Waller Baldwin, *Conservation Easements: A Viable Tool for Land Preservation*, 32 LAND & WATER L. REV. 89, 105 (1997).

²⁵⁰ James L. Olmsted, *Climate Surfing: A Conceptual Guide to Drafting Conservation Easements in the Age of Global Warming*, 23 ST. JOHN’S J. LEGAL COMMENT. 765, 808 (2008-2009).

²⁵¹ C. TIMOTHY LINDSTROM, A TAX GUIDE TO CONSERVATION EASEMENTS 4 (2008).

²⁵² *Id.* at 4-5.

²⁵³ See generally PROTECTING THE LAND: CONSERVATION EASEMENTS PAST, PRESENT AND, *supra* note 216, at 26-54.

biodiversity. Second, 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. Third, 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.²⁵⁴ Fourth, conservation easements can be recorded in the Public Registry and be enforced in courts, though arbitration is the common option of the parties. And finally, they are subject to tax benefits.²⁵⁵

In light of this framework, a carbon sequestering easement should be conveyed over the surface lands comprised by the Yasuní National Park.²⁵⁶ As mentioned earlier, the park is located over public and communal land, so establishing conservation easements would not be feasible until conflicting interests around the Yasuní National Park are settled. Therefore, this proposal presumes that boundaries are clearly defined and surface lands titled and recorded. "The natural candidates for conservation market-makers are environmental NGOs"²⁵⁷ that may offer payments to Ecuador or indigenous peoples for conservation easements on their lands. In addition to NGOs, affluent citizens also can contribute to financing these programs.

There are a variety of advantages to this model. First, the rights conveyed in a conservation easement can be characterized as 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 environmental property rights (the contractual rights can be transferred freely to other parties, without affecting the main conservation obligations stipulated in the contract). Therefore, conservation easements are "environmental property rights" with "modernist" features that guarantee long-term conservation results.

Second, conservation easements can be sufficiently lucrative to the government of Ecuador as landowner for it to respect its contractual obligations to protect the forests and forgo its right to exploit the ITT oil

²⁵⁴ See Baldwin, *supra* note 249, at 106.

²⁵⁵ Maureen Rudolph & Adrian Gosch, *A Practitioner's Guide to Drafting Conservation Easements and the Tax Implications*, 4 GREAT PLAINS NAT. RESOURCES J. 143, 183 ("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.").

²⁵⁶ See Olmsted, *supra* note 250, at 798-807 (classifying conservation easements in perpetual park easements, non-perpetual park easements, and carbon sequestering easements).

²⁵⁷ Hite, *supra* note 212, at 788.

reserves. Nothing impedes combining a conservation easement with carbon offsetting measures.²⁵⁸ In other words, it is possible to include carbon emission rights for avoided GHG emissions in conservation easement schemes, thus providing additional revenues for surface landowners.

Third, in contrast to President Correa's proposal, a conservation easement will not affect indigenous peoples' possession of the lands, but it presupposes their cooperation to fulfill the conservation objectives in a comprehensive manner. Conservation easements are bottom-up measures that recognize that private citizens tend to be in a better position than centralized decision makers to manage forests on their lands.²⁵⁹ Hence, they serve to empower local players by incentivizing them to take action in protecting their own lands,²⁶⁰ without dispossession.²⁶¹ Moreover, communal landowners would have the carrots to better monitor their properties, enhancing the overall surveillance of forests.²⁶² To maximize their investments, they would likely resort to better training and technology to develop inventories and estimate carbon stocks.²⁶³ Active surveillance also provides an additional source of work for local communities.

To conclude, conservation easements are well-suited property-based instruments and are adequate programs to materialize cosmopolitan goals. Such measures demand the voluntary and personal contributions of all capable citizens to help abate climate change and serve as an instrument for cosmopolitan climate justice.

²⁵⁸ See generally James L. Olmsted, *Carbon Dieting: Latent Ancillary Rights to Carbon Offsets in Conservation Easements*, 29 J. LAND RESOURCES & ENVTL. L. 121 (2009).

²⁵⁹ See F.A. Hayek, *The Use of Knowledge in Society*, THE AM. ECON. REV. 519, 524 (1945) ("If we can agree that the economic problem of society is mainly one of rapid adaptation to changes in the particular circumstances of time and place, it would seem to follow that the ultimate decisions must be left to the people who are familiar with these circumstances, who know directly of the relevant changes of the resources immediately available to them to meet them. We cannot expect that this problem will be solved by first communicating all this knowledge to a central board which, after integrating all knowledge, issues its orders. We must solve it by some form of decentralization."); and Ostrom, *supra* note 127, at 555 ("What we have learned from extensive research is that when individuals are well informed about the problem they face and about who else is involved, and can build settings where trust and reciprocity can emerge, grow, and be sustained over time, costly and positive actions are frequently taken without waiting for an external authority to impose rules, monitor compliance, and assess penalties.").

²⁶⁰ See generally Steven A. Kennett et al., *Property Rights and the Legal Framework for Carbon Sequestration on Agricultural Land*, 37 OTTAWA L. REV. 171 (2005-2006).

²⁶¹ See generally ANTHONY ANELLA & JOHN B. WRIGHT, *SAVING THE RANCH: CONVERSATION EASEMENT DESIGN IN THE AMERICAN WEST* (2004).

²⁶² See BEATRIZ GARCIA, *THE AMAZON FROM AN INTERNATIONAL LAW PERSPECTIVE* 249 (2011).

²⁶³ See *id.*

VI. 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, this paper shows that each individual has the moral duty toward all human beings to reduce his GHG emissions by engaging, for example, in carbon-offsetting voluntary programs that finance conservation easements in the Amazon, and thus, mitigating the excruciating and transnational effects of climate change.

Notwithstanding this critique of President Correa’s model, one virtue of the Yasuní-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 time the affluent citizens stop free riding and begin to pay for the carbon absorption and climate regulation services provided by the largest rainforest on Earth.