

## **LL.M. in International Law, Investments, Trade and Arbitration**

### ***Yasuní - ITT Initiative: A different conservation proposal***

### **Comparative analysis with the Clean Development Mechanism under the Kyoto Protocol**

Thesis submitted in fulfillment of the requirement for the Degree of LL.M. in International Law, Investment, Trade and Arbitration

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## **ABBREVIATIONS**

AAU	Assigned Amount Units
CDM	Clean Development Mechanism
CER	Certified Emission Reduced
CH <sub>4</sub>	Methane
CO <sub>2</sub>	Carbon Dioxide
COP	Conference of the Parties
CDM EB	Clean Development Mechanism Executive Board
CGY	Certificados de Garantía Yasuní
DNA	Designated National Authority
DOE	Designated Operational Entity
ERU	Emission Reduction Unit
ETS	Emission Trading Scheme
EU ETS	European Union Emission Trading System
GHG	Greenhouse Gases
HFCs	Hydrofluorocarbons
IPCC	Intergovernmental Panel on Climate Change
JI	Joint Implementation
KP	Kyoto Protocol
MOA	Memorandum of Agreement
N <sub>2</sub> O	Nitrous Oxide
OECD	Organization for Economic Cooperation and Development
PFCs	Perfluorocarbons
PIN	Project Identification Note
PDD	Project Design Document
REDD	Reduced Emission from Deforestation and Forest Degradation
SAA	Standard Administrative Agreements
SF <sub>6</sub>	Sulphur hexafluoride
SD	Sustainable Development
TOR	Terms of Reference of the Yasuní-ITT Trust Fund
UNDP	United Nations Development Program
UNFCCC	United Nations Framework Convention on Climate Change
YNP	Yasuní National Park

## **INTRODUCTION**

Climate change is a reality and its adverse effects are already evident. Today, it is undeniable that temperature is rising, glaciers are melting, precipitation patterns are changing, producing heavy rains and floods in some regions; and droughts and desertification in others. As a result of these alterations in the climate, natural ecosystems and human life are being affected.

Awareness with regard to the negative consequences of climate changes, the international community has established specific environmental policies and concluded international agreements so as to mitigate and avoid the occurrence of these outcomes. In this respect, the most important instruments addressing this issue are United Nations Framework Convention on Climate Change and the Kyoto Protocol, which aim at limiting greenhouse gas (GHG) emissions from Member States through the establishment of emission reduction targets, based on the principle of common but differentiated responsibilities.

The Kyoto Protocol also created three mechanisms: The Emission Trading System (ETS), the Joint Implementation (JI) and the Clean Development Mechanism (CDM). The first two mechanisms can be used exclusively by industrialized countries to meet their binding reduction requirements. While the CDM is the only tool for coping with climate change that allows the participation of developing and least developed countries in environmental mitigation activities. This fact is considered a limitation of the current climate regime since these countries are more vulnerable to dangerous impacts of climate change due to their economies depend greatly on the exploitation of natural resources and they have limited or no financial and technological capacity to respond effectively to this challenge.

Furthermore, according to scientific reports, despite the adoption of these two environmental agreements, the emissions of GHG have continued to increase,<sup>1</sup> which demonstrate the necessity of new and strong measures to combat global warming and to avert its worst effects. In view of this, new international and national strategies to finance actions to address this environmental problem have been proposed by

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<sup>1</sup> Indeed, they have rise about 25% since the Kyoto Protocol was negotiated. The World Bank. *World Development Report 2010. Development and Climate Change* (2010), at 233

developed and developing countries in the negotiation process to reach a post-Kyoto agreement.

In this context, Ecuador has taken the lead and has launched an innovative climate protection initiative, known as *Yasuní-ITT initiative*, which consists of leaving an important oil reserve permanently locked beneath one of the most intact and biodiverse part of the Amazon rainforest, the so-called Yasuní National Park, preventing the emission of a great amount of CO<sub>2</sub>. The core idea of this proposal is simple, but its objectives are ambitious.

The analysis of this initiative is thus particularly interesting since it attempts to design a new international cooperation scheme between industrialized and developing countries which seeks to address climate change and, at the same time, to protect biodiversity, contribute to sustainable development of Ecuador, and protect the rights of its inhabitant, in particular indigenous people. It also pursues the transition of the national economy of this country towards a new development model based on the use of renewable energy source to overcome the dependence on fossil fuels. These aforementioned elements make it an appealing alternative to the other proposals that have been negotiated so far.

The aim of this thesis is to determine the feasibility of the Ecuadorian proposal to be recognized in the new environmental treaty as an effective mechanism to help developing and least developed countries to mitigate and adapt to climate change and highlight the benefits of its inclusion.

The analysis will be divided in three chapters. In the first chapter, I will describe the current international regime to combat climate change and examine the three mechanisms established by the Kyoto Protocol, especially Clean Development Mechanism in order to demonstrate its limitations to attain a real reduction of global GHG emissions. In the second chapter, I will try to summarize the Yasuní ITT Initiative to determine its scope of action, objectives and sources of funding. In this section, the reasons that prompted the Ecuadorian government to propose this new scheme will also be pointed out. And finally, in the third chapter, I will compare the Yasuní-ITT Initiative to the CDM and Reduced Emission from Deforestation and Forest Degradation (REDD) which is other mechanism that share some common features with the Ecuadorian initiative and it is likely to be included in the post-Kyoto

agreement. However, this comparative analysis will show that the Ecuadorian proposal does not fit into the existing and proposed financial mechanisms for climate change mitigation. Therefore, some reforms will need to be introduced in the international framework to allow its implementation.

## **CHAPTER I**

### **Current International Climate Framework**

Today, climate change is one of the most difficult challenges that the world has to tackle due to its diverse and dangerous effects on natural and human systems. In this sense, changes in climate have not only produced environmental and physical consequences such as an increase in temperature, rise in sea level, and alterations in the frequency of extreme weather events, among others, but also have had a significant impact on the economic growth and development of countries since they are affecting strategic sectors, such as energy, agriculture, food security, water resource, human health, wildlife and forestry. Therefore, the actions to mitigate<sup>2</sup> and adapt<sup>3</sup> to its consequences “involves complex interactions between climatic, environmental, economic, political, institutional, social and technological processes”.<sup>4</sup>

The primary cause of this environmental problem is the high concentration of greenhouse gases (GHG) emitted by human activities,<sup>5</sup> especially from burning fossil fuels, the destruction of forests, as well as a wide variety of industrial processes and agricultural activities.

Thus, in order to address the climate change issue and to avert and diminish the damage of its impacts and its costs, the international community has negotiated and adopted environmental protection treaties, with particular focus on reducing the emissions of GHG. In this respect, the United Nations Framework Convention on Climate Change and the Kyoto Protocol are regarded as the most important legal instruments of international climate policy that have been achieved so far. For that

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<sup>2</sup> *Mitigation is described as a human intervention to reduce greenhouse gas sources or enhance carbon sequestration.* Food and Agriculture Organization of United Nations. *Climate Change mitigation*. Available at <http://www.fao.org/climatechange/49370/en/> Accessed on December 01, 2010

<sup>3</sup> *Adaptation refers to adjustments in natural or human systems in response to climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.* IPCC: *Climate Change 2007: Impacts, Adaptation, and Vulnerability*. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Parry, Martin L., Canziani, Osvaldo F., Palutikof, Jean P., van der Linden, Paul J., and Hanson, Clair E. (eds.)] (2007)

<sup>4</sup> Bert Metz, Ogunlade Stewart and Jiahua pan (Eds) .*Climate Change 2001 Mitigation – Contribution of Working Group III to the Third Assessment Report of the Intergovernmental Panel on Climate Change* (2001), at 65.

<sup>5</sup> According to the United Nations Framework Convention on Climate Change (UNFCCC), climate change is defined as *a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods*<sup>5</sup>.



reason, they will be analyzed in this section so as to provide an overview of the current climate legal regime.

## **1.1 The United Nations Framework Convention on Climate Change (UNFCCC)**

### **1.1.1. Background**

In the 1980s, scientific studies alerted that human activities were producing an increase in the anthropogenic emission of GHG in the atmosphere which, according to reports carried out by the scientific community, contribute to global warming. Furthermore, the discovery of the Antarctic ozone hole in 1985 aroused the global attention to this phenomenon and it also demonstrated the urgency to take strong actions.<sup>6</sup>

In light of those findings, the international community recognized the need to respond to the threat of climate change in an effective way. The United Nations thus elaborated an instrument in which the emissions of GHG released by Member States were regulated and limited in order to prevent and reduce their harmful accumulation in the atmosphere. Hence, after an intensive negotiation process, the Framework Convention on Climate Change was open to signature at the Conference of the United Nations on Environment and Development (UNCED), which took place in Rio de Janeiro from 4 to 14 June 1992. The Convention entered into force in 1994 and, currently, it has been ratified by 194 States.<sup>7</sup>

### **1.1.2. Objective**

This international environmental agreement aims to *achieve stabilization greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.*<sup>8</sup> Therefore, pursuant to its objective, States parties voluntarily committed themselves to limit GHG emissions

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<sup>6</sup>United Nations (1992). *United Nations Framework Convention on Climate Change*. Available at: <http://untreaty.un.org/cod/avl/ha/ccc/ccc.html> Accessed December 8, 2010.

<sup>7</sup> United Nations (2007). *UNFCCC Status of Ratification*, at [http://unfccc.int/files/essential\\_background/convention/status\\_of\\_ratification/application/pdf/unfccc\\_conv\\_rat.pdf](http://unfccc.int/files/essential_background/convention/status_of_ratification/application/pdf/unfccc_conv_rat.pdf) Download December 9, 2010.

<sup>8</sup>UNFCCC. Article 2

to return to 1990 levels by 2002, through the adoption of domestic regulatory policies and programs.<sup>9</sup>

### **1.1.3. Principal features**

Some of the most important innovations introduced by the Framework Convention are as follows: First, it classified States Parties into two main groups: *Annex I* (i.e., countries of the Organization for Economic Cooperation and Development (OECD) and countries with economies in transition) and *Annex II* (developing countries). Second, it established an institutional structure for halting climate change, and set the Conference of the Parties (COP) as the governing body of the Convention which has representatives from all states parties. Third, it designed a mechanism to enable its signatories to carry out joint actions<sup>10</sup> to abate the climate change impacts and fulfill their emissions commitments.<sup>11</sup> And, fourth, it recognized the application of two important principles in the implementation of its provisions: The "*common but differentiated responsibilities*"<sup>12</sup> which means that "developed countries should take the lead in combating climate change"<sup>13</sup> given their historic contributions to the creation of this environmental problem and of their economic and technological capacity to face up to its consequences; and, the "*precautionary principle*" in order to "anticipate, prevent or minimize the causes of climate change and mitigate its adverse effects".<sup>14</sup> This means that, although scientific uncertainty exists about the impacts of climate change, in the event of a threat of serious or irreversible damage, States parties cannot use this uncertainty as an excuse to postpone taking actions.<sup>15</sup>

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<sup>9</sup> Parties included in the Annex I to the Convention have submitted national communications containing detailed national GHG inventories.

<sup>10</sup> Ann Prouty. *The Clean Development Mechanism and its implications for climate justice*, Columbia Journal of Environmental Law (2009)34, at 519

<sup>11</sup> That structure is seen as the basis for the further development of the joint implementation mechanism.

<sup>12</sup> Prouty, *supra* note 10, at 519

<sup>13</sup> United Nations (1992), *supra* note 4. Article 3 (1).

<sup>14</sup> *Id.* Article 3 (3)

<sup>15</sup> Rafael Leal Arcas. *Kyoto Protocol: an Adequate Environmental Agreement to resolve the climate change problem?* *European Environmental Law Review* (2001), at 284 Available online at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=536186](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=536186). See also Anita Margrethe Halvorssen. *The Kyoto Protocol and Developing Countries – The Clean Development Mechanism*, Colorado Journal of International Environmental Law & Policy (2005)16, at 359

Thus, notwithstanding the fact that this environmental treaty did not impose binding obligations on Member States nor did it set individual timetables for nations to reduce their carbon emissions, it is considered a relevant instrument of international climate policy because it represents the first step to prevent global warming and indeed it was the starting point to a further development of climate protection at international level.<sup>16</sup>

## **1.2 The Kyoto Protocol (KP)**

### **1.2.1. Background**

In spite of the effort of international community against climate change, the facts demonstrated that the global warming problem would not be tackled if nations were not legally bound.<sup>17</sup> So, the COP began working to achieve an agreement that would not only encourage its member countries to limit their GHG emissions but would also force them to accomplish it. After a protracted negotiation process, in 1997, at the third Meeting of the COP to the United Nations Framework Convention on Climate Change, the Kyoto Protocol was adopted by consensus of 159 nations,<sup>18</sup> but it did not enter into force until 2005 because of the difficulty to attain a sufficient number of signatory States.<sup>19</sup>

### **1.2.2. Principal features**

The core elements of this agreement are: First, the imposition of stronger and binding commitments to get Annex I countries to reduce their national emissions of six GHG<sup>20</sup> by at least 5 percent below 1990 levels during the period 2008 to 2012;<sup>21</sup> to do this, specific reduction targets were laid down in Annex B of the KP; and, second,

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<sup>16</sup> Federal Ministry for the Environment, nature conservation and nuclear safety. *International Climate Policy*. Available at: <http://www.bmu.de/english/climate/unfccc/doc/44282.php> Accessed December 7, 2010.

<sup>17</sup> Leal Arcas, *supra note* 16, at 284.

<sup>18</sup> This treaty was signing by 37 developed nations and the European Community, known as Annex I nations and over 100 developing countries, known as Non-Annex I countries.

<sup>19</sup> Prouty, *supra note* 10. at 519. United States did not ratify the protocol.

<sup>20</sup> Carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF<sub>6</sub>).

<sup>21</sup> This period is usually referred to as the “first commitment period”

the establishment of three flexible mechanisms to help industrialized countries to meet their reduction obligations in a cost-effective way.

### **1.3. Flexible Mechanisms**

As per the KP, Annex I countries must fulfill their commitments through the adoption of national mitigation policies and measures. Nevertheless, it also offers three alternative market-based mechanisms to allow developed States to comply with their obligations abroad at the minimum possible costs since they enable Annex I countries to invest in emission reduction activities in the cheapest place in the globe.<sup>22</sup> The establishment of these mechanisms therefore has driven the creation of international carbon markets and has increased interest in renewable energy sources and low-carbon technologies,<sup>23</sup> which play a key role in achieving global emission reductions in near and long-term.

However, as the KP only provides a brief description of the objectives and functions of these mechanisms, in 2001, at the seventh Meeting of the COP to the United Nations Framework Convention on Climate Change, held at Marrakesh, the COP reached a set of agreements focused on the establishment of operational rules and technical procedures for their implementation to ensure the accomplishment of the KP objectives. These agreements are known as the *Marrakesh Accords*.

The flexibility of these mechanisms is based on the premise that the distribution of GHG is uniform in the atmosphere, so emission reductions achieved by mitigation projects will have the same effect on the climate, regardless where they are undertaken. They therefore permit Annex I parties to decide how and where they will meet their reduction obligations under the protocol. These flexible mechanisms, also referred to as *Kyoto mechanisms*, are: the Emission Trading Scheme, the Joint Implementation and the Clean Development Mechanism.

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<sup>22</sup> Cameron Hepburn. *Carbon Trading: A review of the Kyoto Mechanism*. The Annual Review of Environment and Resources (2007)32, at 379

<sup>23</sup>United Nations Environment Program. *Environment Ministers Meet to Accelerate Transition to a Low Carbon Society*. Press Release, February 2008. Available at: <http://www.unep.org/documents.Multilingual/default.asp?documentID=528&articleID=5745&I=en> Accessed December 11, 2010.

### **1.3.1. Emission Trading Scheme (ETS)**

The Emission Trading Scheme was established by Article 17 of the Kyoto Protocol. This mechanism allows Annex I countries to trade their excess emission allowances (known as *Assigned Amount Units* or “AAUs”) with other countries with similar commitments to offset their exceed GHG emissions as long as such trading is supplemental to domestic actions. The amount of AAUs allocated to a developed country is calculated in accordance with its base year emissions and its emission reduction commitment, and each AAU represents the abatement of one ton of carbon dioxide.

The objective of this mechanism is to encourage companies from Annex I countries to invest in environmentally safe technologies to improve energy efficiency, since if their GHG emissions fall below their emission reduction limits, they can sell surplus AAUs under ETS to companies located in another developed country who struggle to fulfill their Kyoto obligations domestically.<sup>24</sup>

The ETS is based on a *cap-and-trade* system. The *cap* or enforceable limit ensures that industries or installations regulated by this regime will meet their environmental reduction requirements meanwhile the *trade* permits installations to comply with them at the lowest possible cost since “emission reductions beyond a targeted goal will be traded in form of credits.”<sup>25</sup>

Currently, the principal and largest scheme to trade emission allowances is the European Union Emission Trading System (EU ETS), launched in 2005 after the adoption of the Directive (EC) 2003/87. The European Union implemented it *in order to promote reductions of greenhouse gas emissions in a cost-effective and economically efficient manner, recognizing that, in the longer-term, global emissions of greenhouse gases will need to be reduced by approximately 70% compared to 1990 levels*.”<sup>26</sup>

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<sup>24</sup> *Id.*, at 363

<sup>25</sup> Oscar Maria Caccavale. *Climate Change under Peak Oil. The Kyoto Protocol and the Clean Development Mechanism*. (2008), at 7. Electronic copy available at: <http://ssrn.com/abstract=1148347>

<sup>26</sup>European Parliament and of the Council (2003) Directive 2003/87/EC. October 25, 2003, at. 32

The first phase of the EU ETS started in January 2005 and concluded in December 2007. The second phase is running at the same time with the first commitment period of the KP, from January 2008 to December 2012. And, the third phase is proposed to last from January 2013 to December 2020.

To date, this system regulates more than 11.000 installations<sup>27</sup> in 30 countries, representing about 40% of the EU ETS total CO<sub>2</sub> emissions. Thus, given its wide coverage, it is considered the most important European environmental policy adopted to combat climate change.

Under this scheme, each EU Member State has to establish the total amount of the emission permits, known as *European Union Allowance* or “EUAs” at national level and allocate them to each installation covered under this scheme. The EUAs are fully tradable between participants throughout European Union. So, in practice if a company, within the scope of the EU ETS, receives a specific number of EAUs, it must limit its emissions or buy EUAs on the carbon market to meet its reduction obligation.<sup>28</sup> In case of non-compliance, it must pay a fine for the excess emissions.

At the beginning of its operations, the EU ETS did not included the CDM and JI carbon credits; in April 2004, the EU approved the Directive (EC) 2004/101, the so-called *Linking Directive*, in which it integrated the Kyoto mechanisms into the EU ETS by authorizing the use of certain categories and quantities of *Certified Emissions Reductions* (CERs) generated by the implementation of Clean Development Mechanism projects from 2005 and *Emission Reduction Units* (ERUs) generated by Joint Implementation projects from 2008. As a result of this approval, regulated European operators are able to purchase, within specific limitations, CERs or ERUs as a help in achieving their emission reduction commitments.<sup>29</sup>

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<sup>27</sup> “Such as power stations, combustion plants, oil refineries and iron and steel works, as well as factories making cement, glass, lime, bricks, ceramics, pulp, paper and board. Airlines will join the scheme in 2012. The EU ETS will be further expanded to the petrochemicals, ammonia and aluminum industries and to additional gases in 2013, when the third trading period will start”. European Commission. *Climate Action*. Available at [http://ec.europa.eu/clima/policies/ets/index\\_en.htm](http://ec.europa.eu/clima/policies/ets/index_en.htm). Accessed on December 5, 2010

<sup>28</sup> Silvestrum. *Analysis of the ITT-Yasuní Initiative vis-à-vis Carbon Markets*. (2009) at.22

<sup>29</sup> European Parliament and of the Council (2004) Directive 2004/101/EC October 27, 2004. at 5

The decision about the use or not of credits from CDM or JI projects falls within the competence of the Member States; however, this competence must be exercised with due regard to the requirements indicated in the Linking Directive.

Lastly, due to the positive effects that the European system has produced on the reduction of GHG emissions, other national trading schemes are being launched or their implementation is being discussed, such as Australia, Japan, New Zealand, South Korea, Switzerland and United States.

### **1.3.2. Joint Implementation (JI)**

The Joint Implementation mechanism engages the cooperation of two Annex I parties given that it allows the transfer or acquisition of emission reduction credits between Annex I countries produced by investing in GHG abatement projects or projects that enhances removals by sinks.

Therefore, under this flexible mechanism, Annex I governments and legal entities are enabled to take part and finance low-carbon projects in other Annex I countries with the objective to earn a portion of the assigned amount units (the so-called *Emission Reduction Units* “ERU”<sup>30</sup>) issued for the emission reductions achieved through the implementation of these projects towards meeting their Kyoto targets.

Pursuant to article 6 of KP, JI projects must satisfy three criteria: the participation of the parties involved must be voluntary; the emission reductions must be additional to any that would occur without the project; and, the acquisition of ERUs by industrialized countries must be supplemental to their own domestic actions.

Nevertheless, as was mentioned before, the guidance for the performance of JI projects was developed in the Marrakesh Accords. In this respect, there are two important decisions: Decision 15/CP.7 which strengthens the governing principles, the nature and the scope of JI, and Decision 16/CP.7 which provides detailed procedures to be followed for its implementation.

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<sup>30</sup> One ERU is equivalent to one metric ton of CO<sub>2</sub>

### **1.3.3. Clean Development Mechanism (CDM)**

The Clean Development Mechanism was established under article 12 of Kyoto Protocol. This mechanism is designed to enable Annex I parties and private entities (from Annex I) to offset their exceed national emissions by supporting low-carbon activities or removal projects in developing countries (non-Annex I) and obtain in return the emission credits generated by that project, known as *Certified Emissions Reductions* (CERs),<sup>31</sup> which represent the equivalent to one ton of CO<sub>2</sub> not emitted into the atmosphere.

#### **1.3.3.1. Objectives**

The purpose of CDM is threefold: i) to help developing countries to attain sustainable development in an energy-efficient manner through the transfer of advance climate-friendly technologies and the increase of foreign investment flows into their territories.<sup>32</sup>; ii) to assist developed countries in meeting their emission reductions or limitation commitments under the treaty through the acquisition of lower-cost carbon emission credits from projects implemented in developing countries<sup>33</sup>; and, iii) to contribute to the essential objective of UNFCCC that is to “avoid dangerous anthropogenic interference with the climate system”.<sup>34</sup>

Consequently, the implementation of a CDM project is proposed to benefit both developed and developing countries.

#### **1.3.3.2. Requirements for CDM project**

Like a JI, a project must meet certain criteria to be qualified as a project activity under the CDM. The requirements are as follows:

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<sup>31</sup> Andrew Schatz. *Discounting the Clean Development Mechanism*. Georgetown International Environmental Law Review. (2008) 20, at 705

<sup>32</sup>Nhan T. Nguyen, Minh Ha-Duong, Sandra Greiner and Michael Mehling. *Improving the Clean Development Mechanism Post-2012: A Developing Country Perspective*, (2010), at 2.

<sup>33</sup> Noriko Fujimara. “*Flexible Mechanisms in support of a New Climate Change Regime. The Clean Development Mechanism and Beyond*”. CEPS Task Force Report (2009), available at [www.ceps.be/ceps/download/2679](http://www.ceps.be/ceps/download/2679) Downloaded on December 7, 2010

<sup>34</sup> United Nations (1997). *The Kyoto Protocol*. Art.12 (2)



- a) The participation of parties involved (Annex I country and developing country) must be voluntary;
- b) The project must contribute to sustainable development of the host state by producing real, measurable and long-term benefits in reducing carbon emissions; and,
- c) It must prove that the reductions are additional to any that would occur in the absence of the CDM project.<sup>35</sup>

### **1.3.3.3. CDM project cycle**

The Marrakesh Accords established six procedural stages that a project must satisfy in order to be registered as a CDM project activity.

#### *Stage 1: Project Development*

To begin with, project participants must design a formal proposal, known as “*Project Design Document*” (PDD) which contains a detailed information of the project, including the purpose and the justification for its implementation as well as the proposed baseline methodology that will be utilized, the estimated lifetime of the project, how the anthropogenic emission of GHG will be reduced, information of the financial sources of the project, a monitoring and verification plan to determine the quantity of emission that will be curbed and will be additional to the status quo; and, the description of the formula that will be used to calculate the expected emission reductions.<sup>36</sup>

#### *Stage 2: National Approval*

Thereafter, project participants have to provide a formal letter of approval of voluntary participation from the Designated National Authority (DNA). It is crucial that the host party issues a written statement in which it agrees with the execution of

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<sup>35</sup>The element of *additionality* is “the requirement that the greenhouse gas 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” <http://www.cdmrulebook.org/84> . Accessed on December 10, 2010.

<sup>36</sup> United Nations (2001). *The Marrakesh Accords*. Doc. FCCC/CP/2001/13/Add.2. Appendix B

the project activity and confirm that the project contributes to its sustainable development in order to be eligible under CDM.

*Stage 3: Validation and Registration*

Upon the host country approval, projects must be validated by Designated Operational Entities (DOEs). This process consists of evaluating the project activity to verify whether it meets the requirements set out by the protocol and the accords. If the DOE determines that the project passes the eligibility criteria, it proceeds with the validation of the project and the PDD is submitted to the CDM Executive Board for registration,<sup>37</sup> otherwise DOE rejects the project.

*Stage 4: Monitoring*

After registration, the monitoring plan explained in the PDD must be implemented mainly to collect all relevant data for calculating GHG emission occurring within the project to determine the baseline GHG emissions and identify all potential drivers that could increase emissions outside the project boundary as a result of its implementation during the period of crediting.<sup>38</sup>

*Stage 5: Verification and Certification*

Before the CDM EB issue CERs, emission reductions must be verified and certified by a different DOE from stage 4. Under this scheme, *verification* comprises the assessment made by the latter entity that includes the result of auditing and monitoring processes undertaken to demonstrate whether the quantity of GHG emissions curbed in practice are consistent with the PDD.<sup>39</sup> And, *certification* is the written assurance that, during the specified time period, a real reduction in anthropogenic emission was reached by the proposed project activity and all sources

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<sup>37</sup> *Id.* at 35-52

<sup>38</sup> *Id.* at 53-60

<sup>39</sup> CarbonVenture. *Clean Development Mechanism. Project cycle.* Available at: [http://www.carbonventures.com/services/article.php?list=The%20Clean%20Development%20Mechanism%20\(CDM\)%20Project%20Cycle&id=4479&link=The%20Clean%20Development%20Mechanism%20\(CDM\)%20Project%20Cycle](http://www.carbonventures.com/services/article.php?list=The%20Clean%20Development%20Mechanism%20(CDM)%20Project%20Cycle&id=4479&link=The%20Clean%20Development%20Mechanism%20(CDM)%20Project%20Cycle) Accessed December 12, 2010

of greenhouse gases were verified.<sup>40</sup> It is important to mention that carbon credits will only be generated if emissions are below the baseline scenario described in the PDD.

#### *Stage 6: Issuance of CERs*

Based on the certification report made by the DOE, the CDM EB will issue CERs equal to the verified amount of reduced emissions. After receiving EB's authorization, the CERs are deposited in the CDM registry and distributed to the national registries and accounts specified by the projects participants,<sup>41</sup> to be purchased and used by developed countries or companies covered under emission trading schemes.

#### **1.3.3.4. Main critiques**

Despite the fact that the implementation of CDM projects provides significant economic benefits for participants<sup>42</sup> and has promoted the emergence of a global market for GHG emission reduction projects, this mechanism has been seriously criticized for various reasons. In this section the most critical caveats relating to the configuration of the CDM will be analyzed:

##### *1. The uneven distribution of projects by economic sector and by country.*

According to the data published by UNEP RISØE CENTRE, 2836 of the CDM projects has been registered and a further 221 are in the registration process.<sup>43</sup> However, by 1<sup>st</sup> December 2010, the CDM pipeline of projects indicates the following unequal sectoral distribution of CREs that is estimated to be reached by 2012:

Although 61% of the registered CDM projects are renewable, they are calculated to account for 35% of the CERs; the capture of hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and nitrous oxides (N<sub>2</sub>O) is expected to generate about 27%

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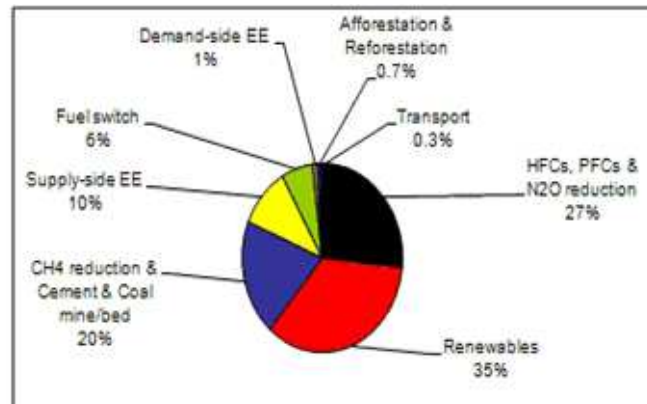
<sup>40</sup> United Nations (2001), *supra note 36*, at 61- 63

<sup>41</sup> *Id.* at 64 -66

<sup>42</sup> Schatz, *supra note 31*, at 716.

<sup>43</sup> UNEP Risøe Centre. *CDM/JI Pipeline Analysis and Database*, January 1st 2011. Available at: <http://cdmpipeline.org/overview.htm> Accessed December16, 2010

of the CERs; while afforestation and reforestation<sup>44</sup> projects are envisaged to take 0.7% and transportation projects only 0.3% of all CERs.<sup>45</sup>



Source: From UNEP Risoe CDM Pipeline Overview as of 1/12/2010

This information also demonstrates that a significant number of CDM projects are focused on non-CO<sub>2</sub> gases, such as HFCs, N<sub>2</sub>O, CH<sub>4</sub> and SF<sub>6</sub>, which have a very high global warming potential (GWP) and receive higher windfall profits than CO<sub>2</sub> abatement projects since for every ton reduced of these gases, they generate more CERs.<sup>46</sup> Therefore, they are more attractive for investors, given their great capacity to reduce GHG emissions at the minimum cost.<sup>47</sup>

In this regard, Schatz gives the following example to illustrate the disparity situation of CDM project portfolio by project type: “Hypothetically, a project may cost €5,000 to reduce one ton of HFC-23, but that reduction generates 11,700 CERs, potentially worth €117,000 on the open market. In contrast, a CO<sub>2</sub> abatement project might cost €5,000 and only produce 1,000 CERs, worth €10,000 on the open market.

<sup>44</sup> *Afforestation*: Direct human-induced conversion of land that has not been forested for a period of at least 50 years. *Reforestation*: Direct human-induced conversion of non-forested land to forested land through planting, seeding, and/or human-induced promotion of natural seed sources, on land that was forested by that has been converted to non-forested land. Terms defined in *16/CMP.1, Annex*, paragraph 1. <http://cdmrulebook.org/497>. Accessed on December 16, 2010.

<sup>45</sup> *Id.* Available at: <http://cdmpipeline.org/cdm-projects-region.htm>

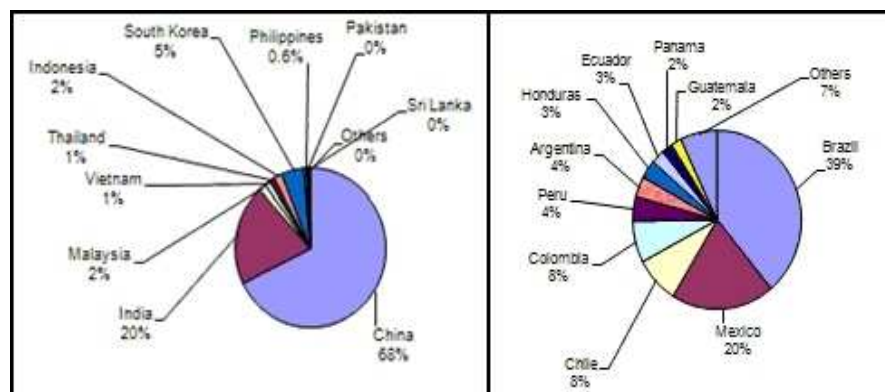
<sup>46</sup> See Lambert Schneider, Jakob Graichen, Nele Matz., *Implications of the clean development mechanism under the Kyoto Protocol on other conventions*. Environmental Law Network International ELNI Review (2005) 1, at 41- 52. See also Lambert. Graichen. *Options to enhance and improve the Clean Development Mechanism (CDM)*. ETC/ACC Technical Paper 2008/15.

<sup>47</sup> Noé21. *Économie, Énergie et Société*. HFC-23. Available at: <http://www.noe21.org/site/index.php/en/section-blog/43-campagnes/64-hfc-23>. Accessed on December 29, 2010

Thus, intelligent investors will make an enormous profit on the cheap HFC's, and ignore CO<sub>2</sub> reductions".<sup>48</sup>

The problem with the proliferation of HFC-23 and N<sub>2</sub>O destruction projects is that their implementation does not fulfill the objectives of the CDM: These project types do not provide environmental benefits for the host country nor induce a long-term transition to a low-carbon economy. They only provide lucrative incomes for a handful of companies, and in the case of HFC-23, their implementation creates a perverse incentive to increase the production of HFC-22.<sup>49</sup> In addition, in the market-based approach, the competitiveness of other CDM projects is being seriously affected since the large quantity of these projects is depressing the price of carbon,<sup>50</sup> and thus creating market distortions. Many solutions have been proposed to solve this critical issue; one of the most accepted is the ban HFC-23 credits from the EU ETS.

In addition, there is also an inequitable geographical distribution of CDM projects since the majority of them are realized in few countries. China, India, Brazil and Mexico are hosting around 80% of the projects registered, and only a limited number of projects are located in other developing and least developed countries.<sup>51</sup> Hence, CDM is failing to promote an equitable low-carbon technology transfer and knowledge to the latter, given that only more-advanced developing countries are receiving economic and environmental benefits from its implementation.



Source: From UNEP Risoe CDM Pipeline Overview as of 1/12/2010

<sup>48</sup> Schatz, *supra* note 31, at 720.

<sup>49</sup> The air-conditioner refrigerant which have a very high global warming potential (GWP)

<sup>50</sup> Schatz, *supra* note 31, at 722

<sup>51</sup> UNEP Risøe Centre. CDM Pipeline, available at: <http://cdmpipeline.org/cdm-projects-region.htm> Accessed December 16, 2010

## *2. Insufficient contribution to sustainable development (SD).*

Although the KP outlines that contribution to achieving sustainable development in the host country is one of the main purposes of the CDM, it did not provide a definition of this term.<sup>52</sup> Moreover, the Marrakesh Accords merely states that “*it is the host Party’s prerogative to confirm whether a clean development mechanism project activity assist it in achieving sustainable development*”. Thus, each developing country is, based on its sovereignty, competent to establish its own criteria and procedures for assessing it.

As a result, different approaches to evaluate the effects of a CDM project have been set up by countries; most of them include environmental, social, economic and technological criteria<sup>53</sup>, such as Brazil that has established specific and ambitious SD requirements for the implementation of CDM projects. However, due to the necessity to attract foreign investments, other developing countries and, in particular, least developed countries have established lenient standards to assess the SD contribution of CDM activities in their territories or they permit the implementation of mitigation projects that not satisfy all requirements, but at least one of them, such as creating job opportunities. Hence, as a result of their economic situation, developing countries would prefer a project that could generate short-term economic incomes to address their urgent development needs, but that would not be environmental sustainable in the long-term.<sup>54</sup>

For the above-mentioned reason, many authors<sup>55</sup> have concluded that the contribution to SD by the CDM is currently very low and sketchy, and it is one of the weakest aspects of this mechanism that could be improved in a post-Kyoto agreement to develop its emission reduction potential.

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<sup>52</sup> Sustainable development is defining as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” World Commission on Environmental and Development, our Common Future ES-7, 1987

<sup>53</sup> Lambert Schneider. *Is the CDM fulfilling its environmental and sustainable development objectives? An evaluation of the CDM and options for improvement*. Report prepared for WWF (2007), at 46

<sup>54</sup> Anita Margrethe Halvorssen, *supra note* 15, at 368

<sup>55</sup> See Schatz, *supra note* 31, at 724. Schneider, *supra note* 53, at 14. Boyd, Emily *et al.* *Reforming the CDM for sustainable development: lessons learned and policy futures*. Elsevier. Environmental Science & Policy (2009) 12, at 822.

### 3. *The CDM does not to reduce global emissions.*

According to Schatz, the CDM is an inefficient measure to halt climate change, given that it fails to achieve its main objective to reduce emissions worldwide. In this regard, within the current structure of the CDM, when a non-Annex I party transfers CERs to an industrialized country, the latter is only using the credits earned to offset an increase of its own emissions. Thus, this transaction is merely an exchange of emission reductions abroad for a domestic increase, in doing so, it is not producing a reduction in global emission beyond those required by developed country targets.<sup>56</sup>

As the CDM is an offset mechanism which enables Annex I countries or private entities to emit more GHG by financing emission reduction projects in developing countries; it is crucial to ensure that global GHG emissions do not increase as a result of the implementation of projects that not create additional emission cuts. In this context, if a CDM project does not demonstrate that the GHG reductions are above and beyond the “*business as usual*” scenario<sup>57</sup> at the verification stage, but it is registered as a CDM project, the amount of emissions of GHG will certainly rise due to the issuance of CERs allows Annex I countries to exceed their GHG emission limits without genuinely offsetting them.<sup>58</sup>

This abusive use of CDM projects can be avoided through an appropriate demonstration of the “*additionality*” requirement. However, in practice, the appraisal of this criterion is “difficult, subjective, and uncertain”<sup>59</sup> since its assessment is based

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<sup>56</sup> Environmental Defense. The Clean Development Mechanism and the Post 2012 Framework (2007) Accessed December 18, 2010. Available online at [www.environmentaldefense.org/documents/6838\\_ED\\_Vienna\\_CDM%20Paper\\_8\\_22\\_07.pdf](http://www.environmentaldefense.org/documents/6838_ED_Vienna_CDM%20Paper_8_22_07.pdf). See Nicholas Stern,. Stern Review: The Economics of Climate Changes. (2007) Part VI: International collective action. Chapters 23, at. 16

<sup>57</sup> A business as usual scenario is defined by Point Carbon as “*a policy neutral reference case of future emissions, i.e. projections of future emission levels in the absence of changes in current policies, economics and technology*”. Glossary. Point Carbon. Available at: <http://www.pointcarbon.com/trading/cpm/resources/cpmglossary/> Accessed on December 18, 2010

<sup>58</sup> Fred Pearce. Carbon trading: dirty sexy Money (2008). New Scientist. Available online at <http://environment.newscientist.com/channel/earth/mg19826521.600-carbon-trading-struggles-to-cut-our-emissions.html>. Accessed on December 18, 2010

<sup>59</sup> Schneider *et al*, *supra* note 46, at 28. “*The demonstration of additionality is controversial issue. The fundamental challenge is that the question as to whether a project would also be implemented without the CDM is hypothetical and counter-factual- it can be never proven with absolute certain*”.

on a hypothetical baseline scenario. Therefore, this feature of the CDM must be enhanced to safeguard its environmental integrity.<sup>60</sup>

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<sup>60</sup> The CDM regime must ensure that emission reductions are real, measurable and additional to any that would have occurred in the absence of the CDM project activity.



## **CHAPTER II**

### **Yasuní-ITT Initiative**

As the first commitment period of the Kyoto Protocol is about to expire, new climate change mitigation strategies are being proposed and discussed by the international community to reduce the concentration of greenhouse gas (GHG) emissions in the atmosphere as means to combat global warming, biodiversity loss and poverty. In this context, Ecuador, a small developing country in South America, has presented its innovative climate protection project, known as *Yasuní-ITT initiative*.

This initiative has been designed to help Ecuador to avoid and alleviate climate change effects and face its sustainable development challenge with the financial assistance of the international community. Indeed, the Yasuní-ITT initiative can be seen as a pilot towards a new scheme of cooperation between industrialized nations and developing countries to tackle global warming, which proposes an institutional and financial structure to conserve biodiversity, reduce GHG emissions, and promote sustainable growth.

#### **2.1. Description of the Initiative**

This initiative consists of keeping indefinitely underground 846 million of barrels of crude oil in the ITT (Ishpingo, Tambococha, Tiputini) field, located within the Yasuní National Park, in the Ecuadorian Amazon rainforest; thereby preventing the emission of 407 million metric tons of CO<sub>2</sub>,<sup>61</sup> which would be released eventually by burning the extracted oil. In exchange, under the principle of share responsibility, Ecuador requests an international compensation for at least 50% of the lost revenues from choosing not to drill, which is estimated at 3.6 billion US dollars over thirteen years. Left 50% would be assumed by the Ecuadorian government, becoming the first and major contributor to the initiative.<sup>62</sup> The investments would be deposited in the Yasuní-ITT Trust Fund, administered by the United Nations Development Program (UNDP), and the capital fund would be used in renewable energy projects while the

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<sup>61</sup> This amount is equivalent to the annual emissions of countries such as Brazil or France.

<sup>62</sup> See Government of Ecuador. *Yasuní-ITT initiative: A big idea from a small country* (2009).

interest earned would finance exclusively conservation and social development projects.

In return for the financial support, the government of Ecuador would issue Yasuní Guarantee Certificates (CGYs according to the Spanish acronym) to all contributors for the nominal value of the compensations so as to assure that the crude oil will remain indefinitely intact in the subsoil. In the event that the Ecuadorian government breaks its commitment and exploits the petroleum of this field, the CGYs will become redeemable and the Yasuní Trust Fund will return the contributions to the donors, the disbursement of the capital investment to develop renewable projects will be suspended as the payment of any yield to Ecuador.<sup>63</sup>

An additional funding source would be the income from the sale of CGYs for avoided emissions as carbon credits to private and public entities who want to offset their surplus emissions by acquiring allowances in carbon markets. Under this scheme, the Ecuadorian government would be the entity responsible for the emission of these certificates. Although such mechanism is not currently envisioned in the Kyoto Protocol, the Yasuní-ITT Initiative proposes its creation as a pilot project that could be part of the post-2012 climate protection regime, currently being negotiated within the United Nations Framework Convention on Climate Change.

In June 2007, this proposal was officially presented at national level by the government as the first option to the ITT field; the second option is its exploitation. At the international level, the proposal was launched three months later by the President of Ecuador, Rafael Correa, at the 62th Period of Session of the General Assembly of the United Nations, who described the initiative as a new ecological model to fight climate change, focusing on: i) the conservation of biodiversity, refraining the production of fossil fuels in areas which are highly biologically sensitive; ii) the avoidance of carbon dioxide emissions by non-extracting and non-burning the ITT oilfield; and, iii) the protection of indigenous peoples, concretely Tagaeri and Taromenane communities who live in the area in voluntary isolation.<sup>64</sup>

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<sup>63</sup> *Id.* at19

<sup>64</sup> Rafael Correa. Speech at the High Level Meeting on Climate Change at the UN General Assembly in New York (2007). Available at <http://www.ens-newswire.com/ens/apr2007/2007-04-24-04.asp> Accessed December 28, 2010.

Immediately, the international community expressed great deal of interest in the Yasuní-ITT Initiative, and so far, it has received support from Latin American and European governments as well as nongovernmental organizations, international institutions and individuals throughout the world. Furthermore, some countries have asked technical assistance to Ecuador to develop similar programs, such as Guatemala and Nigeria.

### **2.1.1. Ecuador and its relationship with oil production**

Ecuador is a small country in South America, with an area of 272,045 sq km and 14'306.876 inhabitants.<sup>65</sup> It is geographically divided into 4 regions: The coastal area (Costa), the Andean highlands (Sierra), the Amazon (Oriente) and the Galapagos Islands. Due to its geographic position and environmental features, it is identified as one of the most biodiverse countries in the world.

However, Ecuador is a developing country. Its economy relies heavily on the exploitation of oil reserves in the Amazon region and on the export of agricultural and fisheries products, such as bananas, coffee, cut flowers, cacao, shrimp and fish, which makes it particularly vulnerable to fluctuations of the price of these products in the marketplace.<sup>66</sup>

In 1972, Ecuador began exporting oil and since then this product has played a dominant role in the national economy, becoming its first source of income. Only in the last decade, the oil generated about 54% of total export revenues. However, despite the fact that oil incomes contributed significantly to the development of the country from 1972 to 1982, Ecuador has not received the full benefits of its oil wealth, given that it has not brought sustained economic growth or social improvements during the last 28 years. By contrast, the dependency on hydrocarbons has caused serious economic, social and especially environmental problems because the extraction of oil is carried out within fragile areas in Amazon rainforest. For instance, it has caused the lack of economic diversification, unequal income distribution, over-

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<sup>65</sup> Instituto Ecuatoriano de Estadísticas y Censo (INEC). <http://www.inec.gob.ec/preliminares/somos.html> Accessed on January 27, 2011.

<sup>66</sup> Federal Ministry for Economic Cooperation and Development. *Ecuador profile*. Available at [http://www.bmz.de/en/what\\_we\\_do/countries\\_regions/lateinamerika/ecuador/Cooperation.html](http://www.bmz.de/en/what_we_do/countries_regions/lateinamerika/ecuador/Cooperation.html) Accessed December 28, 2010

exploitation of natural resources and deforestation at a high rate, to mention a few. Therefore, Ecuador is a perfect example of the “*curse of natural resources*”.<sup>67</sup>

At present, as per the data published by Oil and Gas Journal (OGJ), Ecuador has proven oil reserves of about 6.5 billion barrels. Consequently, the oil extraction is estimated to last for approximately 30 years, even if new oil reservoirs are discovered in the Amazon region. Furthermore, in recent years the production has fallen in the most important oil fields as a result of natural decline of the well, lower investment levels, the lack of new project developments, and some operating difficulties.<sup>68</sup>

In light of the above, in the medium and long run, Ecuador will need to shift its development model based on the extraction of non-renewable sources, and go towards a post-petroleum economy based on the sustainable use of its biological and biodiverse richness and the protection of its cultural diversity.<sup>69</sup> In this context, the Yasuní-ITT initiative can be seen as the right step to achieve this transition.

### **2.1.2. Yasuní National Park (YNP) and ITT Oil-block**

The Yasuní area is considered as one of the most biologically diverse areas on earth.

In 1979, the Ecuadorian government created the Yasuní National Park in order to protect and preserve its abundance natural resources.<sup>70</sup> The park is situated at the eastern edge of Ecuador, in the provinces of Orellana and Pastaza, with a surface of 9.820 sq km and it is surrounded by a 10 sq km buffer zone in all directions except to the east, where it meets the Ecuador-Peru border. Given its extension and its

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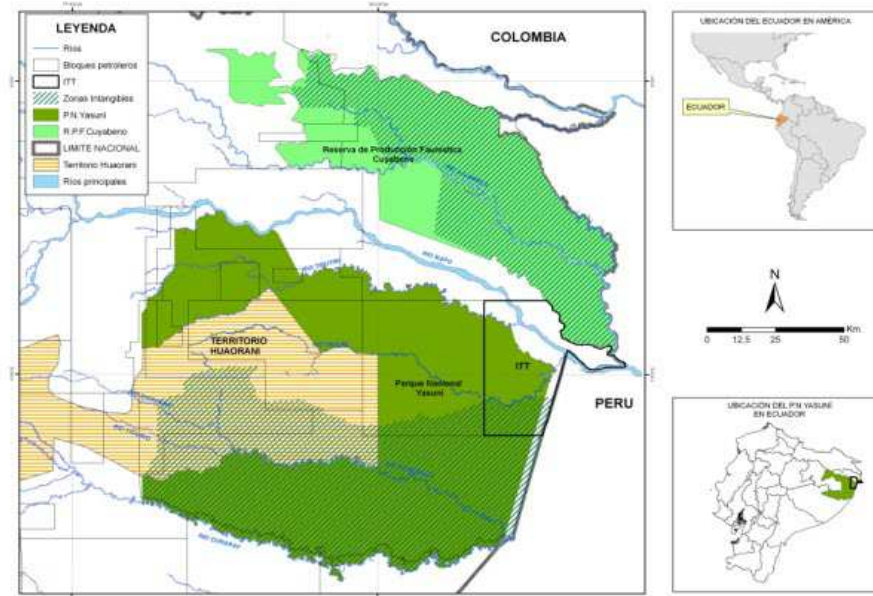
<sup>67</sup> Term used by Richard Auty in 1993 to refers to the paradox of countries with great natural resources wealth tend nevertheless to grow more slowly than resource-poor countries. Sachs, Jeffrey D. Warner, Andrew. *Natural Resources and Economic Development. The curse of Natural Resources*. European Economic Review (2001), at 45.

<sup>68</sup> United States Energy Information Administration (EIA). *Country Analysis Briefs: Ecuador*. Washington, DC: United States Energy Information Administration (2010). Available <http://www.eia.doe.gov/cabs/Ecuador/Oil.html> Accessed December 28, 2010

<sup>69</sup> Laura Rival. *The Yasuní-ITT Initiative: Oil Development and alternative form of wealth making in the Ecuadorian Amazon*. Working Paper Number 180. University of Oxford (2009).

<sup>70</sup> This declaration was made official through the Inter-Ministerial Decree No. 0322, published in the R.O. 69 of November 20, 1979.

extraordinary array of flora and fauna, it is the largest national park in Ecuador and one of the most important biological reserves in Latin America.



In 1989, UNESCO designated the park as a “*World Biosphere Reserve*” under the program “*Man and the Biosphere*”, in recognition of its extraordinary biodiversity value. As a result of this designation, the activities undertaken within the YNP should be directly related to the promotion of biodiversity conservation and its sustainable use, such as nature preservation activities, environmental education, scientific research and ecotourism,<sup>71</sup> among others. Additionally, the YNP has to be administered in accordance with the recommendations contained in the Seville Strategy for Biosphere Reserves, adopted at the International Conference on Biosphere Reserves held in Seville, in 1995.

In 1999, the southern part of the Park was declared “*Intangible Zone*” by the Ecuadorian Government<sup>72</sup> in order to protect the territory of the Tagaeri and Taramenane people, two of the last remaining non-contacted indigenous tribes in the world, and to prevent the State from extracting oil in this area, but its boundaries were

<sup>71</sup> José Luis De la Bastida. *Development in the Amazon Basin countries: Alternatives to Extraction of non-renewable Natural Resources*. Master Thesis. American University School of International Service Global Environmental Policy (2009), at 43.

<sup>72</sup> Government of Ecuador. Executive Decree No.552, published in the R.O. 121 of February 2, 1999.

not defined. In 2007, the zone was finally delimited and it encompasses approximately 6.125 sq km.

In 2008, the new Political Constitution of the Republic of Ecuador was approved by referendum. This Constitution grants rights to nature or '*Pacha Mama*' (in Quichua), to promote its preservation. To do so, it prohibits all types of oil and gas extractive activities in intangible zones and in protected areas. However, there is an exception, drilling projects could be allowed on ground of national interest if the President approved it and the National Assembly declared it. It is also established that a public referendum could be called.<sup>73</sup>

There are many important reasons to justify the conservation of the Yasuní National Park: First, to safeguard the exceptional biodiversity of the area. According to a joint research published in January 2010, "just one hectare of the park spots more tree species than are present in all of North America, the park overall has 2,274 registered ones. Almost 570 species of birds, more than 100 species of amphibians and reptiles, some 4000 species of vascular plants and supposedly, with 100,000 per hectare, the largest number of insects anywhere in the world can be found in the park".<sup>74</sup> Second, to protect and maintain essential environmental services that the park provides, such as provisioning services (it is a natural supplier of food and fresh water), regulating services (it plays an important role in the water cycle, air quality and climate regulation), supporting services (it facilitates nutrient recycling and soil formation) and cultural services (it guarantees the conservation of cultural heritage values, cultural diversity and ecotourism use), to name a few. And third, to defend the rights of Tagaeri and Taromenane and ensure their survival, since they dwell in Yasuní and adjacent areas.

Nevertheless, despite the above-mentioned declarations and recognitions, the actual protection of the Yasuní National Park is low due to the limited budget resources of the Ministry of Environment of Ecuador, entity responsible for the

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<sup>73</sup> Government of Ecuador. Political Constitution of the Republic of Ecuador (2008). Articles 10, 57, 71, 74 and 407.

<sup>74</sup> Margot Bass *et al.* *Global Conservation Significance of Ecuador's Yasuní National Park*. PLoS ONE. (2010)5. Issue 1, at 7. See also Carlos Larrea and Lavinia Warnars, *Ecuador's Yasuní-ITT Initiative: Avoiding emissions by keeping petroleum underground*. 13 Energy for Sustainable Development, International Energy Initiative (2009) 3, at 220.

management and control of the YNP, which have impeded the implementation of effective environmental strategies.

In addition, this fragile ecological area is threatened by existing and envisaged oil development activities in the north half of the park. Indeed, the Yasuní National Park holds important oil reserves. There are five oil blocks within its boundaries; four of them have been granted under concession to oil companies and they are currently being drilled. But, the second largest field located in the most intact northeastern section of the park, remains untapped. It is known as Ishpingo, Tambococha and Tiputini (ITT) field, with a size of 178,768 hectares, representing 23% of the park. It contains about 846 million barrels, equivalent to 20% of the country's oil reserves, which will allow approximately 25 years of exploitation. Thus, it is expected to produce around 107.000 barrels per day during the first 13 years, then, as a result of the natural declining phase of the wells, the production would decrease to 56.000 barrels per day and 12 years later the extraction would cease.<sup>75</sup>

The ITT block contains a heavy crude oil with an API gravity<sup>76</sup> of 14.7 degrees, which has a lower price in the market and raises the cost of the extraction process since its transportation through pipelines requires that the oil reaches certain density that can only be obtained by heating it.<sup>77</sup> Therefore, it will be necessary to invest in the construction of a high power thermoelectric plant in the Yasuní area, which will delay the start of the productive stage for about five years.<sup>78</sup> In addition, it is estimated that this block has 90/10 water-to-crude oil ratio, which means 90 barrels of formation water for every 10 barrels of petroleum. So, the exploitation of this oil field would

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<sup>75</sup> Petroproducción. *ITT Project Report*. PowerPoint presentation (2008)

<sup>76</sup> "API gravity is a specific gravity scale developed by the American Petroleum Institute (API) for measuring the relative density of various petroleum liquids, expressed in degrees. API gravity is graduated in degrees on a hydrometer". *Oilfield glossary*. Available at: <http://www.glossary.oilfield.slb.com/Display.cfm?Term=API%20gravity> Accessed January 1, 2011.

<sup>77</sup> Caroline Imesch. *The non-extraction of crude oil in the Ishpingo-Tiputini-Tambococha (ITT) oil fields: Beyond an ecological utopia? The case of the Yasuní National Park*. Master Thesis (2009), at 34

<sup>78</sup> SOS Yasuní (2010). *Will it be conservation or oil extraction in the Yasuní National Park?* [http://www.sosyasuni.org/en/index.php?option=com\\_content&view=article&id=111:will-it-be-conservation-or-oil-extraction-in-the-yasunational-park&catid=15:campaign](http://www.sosyasuni.org/en/index.php?option=com_content&view=article&id=111:will-it-be-conservation-or-oil-extraction-in-the-yasunational-park&catid=15:campaign) Accessed on January 1, 2011. See also Rival, Laura, *supra note* 69, at 8

generate a significant amount of produced water that could end up in the rainforest and even in Amazonian rivers if its re-injection into the subsoil failed.<sup>79</sup>

Consequently, due to the uncertainties about the real quantity of crude oil that will be extracted, the technology to be employed,<sup>80</sup> and the oil price fluctuation in the market, the development of this field would be less profitable for oil companies, given that “the costs of exploitation could be higher than the incomes earned by its production”.<sup>81</sup> On the contrary, the negative environmental impact would be significant, irreparable and impossible to economically quantify.

## **2.2. Objectives of the Initiative**

As per the official proposal,<sup>82</sup> the main objectives of the initiative are:

- a) *Attack global warming* by keeping 407 million metric tons of CO<sub>2</sub> out of the atmosphere.

As the two principal causes of global warming are the burning of fossil fuels and deforestation, Ecuador seeks to face this environmental problem in an effective manner through the implementation of its initiative. If the scheme is applied, the release of greenhouse gases will be blocked permanently at source, since the fossil fuels will not be extracted for consumption. At the same time, it will avoid the loss of natural forests by preventing deforestation that drilling for oil is known to cause.

Furthermore, Ecuador will use the capital fund received from the international community: i) to invest in renewable projects so as to reduce the use of oil in power generation and industrial production and develop diverse and alternative energy sources. Therefore, this initiative will promote an energy transition of Ecuador towards a post-petroleum path; and, ii) to set up massive programs of

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<sup>79</sup> Oilwatch. *ITT Project. Option I: Conserving crude oil in the subsoil* (2007), at 5. Available online at: [http://sosyasuni.org/en/files/ow\\_itt\\_proposal\\_v8-ingles.pdf](http://sosyasuni.org/en/files/ow_itt_proposal_v8-ingles.pdf) Downloaded on December 20, 2010.

<sup>80</sup> *Id.* at 18.

<sup>81</sup> Joan Martínez Alier. "Cuantificación de la Deuda Ecológica." 10 *Gestión y Ambiente* (2007)3, at 26

<sup>82</sup> See Government of Ecuador (2009) *supra* note 62, at 11.



afforestation, reforestation and forest recovery that will permit the absorption of additional amounts of CO<sub>2</sub> from the atmosphere.

*b) Prevent the loss of biodiversity and support the subsistence of indigenous cultures.*

Given that the oil extraction causes inevitable destruction of biodiversity and soil and water pollution, this initiative intends to prevent the occurrence of these serious environmental damages by avoiding the extraction of the crude oil in the ITT field. Thus, its goal is to promote the protection and sustainable management of 38% of Ecuadorian territory, which include not only the YNP but also another 40 protected areas. It also ensures the existence of the last two tribes who live in voluntary isolation in Ecuador, the Taromenane and the Tagaeri, through the conservation of their territory in order to maintain their traditional lifestyles.

*c) Reduce poverty and inequality*

The implementation of the proposed scheme will help Ecuador to reduce its high poverty rate and other social problems by investing in projects mainly focused on education, health, housing, and the creation of employment in sustainable activities, such as ecotourism and agriculture.

Therefore, this initiative is unique since it faces simultaneously environmental, economic and social challenges. It aims to attain, at the same time, the reduction of GHG emissions, the protection of biodiversity and natural resources; the transition of the Ecuadorian economy to a new non-extractive development model; and, the protection of the rights of its inhabitant, especially the indigenous people.

These objectives could also be seen as the criteria established by the Ecuadorian government to achieve its sustainable growth and a mean to fulfill the Millennium Development Goals.<sup>83</sup>

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<sup>83</sup> Global action plan adopted at the UN General Assembly, on September 18, 2000, which consist of eight international development goals that UN Member States have agreed to achieve by 2015. Available online at: <http://un.org/millennium/declaration/ares552e.pdf> Accessed on January 6, 2011

### **2.3. Guarantee-Mechanism**

As previously mentioned, the Ecuadorian Government, in exchange for contributions, will issue to the donors Yasuní Guarantee Certificates (Certificados de Garantía Yasuní CGY in Spanish), which will hold the Ecuador's pledge to maintain the oil of ITT field indefinitely intact in the subsoil. Each CGY would represent 1 metric ton of CO<sub>2</sub> that is not released into the atmosphere because of non-extraction and non-combustion of the crude oil in the ITT field. Therefore, the government will issue CGYs up to a total amount of 407 million metric tons of CO<sub>2</sub> avoided as a result of the implementation of the initiative.

Pursuant to the Terms of Reference of the Yasuní-ITT Trust Fund (TOR), each certificate will include the nominal value of the contribution and the equivalent amount of non-emitted metric tons of CO<sub>2</sub>, according to the price of the European Union Allowances (EUAs) in the Leipzig carbon market. Additionally, it is established that the CGYs will not earn any interest and have not an expiration date as long as the government fulfills its commitment to permanently keep untapped the Yasuní ITT oil reserve in the ground. Thus, in case of non-compliance, the CGYs will be made redeemable and the government must reimburse to the holders the investment amount plus interests.

The establishment of such guarantee-mechanism seeks to generate and increase the confidence of actual and potential contributors to the initiative. It will also prevent a future Ecuadorian government from starting the development of ITT oil field since if it defaults on its commitment, it will be responsible for the reimbursement process.

### **2.4. The issuance of CGYs as carbon credits**

It is important to mention that in 2007, the initiative only contemplated the emission of CYGs as “government bonds for the crude oil that will remain ‘*in situ*’, with the double commitment of never extracting this oil and of protection Yasuní National Park”.<sup>84</sup> However, in mid-2008, in order to create an additional source of income due to the international economic crisis and the difficulty to find contributors, the Ecuadorian government modified the original design of its initiative by including

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<sup>84</sup> Oilwatch, *supra note* 79, at 4.

the sale of CGYs as emission rights to create a link between this scheme and existing carbon markets. This modification thus intends to insert the initiative as a pilot project into the *cap-and-trade* system. By doing so, the CGYs would be accepted in the world carbon market and the government could issue them for sale to governments and legal entities under the specific condition that the CGYs will be included in the total quota of annual emission permits in order not increase the amount of emission allowed from all States or installations under emission trading schemes.<sup>85</sup> The CGYs are expected to be sold by the Ecuadorian government in a 10 year timeframe.

However, as the mechanism proposed by Ecuador is not recognized under the United Nations Framework Convention on Climate Change, a political agreement will be necessary at international level to support the initiative as an additional scheme to address climate change, preventing greenhouse gas (GHG) emissions.

## **2.5. Yasuní-ITT Trust Fund**

As the initiative proposes a mechanism of compensation in which the international community has to contribute at least 50% of the forecasted profits that Ecuador would have obtained by extracting the ITT's crude oil, currently estimated at 7.2 billion US dollars, the establishment of the Yasuní-ITT Trust Fund is crucial for the implementation of this initiative.

Thus, in order to design the adequate procedure to channel the financial support received from the international community through the Yasuní-ITT Trust Fund; three documents have been elaborated by the Ecuadorian government with the cooperation of the United Nations Development Program (UNDP). These documents are: *Yasuní-ITT Terms of Reference* (TOR), which sets forth the purpose, principles and structure of Yasuní-ITT Trust Fund; the *Memorandum of Agreement* (MOA) between the Government and UNDP, as the Administrative Agent, for the management and other support services related to the Yasuní-ITT Trust Fund, which was signed on August 2, 2010; and, the *Standard Administrative Arrangements* (SAA) between the

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<sup>85</sup> Government of Ecuador (2009), *supra* note 62, at 4

Administrative Agent and the Contributors to the Yasuní-ITT Trust Fund<sup>86</sup>, for receipt of funds from the latter.

### **2.5.1. Structure of the Yasuní-ITT Trust Fund**

Although the Yasuní-ITT Trust fund is already considered as a pioneering financial method to preserve an important ecosystem of Ecuador,<sup>87</sup> it will also serve as a mechanism to attain long-term sustainable human development goals of this country, focusing on poverty alleviation and the strengthening of the rights of indigenous peoples.

In this sense, the initiative, through the effective management of the Fund, will help Ecuador to solve its long-term dilemma between economic growth and nature conservation, allowing it to achieve both of them through the transition of the national economy to a new development model that displaces the high-carbon dependence.

In this section, the main elements of this original fund will be analyzed in detail.

#### **2.5.1.1. Financial Sources**

There are two envisaged sources of funding for the Yasuní-ITT Trust Fund:

1. The voluntary contributions, which could come from:

- a) *“Governments of Partner Countries and International Multilateral Organizations;*
- b) *Contributions from Civil Society Organizations;*
- c) *Contributions from socially and environmentally responsible private sector companies;*
- d) *Contributions from citizens worldwide”*

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<sup>86</sup> Yasuní-ITT Initiative. *Ecuador's Yasuní – ITT Initiative: Why leave oil underground?* (2010). <http://yasuni-itt.gob.ec/blog/2010/08/04/ecuador-%E2%80%98s-yasuni-%E2%80%93-itt-initiative-why-leave-oil-underground/> Accessed January 5, 2011.

<sup>87</sup> Johannes Van de Ven. *Ecuador's Yasuní-ITT Trust Fund – A paradigmatic shift in Global Development Cooperation* (2010). <http://johannesvadeven.blogspot.com/2010/08/ecuadors-yasuni-national-park.html> Accessed on January 5, 2011

The Yasuní-ITT Trust Fund has already received the financial support from other governments. In this respect, Chile was the first country to contribute to this initiative through a symbolic donation of 100 thousand US dollars, made on September 15, 2010. Spain became the second donor country; it made a contribution of 1 million euros, which was deposited in the Yasuní-ITT Account on November 10, 2010. The Popular Republic of China has also committed 20 thousand US dollars to the fund on December 3, 2010. In addition, the Government of Ecuador and the Regional Government of Wallonia (Belgium) signed a declaration of honor for the contribution of 300 thousand euros for the Yasuní-ITT Initiative, on December 13, 2010. Italy plans to contribute 35 million US dollars through debt-for-conservation swaps. Meanwhile, Germany, Canada and Portugal are also considering making contributions.<sup>88</sup>

2. *Transaction linked to the carbon market.* However, as mentioned before, this financial source will be only feasible if developed countries recognize the CGYs as emission credits and include the proposed mechanism as a pilot project.

It is worth mentioning that the Ecuadorian government has established a deadline for collecting at least US 100 million US dollars to the Yasuní-ITT Fund. This deadline is December 31, 2011. In the event that the international community does not contribute to this minimum threshold, all contributions will be refunded by the government; and, the initiative will be seen as a failure, leaving the door open for the exploitation of the ITT field.

#### **2.5.1.2. The funding flow**

The Yasuní-ITT Trust Fund will be divided in two accounts or windows, which will have different sources of income, scopes of application and purposes:

1. The *Capital Fund Window* is the account in which will be deposited the contributions received from the international community and the income from the sale of CGYs in the carbon market. This fund will be used in developing renewable energy

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<sup>88</sup> *Contributors to Yasuní-ITT Initiative.* Available at: [www.yasuni-itt.gob.ec](http://www.yasuni-itt.gob.ec) Accessed on January 5, 2011

sources, such as hydro, geothermal, solar and wind power projects with guaranteed profitability; and,

2. The *Revenue Fund Window*, is the account in which will be deposited the annual revenue payments for the use of the funds from the Capital Fund Window. This fund will finance exclusively sustainable development projects in accordance with the Ecuadorian National Development Plan, such as conservation, reforestation projects and social programs for Amazonian communities, so that it will enable to achieve climate policy goals and to deliver local benefits simultaneously.

Therefore, the Yasuní-ITT Trust Fund's purpose is twofold: On the one hand, it will assist Ecuador to gradually change its energy matrix away from fossil-fuel dependency and allow it, in the future, to prefer not to extract and exploit its oil by investing and diversifying renewable energy resources (*Capital Fund Window's objective*); and, on the other hand, it will shift Ecuador's development model to a sustainable economy that protects its people and its natural assets<sup>89</sup>, thereby reaching the *Sumak Kawsay or life at its fullest*,<sup>90</sup> which is one of the guiding principles for a new regimen of development enshrined in the current Political Constitution of Ecuador (*Revenues Fund Window's objective*).

### **2.5.1.3. Governance Structure**

The initiative proposed the following institutional structure to channel revenues collected to finance strategic national programs.

#### *Administrative Agent*

According to the Memorandum of Agreement signed by the Ecuadorian government and the UNDP on August 2, 2010, the latter is the entity in charge of the administration of the Yasuní-ITT Trust Fund, through the specialized services of its Multi-Donor Trust Fund (MDTF) Office.

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<sup>89</sup> Silvestrum , *supra note* 28, at 12.

<sup>90</sup> The Preamble of Ecuadorian Constitution (2008) states: “*We decide to construct a new form of citizen coexistence, in diversity and harmony with nature, to reach “el buen vivir” , el sumak kawsay*”

The main functions of the Administrative Agent will include the following: Receive the financial resources from contributors and payments from the sale of CGYs; manage and transfer the fund to the Capital Fund Window pursuant to its own financial regulations and rules and the provisions embodied in the TOR, consolidate financial statements and progress reports for submission to donors and provide final reporting, including notification that the Yasuní Fund MDTF has been operationally completed, among others.<sup>91</sup>

#### *The Yasuní Fund Steering Committee*

The Steering Committee is the governing body of Yasuní Fund that will be chaired by a representative of the Ecuadorian government. It will be composed of the following members to ensure the broad participation of all stakeholders in its governance:

- Three representative of the government, including the chairperson;
- Two representative from the Contributor governments;
- One Ecuadorian civil society representative.
- The UNDP Resident Representative, who also serve as the UN Resident Coordinator and the UNDP MDTF Office Executive Coordinator will participate as *ex officio* members.

However, the TOR does not provide any guidelines for selection of members of this body and any other entity.

The Steering Committee will make its decisions through consensus or majority vote. To do this, each member will be entitled to one vote. In the event of no consensus or when the numbers of votes for and against a proposal are equal, the chairperson will have the casting vote.

Among other functions, the Steering Committee will be responsible for: Provide overall leadership and set the strategic direction and oversight of the Yasuní Fund; review and make fund allocation decisions on all Yasuní Fund activities from both the Capital and the Revenue Fund, review and approve the Yasuní Fund Annual Strategic

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<sup>91</sup> Government of Ecuador. *Memorandum of Agreement for Management and other support services related to the Yasuní-ITT fund* (2010a). Article 2

Plan; review and approve the Annual and Final Yasuní Fund Consolidated Report submitted by the Administrative Agent, for further submission to Contributors and public dissemination; oversee effective monitoring and evaluation of all Yasuní Fund activities to ensure fund-wide success and transparency; and ensure coherence and collaboration between the Yasuní ITT Trust Fund and national programs.<sup>92</sup>

#### *The Yasuní Fund Technical Secretariat*

The Technical Secretariat is an independent and functional entity that will be responsible for providing administrative, technical and substantive support to the governing body. It will also be in charge of the project appraisal and the performance monitoring and evaluation of the project after the transference of the fund.<sup>93</sup> The Technical Secretariat will be appointed by the Ecuadorian government.

#### *The Government Coordinating Entity*

Under this scheme, the Ministry of Heritage, through the Yasuní ITT Coordination Office, is the Government Coordinating Entity of the Yasuní-ITT Trust Fund. As its name implies, it must coordinate the development and implementation of the Yasuní Fund Activities on behalf of the Government as well as promote government-wide participation in the Yasuní Fund process and ensure the exercise of oversight, accountability and transparency in relation to the project portfolio to be implemented by national bodies.<sup>94</sup>

#### *Recipient and Implementing Organizations*

Recipient and Implementing Organization are national entities that will present project proposals for the approval of the Steering Committee and if the project is accepted they will be responsible for the administration of the funds transferred and for the implementation of projects financed by the Capital Fund Window and the

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<sup>92</sup> Government of Ecuador. *Terms of Reference Yasuní-ITT Trust Fund*. (2010b), at. 13

<sup>93</sup> *Id.* p. 16

<sup>94</sup> *Id.* p.17



Revenues Fund Windows, respectively<sup>95</sup> in accordance with the National Development Plan.

Each entity that has been qualified as a Recipient or Implementing organization must sign an agreement with the Government Coordinating Entity to set out the terms and conditions relating to the receipt of funds and their obligations and duties<sup>96</sup>.

Therefore, for the implementation of this scheme and for the receipt, transfer and use of the funds, the Ecuadorian initiative proposes different levels of delegation between the UNEP, the government through the Government Coordinating Entity and receipt and implementing bodies.

## **2.6. Replicability**

It is important to analyze whether the Yasuní-ITT initiative could be implemented by other countries in order to determine its feasibility to be recognized as a new mitigation mechanism within the context of the current climate negotiations.

In general, Ecuador is proposing an alternative environmental mechanism to combat global warming by forgoing the exploitation of oil fields located in ecological highly sensitive areas, so as to preserve the biodiversity, cut the emission of GHG into the atmosphere and respect the territory indigenous communities. Thus, as this initiative has been designed, it could be implemented by other countries as long as they meet the following criteria:

- a) *“be a developing country,*
- b) *be a “megadiverse” country located between the tropics of Cancer and Capricorn and contain tropical forests, since the proposal aims to protect biodiversity areas and,*
- c) *have significant fossil fuel reserves in highly biological environmental and culturally sensitive areas, as the Yasuní National Park”.*<sup>97</sup>

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<sup>95</sup> *Id.* p. 17

<sup>96</sup> Government of Ecuador (2010a), *supra note* 91. Article 4

<sup>97</sup> Government of Ecuador (2009), *supra note* 62, at 4 - 5

According to a research carried out by the Ecuadorian Government, the countries that qualify for implementing the proposed scheme are: Bolivia, Brazil, Colombia, Costa Rica, Democratic Republic of Congo, Indonesia, India, Kenya, Madagascar, Malaysia, Nigeria, Papa New Guinea, Peru, the Philippines and Venezuela.<sup>98</sup>

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<sup>98</sup> *Id.* at 5

## **CHAPTER 3**

### **Analysis of the ITT Yasuní Initiative under the United Nations Framework Convention on Climate Change**

In the present section the main similarities and differences between the Yasuní-ITT Initiative and the existing and proposed mitigation mechanisms will be analyzed and explained. This examination will permit to outline in the last part of this chapter the advantages and disadvantages of the incorporation of this scheme into the new climate protection treaty.

#### **3.1. Comparison of Yasuní-ITT Initiative with Clean Development Mechanism (CDM)**

Although, at first sight, the Clean Development Mechanism and the Yasuní-ITT Initiative seem similar as both seek to mitigate climate change by reducing GHG emissions in global context and promote sustainable development of the host developing country, there are particular distinctions between them. Thus, a comparative analysis is necessary.

##### **3.1.1. Similarities**

The similarities between the CDM and the Yasuní-ITT Initiative are as follows:

1. Both mechanisms permit and encourage the participation of developing and least developed countries in international mitigations efforts;
2. They are voluntary schemes. States can decide whether or not they take part in developing environmental projects under the framework of the mechanisms in question.
3. They have been designed as means to alleviate and avoid climate change effects, focused on reducing the GHG emissions and promoting sustainable development of host countries;
4. The Ecuadorian proposal builds up an institutional and decision-making structure to ensure the fulfillment of their objectives. The CDM is also governed and

overseen by institutional bodies created by the United Nations Conventions on Climate Change.

5. The CDM has created tradable emission credits and the Yasuní-ITT Initiative has envisioned their creation as a financial source to implement strategic projects with the purpose of assisting host developing countries in the transition towards a low-carbon economy. In the case of CDM, the carbon revenues have already produced a financial incentive to curb GHG emissions. In the case of the Ecuadorian proposal, the market-based incomes from the sale of CGYs are expected to encourage not only the prevention of GHG emissions but also the protection of indigenous culture and highly biodiverse reserves; and,

6. They establish guidelines and principles for the approval and execution of projects so as to ensure transparency, efficiency and accountability. For this purpose, project activities are subject of auditing and verification processes.

After the analysis of the resemblances of these two mechanisms, it could be concluded that the CDM has served as a benchmark standard for the design of the Ecuadorian proposal, since it has adopted some of the main features of this offset mechanism.

### **3.1.2. Differences**

However, despite the similarities outlined above, the Yasuní-ITT Initiative cannot be regarded as a CDM project since there are certain differences between them, which are related to:

#### *Mitigation target*

The strategy of the Yasuní scheme is to address climate change by tackling one of its major sources: the combustion of fossil fuel. This scheme consists of paying developing countries to leave their oil underground so as to avoid the release of a significant amount of CO<sub>2</sub> into the atmosphere, while the implementation of a CDM project in a developing country aims to compensate and reduce the emissions of pollutant activities carried out by developed countries in their territories. This scheme is only tackling the results instead of attacking the real source.

As per the previous explanation, the Ecuadorian proposal differs from the CDM since it is based on the concept of net avoided emissions, which is not currently included in the Kyoto Protocol. Indeed, at the sixteenth COP, which took place in Cancun from November 29 to December 10 2010, the incorporation of this new approach of mitigation into the post-Kyoto agreement was discussed in the negotiation table, opening the door to the potential adoption of the Yasuni mechanism at international level.

*The type of the parties involved in each of these schemes*

Under the CDM framework, only Annex I countries and developing countries not included in Annex I that have ratified the Kyoto Protocol can participate in a CDM project: Annex I country by investing in its implementation and non-Annex I country by hosting it. According to Yasuní Initiative, Ecuador will be responsible for the adoption and development of this scheme in its territory, but it expects the participation not only of industrialized countries but also of developing countries, international organizations and individuals around the world in the financing of its proposal. Therefore, the Yasuní scheme would enable the voluntary participation of individuals not envisioned by the CDM in particular and the KP in general.

*The funding sources*

The financial modality of a CDM project relies only on incomes from the sale of CERs in carbon markets. On the other hand, the financial modality of the Ecuadorian initiative encompasses not only revenues generated from transactions in carbon markets, but also voluntary contributions received from the international community. It combines fund and market based approaches to obtain sufficient incomes to implement the mitigation projects specified in the National Development Plan. Indeed, carbon revenues are expected to cover only a specific percentage of the total cost of the project.<sup>99</sup>

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<sup>99</sup> According to a technical report carried out by Silvestrum, a consultancy firm contracted by the German aid agency: 50% will be assumed by the Ecuadorian state, 15% will come from donations and 35% will come from carbon revenues.

*The way to contribute to sustainable development*

A CDM project and the Yasuní scheme have been design to assist developing countries in achieving their sustainable development objectives by producing real, measurable and long-term environmental benefits. However, the Yasuní-ITT initiative envisages an alternative method to accomplish it. In this regard, according to the provisions of the KP and the Makarresh Accords, the core idea of the establishment of a CDM project is to promote sustainable development by assisting developing countries in the transition to a low-carbon economy through the transference of environmentally safe technology, knowledge and expertise from industrialized countries to the latter.<sup>100</sup> The financial resources that come from developing countries will be used to implement the CDM project. In the Yasuní scheme, the contribution to sustainable development is attained by the investment of the fund raised in renewable, environmental and social projects to strengthen the capacity of the host country to mitigate and adapt to climate change. Therefore, the implementation of this scheme does not involve technologic transfers, but the mobilization of financial support to developing countries.

*Other goals*

The objectives of the Yasuní proposal comprise not only the avoidance of GHG emissions, but also the conservation of the extraordinary biodiversity of Ecuador, the change of its energy matrix and the protection of the rights of its inhabitants, in particular indigenous people. Therefore, linking the Yasuní proposal to the CDM could reduce its potential to achieve its purposes since it has been recognized the limited success of the CDM model to promote significant environmental and social improvements in developing countries hosting the project.

*The overall purpose of compensation*

Under the carbon market perspective, the implementation of the market-based mechanism proposed by Yasuní-ITT initiative will imply the establishment of a financial compensation for avoided emissions from non-extracting and non-burning the ITT oil field. This mechanism attempts to put an economic value on each ton of

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<sup>100</sup> United Nations. Makarresh Accords. Decision 17/CP.7 *Modalities and procedures for a clean development mechanism as defined in Article 12 of the Kyoto Protocol*. FCCC/CP/2001/13/Add.2 at 20.

CO<sub>2</sub> that will be locked at source, applying the *stock-maintenance approach*<sup>101</sup> which means that Ecuador will be rewarded as long as it keeps the total carbon stock unreleased. The advantage of this approach is that it does not require the assessment of additionality<sup>102</sup>, since the payment aims at the maintenance of CO<sub>2</sub> in the subsoil rather than increasing the sequestration. On the other hand, the CDM has already set up a financial compensation for reduced emissions by the implementation of a mitigation project, which is known as *emission-based approach*.<sup>103</sup> The economic value is giving to each ton of CO<sub>2</sub> reduced; therefore, in order to reward a project, it has to be demonstrated that it cuts GHG emissions below the projected baseline scenario. In this scheme, the demonstration of additionality is a condition *sine qua non* for the issuance of CERs.

#### *The time to issue carbon credits*

The approach of the CYGs also differs from the approach of CERs. The latter are issued and sold after emission reductions have been achieved thanks to the implementation of a carbon abatement project. This process is referred to as *ex-post crediting*. By contrast, if the CYGs are recognized as equivalent of carbon credits, they would be issued and sold following the *ex-ante* approach since the objective of this scheme is not to reduce but prevent indefinitely the emission of GHG in the atmosphere. This process is referred to as *forward crediting*.

It is important to mention that the Ecuadorian government has stated in several occasions that it does not attempt to integrate its innovative initiative into the current configuration of the Clean Development Mechanism due to its shortcomings, but it pursues a formal recognition of the initiative as a new and effective tool to confront global warming and its adverse effects, that could be replicated by other developing and least developed countries with similar economic and environmental characteristics. This mitigation mechanism would be additional to the mechanisms

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<sup>101</sup> “In a stock-based approach, payments are based on the total carbon stock in a specific area during a specific period, that is, the absolute levels, and not the changes (emissions)”. Arild Angelsen (Ed.2008). *Moving Ahead with REDD. Issues, Options and Implications.*, at 17

<sup>102</sup> Pedro Moura Costa. *Compensation for carbon stock maintenance in forests as an alternative to avoiding carbon flows*. Oxford Centre for Tropical Forests, Environmental Change Institute, University of Oxford, UK (2009), at 86.

<sup>103</sup> “In an emissions-based (or flow-based) approach only the net changes in carbon stocks for specific periods are used to calculate credits”. Angelsen, *supra* note 101, at 17

already established by the United Nations Framework Convention on Climate Change and any other climate action to be adopted.<sup>104</sup>

### **3.2. Comparison of the Yasuní ITT Initiative with Reducing Emission from Deforestation and Forest Degradation REDD**

The Ecuadorian initiative has to be compared to another proposed climate change mechanism which is being discussed in the post-Kyoto negotiations, due to it also seeks to incentive developing countries to stop the performance of an activity as an alternative to cut GHG emissions and the sale of carbon credits as a source of income.

#### **3.2.1. REDD scheme**

This mechanism, known as *Reducing Emissions from Deforestation and Forest Degradation* REDD, will enable developing and least developed countries to issue and sell emission rights for conserving their forests standing instead of cutting them down. These carbon credits could be used by countries or companies with emission reduction targets to comply with their assigned amount.<sup>105</sup> Therefore, the main goal of this mechanism is to encourage developing countries to curb their GHG emissions avoiding deforestation of forested lands as a mean to address climate change.<sup>106</sup>

#### **3.2.2. Background**

The concept of paying developing countries to keep their trees standing is not new. It has been proposed and discussed at various meetings of the Conferences of the Parties (COP) to United Nations Framework Convention on Climate Change (UNFCCC); even it was discussed at the third Meeting of COP, in which the Kyoto Protocol was adopted. But, it was not included as one of the flexible mechanisms due to technical concerns and the opposition from some environmental groups.

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<sup>104</sup> Larrea and Warnars, *supra note* 74, at 222

<sup>105</sup> Angelsen, *supra note* 101, at 63

<sup>106</sup> United Nations Environment Programme. *Climate Change REDD+. Introduction*. <http://www.unep.org/climatechange/reddplus/Introduction/tabid/29525/Default.aspx>. Accessed on January 22, 2011.



In 2005, the deforestation issue was brought back into the climate negotiations by the Coalition for Rainforest Nations.<sup>107</sup> This intergovernmental organization, led by Costa Rica and Papua New Guinea, developed the idea and prepared a proposal titled "Reducing emissions from deforestation in developing countries: approaches to stimulate action", which was introduced into the agenda of the eleventh Meeting of COP, held in Montreal. The negotiations continued and, in 2007, during the Climate Change Conference in Bali (COP13) delegates meeting recognized the REDD scheme as an adequate mechanism to mitigate climate change. There was also a widespread consensus to include it in "Bali Action Plan", which sets out the course for the discussions on a post-Kyoto agreement to tackle climate change.

In 2009, during United Nations climate change conference in Copenhagen (COP15), Member States recognized *the crucial role of reducing emission from deforestation and forest degradation and the need to enhance removals of greenhouse gas emission by forests and agree on the need to provide positive incentives to such actions through the immediate establishment of a mechanism [...] to enable the mobilization of financial resources from developed countries.*<sup>108</sup> This recognition constituted an important step forwards for the implementation and development of this forest protection mechanism.

In 2010, at the sixteenth COP to United Nations Framework Convention on Climate Change held in Cancun, it was established guidance for the application and coordination of the REDD activities by developing countries through national strategies, policies and measures, which must include the establishment of national reference emission levels and a forest monitoring and measurement systems. However, these actions will not be part of the UNFCCC, until the formal acceptance of this scheme in the new environmental treaty.<sup>109</sup>

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<sup>107</sup> "The Coalition for Rainforest Nations is an intergovernmental organization established by forested tropical countries to collaboratively reconcile forest stewardship with economic development". [www.rainforestcoalition.org/](http://www.rainforestcoalition.org/). Accessed on January 20, 2011

<sup>108</sup> Article 6. Copenhagen Accords. United Nations (2009). [http://unfccc.int/files/meetings/cop\\_15/application/pdf/cop15\\_cph\\_auv.pdf](http://unfccc.int/files/meetings/cop_15/application/pdf/cop15_cph_auv.pdf) Downloaded on January 20, 2011.

<sup>109</sup> World Resources Institute. *The REDD+ Decision in Cancun* (2010). Available at <http://www.wri.org/stories/2010/12/redd-decision-cancun> Accessed on January 22, 2011.

### **3.2.3. Objectives**

The main goals of this proposed mechanism are: i) Reduce GHG emissions from deforestation and forest degradation in developing countries; ii) promote the conservation of forests through their sustainable management; and, iii) enhance the forest carbon stocks.

### **3.2.4. Shortcomings**

Despite the general consensus to include this mechanism in the post-2012 climate protection regime, there are some concerns that have to be solved in the near term. These concerns are related to:

- *The use of terms that have not been defined*, such as "deforestation" and "forest degradation".
- *The risk of leakage* given the difficulty to avoid that deforestation activities simply displace to another forest area in the same country or to another country without carbon conservation policies;
- *The non-permanence of the emission reductions* since there is always the possibility that GHG emissions savings from forest conservation will be released in the future;
- *The complexity to establish baselines or reference levels for REDD projects and the assessment of the additionality requirement* due to there are three criteria for setting it: a) the *historical baseline*, which refers to the average rate of deforestation and forest degradation and CO<sub>2</sub> emissions from a previous time period; b) the *'business as usual' scenario*, which is a hypothetical projection of the amount of emissions that would have been released in the absence of a forest protection project; and, c) the *crediting baseline*, which consists of establishing a point of reference for rewarding the project. Only if the emissions are below that this specific level, the project will receive a compensation;<sup>110</sup>

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<sup>110</sup> Angelsen, *supra note* 101, at 136

- *Difficulties associated with Monitoring, Reporting and Verification (MRV) of emissions*, given that this process will depend on the technical capacity of each country to measure the emission reductions reached by REDD activities.
- *The low participation of indigenous communities and forest communities in the negotiations*, since there are some concerns regarding the potential impacts of REDD projects on the well-being and lifestyle of the people who resides in forest areas and indigenous communities due to their ancestral territories and customary rights could be affected in the interest of inward investment, causing or increasing social conflicts.

### **3.2.5. Similarities and difference between Yasuní-ITT Initiative and REDD**

#### *Objectives*

Both, Yasuní-ITT initiative and REDD, design a mechanism to effectively mitigate an important source of GHG emissions. On the one hand, the Yasuní-ITT seeks to avoid carbon dioxide emissions from burning fossil fuels; and the REDD scheme, on the other hand, aims to tackle the GHG emissions from deforestation and forest degradation activities.

#### *Scope of application*

They are examples of international collective actions to address climate change since they create new ways to involve and incentive the participation of developed and developing countries, especially the latter, in climate strategies. In this respect, the REDD scheme could be applied by developing and least developed countries that have high rate of deforestation and are willing to protect their rainforest from immediate threat. In contrast, the implementation of Yasuní scheme is more restrictive, given that it could only be replicated by a certain number of nations that satisfied the following criteria: being a developing country with proven oil reserves in environmentally sensitive areas.

### *Compensation approach*

The concept of the REDD is to design a market-based mechanism to reward projects or countries that produce emission reductions below the projected baseline by halting deforestation and forest degradation.<sup>111</sup> The REDD mechanism is already aligned to the architecture of UNFCCC since it will establish a compensation for reducing GHG emissions. In the case of the Yasuní ITT Initiative, the proposed market-based has been designed to reward the State for the amount of CO<sub>2</sub> prevented from reaching the atmosphere by leaving an important oil field undisturbed. It will establish a compensation for maintaining carbon stock stored in oil pools within highly biodiverse reserves.

### *Issuance approach*

REDD carbon credits will be issued applying the *ex-post* approach since they will be emitted after verification that the project produces a real reduction in emissions. The issuance of CGYs would follow the *ex-antes* approach, due to the abovementioned reasons.

### *Social justice*

The Yasuní-ITT scheme would also face the risks of leakage, non-permanence of emission reductions and difficulties to establish baseline to measure the impacts of the Yasuní projects in the short-term, but the Ecuadorian proposal, unlike the REDD, is supported by the indigenous communities since its implementation aims to protect their rights and maintain their lifestyle, which could be seriously threaten by the development of the ITT oilfield.

### **3.3. Analysis of the financial mechanism proposed by the Yasuní-ITT Initiative**

The Ecuadorian proposal has envisaged two sources of income: Voluntary contributions from various origins (donations, debt-for-nature swaps, among other) and revenues from the sale of CYGs in the global compliance carbon market as a mean to obtain a long-term financing. However, the last source of funding is currently

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<sup>111</sup> *Id.*, at 141

not feasible since the proposed scheme, based on the *stock-maintenance approach*, does not exist in the climate change mitigation regime nor does it fit into the flexible mechanisms created by the Kyoto Protocol. This is thus one of the main constraints faced by the Ecuadorian proposal.<sup>112</sup>

As was mentioned in the second chapter, the objective of the Initiative is to not develop the ITT oil field in exchange for international financial compensation that amounts to at least 50% of the revenues that the country would receive if the government allowed oil development, 70% of which is expected to be generated from international carbon markets through the sale of CGYs.<sup>113</sup>

The Ecuadorian proposal has not envisioned the sale of the CGYs in the voluntary carbon market due to the extreme fluctuation in pricing of carbon and its lack of standards to monitor and verify real, measurable and long-lasting emissions reductions;<sup>114</sup> however, in recent years new standards have been developed and it could be an important alternative source to generate funds for the implementation of the Yasuní-ITT projects.

So, in order to analyze the viability to integrate the market-based mechanism proposed by Ecuador in the principal emission trading scheme, it is relevant to indicate that, according to the *Linking Directive*, under the EU ETS, Member States are competent to allow operators to use the emission credits generated by a CDM and JI project, CERs and ERUs respectively, to satisfy their emission reduction obligations, but Member States are not authorized to permit the use of different carbon credits than those listed in this Directive. This means that, although European Governments, such as Belgium, France, Germany, Italy and Spain support the Yasuní Initiative, its national installations cannot be able to purchase or trade the CYGs in the European scheme because they are not part of the current climate protection regime.

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<sup>112</sup> Other constraints are: i) the great dependence on the willingness of the international community to participate and contribute to the initiative, ii) the volatile political environment of the country and the implementation of contradictory and unclear politics by Ecuador's government that could confuse potential contributors; iii) the pressure exercised by oil companies to exploit this important reserve; and, iv) the establishment of a short deadline to raise funds from the international community.

<sup>113</sup> Silvestrum, *supra note* 28, at.16.

<sup>114</sup> Eliasch J. *Eliasch Review – Climate change: Financing global forests* (2008), at 243

The Ecuadorian Government is aware of this limitation, for that reason it seeks to reach a political agreement at international level for the application of the initiative as a pilot project that could be embraced in the environmental agreement succeeding the Kyoto Protocol so as to acquire legitimacy and market value.<sup>115</sup> In this sense, Ecuador is proposing a reform of the international framework to permit the trade of credits for the carbon stock stored by leaving indefinitely underground oil reserves located in areas of high biodiversity. By doing so, developing and least developed countries will have more alternatives to combat global warming and to get involved in the common efforts to mitigate climate change.

As this market-based mechanism is under construction and still under negotiation, the initiative is currently being financed by donations and debt-for-conservation swaps. So far, the Yasuní-ITT Trust Fund has raised USD 36'993.496,<sup>116</sup> which include international and local contributions. However, Ecuador expects to collect at least 100 million US dollars by the end of 2011 and 3.6 billion US dollars in 13 years.

### **3.4. Advantages and Disadvantages of the adoption of the Ecuadorian proposal in the new post-2012 climate change regime**

In this section, the pros and cons of the incorporation of this new approach of conservation into the international climate change framework will be pointed out.

#### **3.4.1. Advantages**

There are some economic, environmental and social benefits for host developing countries, and also for developed countries, that could be obtained by the inclusion of the Yasuní-ITT initiative in the post-Kyoto agreement. These advantages are as follows:

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<sup>115</sup> Analytica Investments. *Ecuador Weekly Report. March 9 - 12 2009.* [http://www.equatorialis.net/reporte\\_economico/12%20Mar%202009.pdf](http://www.equatorialis.net/reporte_economico/12%20Mar%202009.pdf) Download on December 28, 2010, at 3.

<sup>116</sup> Andes, Agencia Pública de Noticias del Ecuador y Sudamérica. *En el último año el Yasuní-ITT recaudó 37 millones de dólares.* <http://andes.info.ec/actualidad/en-el-ultimo-ano-el-yasuni-itt-recaudo-37-millones-de-dolares-50773.html>. Accessed on February 20, 2011.

1. The Yasuní scheme is an effective and alternative mechanism to tackle climate change and prevent the biodiversity loss, which are the two most urgent environmental problems, since it seeks to avoid the emission of a large quantity of CO<sub>2</sub> from burning fossil fuels and, in doing so, it would avert deforestation associated with oil extractive activities;
2. It creates and establishes a new model of cooperation between industrialized and developing countries to stabilize the high concentration of GHG in the atmosphere. In this regard, it would encourage the active participation of developing countries in the international efforts to attack global warming, given that they would be responsible for the implementation and development of this scheme to protect their biodiversity and rainforests, but the financial support would come from developed countries on the basis of the co-responsibility principle. Furthermore, this scheme is expected to be additional or a complement measure of the Kyoto mechanisms or any other climate change mitigation action.
3. It would promote real sustainable development of host developing countries. This scheme demonstrates that national sustainable growth objectives and the protection of natural resources can be attained at the same time, without the necessity to choose one of them;
4. It would create an economic incentive to make more valuable to leave-in-place oil reserves located in environmentally fragile areas instead of exploiting them. In other words, this mechanism would be a financial strategy to encourage developing and least developed countries to halt the extraction of non-renewable natural resources and deforestation within highly sensitive ecosystems. Thus, it aims to produce a transition of the economy of oil-exporting countries towards a post-carbon societies based on the conservation and the sustainable use of natural assets through the investment of the funds collected in renewable energy projects, such as solar and wind power plants, in order to develop renewable energy resources, overcoming the oil dependence and increasing the resilience of climate change;
5. Furthermore, the adoption of this scheme has the potential to generate social benefits, such as poverty reduction and the abolishment of inequalities in developing countries, due to its implementation would ensure the achievement of sustainable human development goals by financing national programs focused on education,

health and productive job creation in sustainable activities, and thus improving the standard of living of its inhabitants, especially Amazonian communities.

6. It would protect the rights of indigenous people. The Yasuní mechanism links climate change mitigation, the biodiversity conservation and the protection of indigenous people's rights as a common goal to avoid the destruction of important biological reserves. Therefore, this scheme is a good alternative for meeting, at the same time, the objectives of the international treaty for the protection of the indigenous peoples, namely the ILO 169, the Convention and the United Nations Convention on Biological Diversity (CBD) and the United Nations Framework Convention on Climate Change (UNFCCC).

7. It could be replicated by other developing countries, thereby enhancing its emission reduction potential and simultaneously saving the rainforests and their rich biodiversity. Indeed, forgoing the extraction of oil and gas in the Yasuní National Park or in another natural reserve is an interesting and effective strategy to combat climate change and limit the rise in global temperature to no more than 2°C.

In addition to the environmental benefits, developed countries will receive an economic benefit since they would earn carbon credits in exchange for their contribution in order to fulfill their reductions commitments.

### **3.4.2. Disadvantages**

Although the scheme proposed by the Ecuadorian Government has not been implemented, some potential shortcomings of its adoption in the post-Kyoto agreement have already been identified. Each of the most critical disadvantages will be dealt with below:

#### *Oversupply of Yasuní credits*

There are some concerns regarding the possible dominant presence of these carbon credits (CGYs) in carbon markets, since its implementation would allow developing countries to generate a great amount of allowances. The abundance and availability of CGYs would flood carbon markets, causing an adverse effect on the carbon price, on the competitiveness of other mitigation projects and consequently,



on the efficiency of the cap-and-trade system. However, there are some measures that could be adopted to address this possible shortcoming. These measures are focused on finding a balance between the supply and demand of these credits in the marketplace in order to ensure the stability of carbon prices. First, increasing their use by imposing more stringent emission reduction targets for industrialized countries in the new environmental treaty; and, second, reducing their issuance by setting a rigorous baseline to calculate the amount of emissions prevented by the non-extraction of fossil fuels or limiting their fungibility by creating temporary carbon cap on Yasuní credits put on compliance markets.

In this respect, as per feasibility studies made by Ecuadorian government, the recognition of CGYs would increase the supply of carbon credits by a very low amount, less than 1%.<sup>117</sup> In addition, Ecuador has also provided a solution to avoid this possible risk by restricting the adoption of this mechanism to those countries whose oil reserves lie beneath highly valuable biological reserves.

#### *Risk of leakage*

Like the REDD mechanism, there could be a difficulty to prevent the migration of the oil activity to another location, which could nullify its potential to achieve a global reduction in GHG emissions. In this regard, the non-exploitation of the ITT field would reduce the supply of oil in the near term, raising the price of this product in the market and stimulating oil production elsewhere. Indeed, it is likely that, after the implementation of this scheme by Ecuador, oil activities move to the Peruvian Amazon rainforest since the government of this country has adopted some policies to promote the private investment in exploration and exploitation of oil, gas and other natural resources in its territory in hopes of becoming a net energy exporter. Within the national boundaries, the pressure to meet oil demand could cause the development of other oil fields that are not currently being exploited, such as block 31. Therefore, addressing this potential shortcoming is essential. It will require not only the adoption of strict measurement and monitoring policies at national level, but also the prompt replication of this scheme by other developing countries, since the wide participation of oil-exporting countries will significantly minimize the occurrence of the aforementioned negative effects.

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<sup>117</sup> See Government of Ecuador (2009), *supra note* 62, at 36.

*Establishment of the baseline*

Another technical concern about the inclusion of this mechanism in the new climate protection agreement is related to the baseline methodology to be applied. This mechanism requires the development of a credible and verified criterion to measure the amount of emissions that would be prevented from reaching the atmosphere since the adoption of this scheme will permit developing countries to issue CGYs on the basis of the results of this assessment. Therefore, the establishment of a tight baseline would avoid an overestimation of the carbon stock that will remain in place by non-exploiting fossil fuels, thereby preventing the risk of an excess supply of these certificates in the markets and ensuring the environmental integrity of this scheme, given that each CGYs would actually represent a ton of CO<sub>2</sub> kept out of the atmosphere.

*Questionable effectiveness*

Some environmentalists<sup>118</sup> have also expressed that linking the Ecuadorian initiative to the compliance carbon market would reduce the effectiveness of this ecological model since it would permit governments and regulated entities under emission trading scheme to buy CGYs instead of reducing their domestic emissions. It will repeat a current weakness of the CDM. However, it is necessary to underline that the reliance of carbon market would provide the initiative to predictable and long-term funding flows to carry out environmental and social projects.

*Risk of reversibility*

The non-permanence of the reduction achieved is also another flaw that could have the Ecuadorian scheme. However, if a country replicated this proposal, it would voluntarily commit itself to maintain - *in perpetuity* - intact an oil field located in a fragile and sensitive area, thus ensuring the durability of the mitigation effects. In addition, in order to prevent or control this possible risk, the Ecuadorian government has established a guarantee-mechanism to prevent a future government from breaking the international commitment assumed and opens this reserve for oil drilling. In this event, the contributions with interest will be refunded to donors. Ecuador expects

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<sup>118</sup> Matt Finer, Remi Moncel and Clinton Jenkins. Commentary: *Leaving the oil under the Amazon: Ecuador's Yasuni-ITT Initiative*. 42 *Biotropica* (2009) 1, at 65

that such guarantee to be effective and allow its proposed scheme to become a win-win mechanism for both host developing countries and contributors.

In the hypothetical event that this scheme were incorporated into the CDM, the guarantee-mechanism would not be necessary since the original design of the initiative would be changed to adapt it to the requirements of this Kyoto mechanism. Therefore, to be in line with the current architecture of the UNFCCC, the issuance of CYGs will apply the *post-crediting approach*, which means that the CGYs would be only emitted after the reduction in GHG emissions have been achieved. However, other policies have to be implemented to avoid the risk of non-permanence, such as the issuance of CGYs as temporary carbon credits. Therefore, if the ITT oil field is drilled, new credits are simply not generated. This measure is already applied to the afforestation and reforestation CDM projects.

Therefore, the potential disadvantages of the Yasuní model could be discussed in the current negotiation process to overcome them by adopting solid policies or developing new methodologies, as has happened in the REDD scheme adoption process. In addition, it is important to highlight that the Ecuadorian government has tried to minimize the risks that any new mitigation mechanism would face, such as leakage and impermanence of emission reductions by the establishment of strategic requirements for its implementation.

## CONCLUSIONS

The above analysis demonstrates that addressing climate change is now a global priority since it is causing irreversible environmental impacts and affecting key sectors of the economy, thereby threatening the economic growth and prosperity of countries, especially developing and least developed states. Thus, climate change is no longer considered a simple environmental problem. Rather, it has become a complex challenge that comprises economic, technological, social and political issues and whose effects are still unpredictable.

Furthermore, the existing mechanisms established under the United Nations Framework Convention on Climate Change to halt this phenomenon are focused mainly on reducing GHG emissions through the implementation of low-carbon projects and the sale of emission credits in carbon markets. However, they are not achieving its purposes due to the global emissions continue to rise. In view of that, alternative and complementary measures are being discussed by the international community in the context of the current negotiations towards a new binding climate protection treaty. The particularity of the new measures is that they are focused on controlling and preventing activities that generate great quantities of GHG emissions. For instance, *REDD*, which main objective is to avoid deforestation and forest degradation. And, the *Yasuní-ITT Initiative*, which aims at avoiding the exploitation and combustion of fossil fuels in environmentally fragile areas. Therefore, the new approach used to develop mitigation strategies seeks to tackle not only the “*outputs*” (emissions) but also the “*inputs*” (activities) that cause this environmental challenge<sup>119</sup> in order to obtain better results.

In the particular case of the Yasuní –ITT initiative, it can be concluded that it has emerged due to Ecuador realized that its development model based on the exploitation of natural resources is unsustainable in the medium and long run and it has produced serious environmental and social problems rather than a continuous economic growth and welfare. Thus, the initiative has been designed to enable the transition of the economy of this country to a new post-oil energy model that balances economic development objectives and nature conservation aspirations. It will also permit

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<sup>119</sup> Aldy, Joseph et al (2003). *Beyond Kyoto. Advancing the international effort against Climate Change*. Pew Center on Global Climate Change, at 6.

Ecuador to take part in international mitigation efforts, without affecting its development needs. However, this avoided emission scheme and its proposed market-based mechanism do not fit in the current financial mechanisms created by the Kyoto Protocol nor in the architecture of the UNFCCC. Therefore, their inclusion in the international climate framework depends on the political will of developed countries and the negotiation capacity of the Ecuadorian government in the upcoming climate meetings.

In addition, before the adoption of this new strategy, it is necessary to discuss some of its most relevant aspects in order to create an effective mitigation scheme. The discussion must encompass an in-depth analysis of the possible impacts of the recognition of the proposed market-based mechanism on existing carbon markets, the modifications that would be introduced into the current international climate regime to allow its implementation and the development of solid measurement standards to assess the real amount of emissions that would be avoided.

In this regard, as the compliance carbon market only permits the trade of Kyoto carbon credits, the major reform that the Yasuní-ITT Initiative requires is to allow the trade of credits for stored emissions by maintaining oil reserves indefinitely underground so as to incentive developing countries to refrain the extraction of oil in highly biodiverse ecosystems and to compensate them for the lost revenues for the adoption of this environmental policy. The implementation of such reform is feasible in the current stage of the climate negotiation process and it could be agreed in the next climate change conferences. By doing so, oil-exporting developing and least developed countries could take advantages of the power of the market to protect their natural assets and to implement strategic social projects in favor of their inhabitants. In addition to domestic benefits, it is undeniable that the envisioned mechanism will be a useful tool to combat global warming and climate change since it is focused on addressing a major source of GHG emissions, which is the burning of fossil fuels; encouraging the use of efficient and sustainable energy sources.

In light of the foregoing, its incorporation into the new environmental treaty is possible and it would be a positive reinforcement to increase and strengthen the climate protection of the international regime.

## REFERENCES

- Aldy, Joseph E. Ashton, John. Baron, Richard. Bodansky, Stece. Diringer, Elliot. Heller, Thomas C. Pershing, Jonathan. Sukla, P.R. Tubiana, Laurence. Tudela, Fernando. Wang, Xueman. *Beyond Kyoto. Advancing the international effort against Climate Change*. Pew Center on Global Climate Change (2003).
- Analytica Investments. *Ecuador Weekly Report. March 9 - 12 2009*.  
[http://www.equatorialis.net/reporte\\_economico/12%20Mar%202009.pdf](http://www.equatorialis.net/reporte_economico/12%20Mar%202009.pdf)
- Andes, Agencia Pública de Noticias del Ecuador y Sudamérica. *En el último año el Yasuní-ITT recaudó 37 millones de dólares*. <http://andes.info.ec/actualidad/en-el-ultimo-ano-el-yasuni-itt-recaudo-37-millones-de-dolares-50773.html>
- Angelsen, Arild. *Moving Ahead with REDD. Issues, Options and Implications*. Center for International Forestry Research CIFOR (Ed.2008).
- Bass, Margot. S. Finer, Matt. Jenkins, Clinton N. Kreft, Holger. Cisneros-Heredia, Diego F. McCracken, Shawn F. Pitman, Nigel C. A. English Peter H. Swing, Kelly. Villa1, Gorky. Di Fiore, Anthony. Voigt, Christian C. Kunz, Thomas H.. *Global Conservation Significance of Ecuador's Yasuní National Park*. PLoS ONE, (2010) 5. Issue 1.
- Bert Metz, Ogunlade Stewart and Jiahua pan (Eds), *Climate Change 2001 Mitigation – Contribution of Working Group III to the Third Assessment Report of the Intergovernmental Panel on Climate Change*, Cambridge University Press (2001).
- Boyd, Emily. Hultman, Nate. Roberts, J. Timmons. Corbera, Esteve. Cole, John. Bozmoski, Alex. Ebeling, Johannes. Tippman, Robert. Mann, Philip. Brown, Katrina. Liverman, Diana M. (2009). *Reforming the CDM for sustainable development: lessons learned and policy futures*. Elsevier. Environmental Science & Policy, 12 (2009).
- Caccavale, Oscar Maria. *Climate Change under Peak Oil. The Kyoto Protocol and the Clean Development Mechanism* (2008). Electronic copy available at:  
<http://ssrn.com/abstract=1148347>
- CarbonVenture. Clean Development Mechanism. *Project cycle*.  
[http://www.carbonventures.com/services/article.php?list=The%20Clean%20Development%20Mechanism%20\(CDM\)%20Project%20Cycle&id=4479&link](http://www.carbonventures.com/services/article.php?list=The%20Clean%20Development%20Mechanism%20(CDM)%20Project%20Cycle&id=4479&link)

[=The%20Clean%20Development%20Mechanism%20\(CDM\)%20Project%20Cycle](#)

CDM Rulebook. Clean Development Mechanism Rules, Practices & Procedures. What is additionality?. Available at <http://www.cdmrulebook.org/84>

Centre for Environment Education, CEE India. *Glossary*. Available at: <http://www.ceeindia.org/greenhousegases/glossr.htm>,

Correa, Rafael. Speech at the High Level Meeting on Climate Change at the UN General Assembly in New York (2007). Available at <http://www.ens-newswire.com/ens/apr2007/2007-04-24-04.asp>

De la Bastida, Jose Luis. *Development in the Amazon Basin countries: Alternatives to Extraction of non-renewable Natural Resources*. Master Thesis. American University School of International Service Global Environmental Policy (2009).

DeLay, Robert. *Our post-Kyoto Treaty climate change framework*. Penn State environmental law review (2008)17.

Earth Policy Institute. “Eco-Economy Indicators”. Available at: <http://www.earth-policy.org/index.php?/indicators/C52/>

Eliasch J. *Eliasch Review – Climate change: Financing global forests* (2008).

Elli Louka. *International Environmental Law. Fairness, Effectiveness and World Order*. Cambridge University Press (2006).

European Energy Exchange. *Market Data: Emission Rights* (2011). Available at: <http://www.eex.com/en/>

European Parliament and of the Council (2003). *Directive 2003/87/EC*. October 25, 2003.

——— (2004). *Directive 2004/101/EC*. October 27, 2004.

European Commission. *Climate Action*. Available at: [http://www.eutrio.be/files/bveu/media/source1856/documents/cancun/EN-10-026\\_factsheet-climate-change\\_EN\\_V5.pdf](http://www.eutrio.be/files/bveu/media/source1856/documents/cancun/EN-10-026_factsheet-climate-change_EN_V5.pdf)

Environmental Defense. *The Clean Development Mechanism and the Post 2012 Framework* (2007). Available online at [www.environmentaldefense.org/documents/6838\\_ED\\_Vienna\\_CDM%20Paper\\_8\\_22\\_07.pdf](http://www.environmentaldefense.org/documents/6838_ED_Vienna_CDM%20Paper_8_22_07.pdf).

Federal Ministry for the Environment. *Nature conservation and nuclear safety. International Climate Policy* (2010). Available at: <http://www.bmu.de/english/climate/unfccc/doc/44282.php>

Federal Ministry for Economic Cooperation and Development. *Ecuador profile*. [http://www.bmz.de/en/what\\_we\\_do/countries\\_regions/lateinamerika/ecuador/Cooperation.html](http://www.bmz.de/en/what_we_do/countries_regions/lateinamerika/ecuador/Cooperation.html)

Finer, Matt. Moncel, Remi. Jenkins, Clinton. Commentary: *Leaving the oil under the Amazon: Ecuador's Yasuní-ITT Initiative*. 42 *Biotropica* (2009)1.

Food and Agriculture Organization of United Nations. *Climate Change mitigation* (2010). Available at <http://www.fao.org/climatechange/49370/en/>

Fujimara, Noriko. “*Flexible Mechanisms in support of a New Climate change Regime. The Clean Development Mechanism and Beyond*” (2009). CEPS Task Force Report, available on the internet at [www.ceps.be/ceps/download/2679](http://www.ceps.be/ceps/download/2679)

Fynn, A.J. Alvarez, P. Brown, J.R. Geore M.R. Kustin. C. Laca, E.A. Oldfield, J.T. Schohr, T. Neely, C. L. and Wong, C. P.. *Soil Carbon Sequestration in U.S. Rangelands*. Environmental Defense Fund (2009). Available at: [http://www.fao.org/fileadmin/templates/agphome/scpi/cgwg/Soil\\_Carbon\\_US\\_Rangelands\\_IP.pdf](http://www.fao.org/fileadmin/templates/agphome/scpi/cgwg/Soil_Carbon_US_Rangelands_IP.pdf).

Government of Ecuador (1979). Inter-Ministerial Decree No. 0322, published in the PO. 69 of November 20, 1979.

——— (2008) Political Constitution of the Republic of Ecuador Constitution

——— (2009). *Yasuní-ITT initiative: A big idea from a small country*. Official proposal.

——— (2010a). *Memorandum of Agreement for Management and other support services related to the Yasuní-ITT fund*.

——— (2010b). *Ecuador Yasuní-ITT. Trust Fund. Terms of Reference*.



- Halvorssen, Anita Margrethe.. *The Kyoto Protocol and Developing Countries – The Clean Development Mechanism*, Colorado Journal of International Environmental Law & Policy (2005)16.
- Hepburn Cameron. *Carbon Trading: A review of the Kyoto Mechanism*. The Annual Review of Environment and Resources (2007) 32.
- IETA - International Emissions Trading Association. Available at: <http://www.ieta.org/ieta/www/pages/index.php?IdSitePage=203>
- Imesch, Caroline. *The non-extraction of crude oil in the Ishpingo-Tiputini-Tambococha (ITT) oil fields: Beyond an ecological utopia? The case of the Yasuní National Park*. Master Thesis (2009).
- Instituto Ecuatoriano de Estadísticas y Censo (INEC) (2011). Available at: <http://www.inec.gob.ec/preliminares/somos.html>.
- IPCC. *Cambio Climático y Biodiversidad*. Documento técnico del Grupo Intergubernamental de Expertos sobre el Cambio Climático IPCC (2002) <http://www.ipcc.ch/pdf/technical-papers/climate-changes-biodiversity-sp.pdf>
- (2007): *Climate Change 2007: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* [Parry, Martin L., Canziani, Osvaldo F., Palutikof, Jean P., van der Linden, Paul J., and Hanson, Clair E. (eds.)]. Cambridge University Press, Cambridge, United Kingdom, 1000 pp.
- Lambert. Graichen. *Options to enhance and improve the Clean Development Mechanism (CDM)*. ETC/ACC Technical Paper 2008/15.
- Larrea, Carlos, and Warnars, Lavinia. *Ecuador's Yasuní-ITT Initiative: Avoiding emissions by keeping petroleum underground*. 3 Energy for Sustainable Development, International Energy Initiative, (2009) 13.
- Leal Arcas, Rafael. *Kyoto Protocol: an Adequate Environmental Agreement to resolve the climate change problem? European Environmental Law Review* (2001).
- Martínez Alier, Joan. "*Cuantificación de la Deuda Ecológica*." 10 Gestión y Ambiente (2007)3.

Ministry of Heritage. News. Ecuador is in advanced negotiations with Portugal, Canada and Norway. December 2010. <http://www.ministeriopatrimonio.gov.ec/index.php/es/inicio/noticias/diciembre-2010/1158-yasuni-itt-ecuador-avanza-negociaciones-con-portugal-canada-y-noruega>.

Moura Costa, Pedro. *Compensation for carbon stock maintenance in forests as an alternative to avoiding carbon flows*. Oxford Centre for Tropical Forests, Environmental Change Institute, University of Oxford (2009).

Nguyen, Nhan T. Ha-Duong, Minh, Greiner, Sandra and Mehling, Michael. *Improving the Clean Development Mechanism Post-2012: A Developing Country Perspective*. (2010).

Noé21. Économie, Énergie et Société. HFC-23. <http://www.noé21.org/site/index.php/en/section-blog/43-campagnes/64-hfc-23>.

Oilfield glossary. *Glossary*. Available at: <http://www.glossary.oilfield.slb.com/Display.cfm?Term=API%20gravity>

Oilwatch. *ITT Project. Option I: Conserving crude oil in the subsoil* (2007). Available online at: [http://sosyasuni.org/en/files/ow\\_itt\\_proposal\\_v8-ingles.pdf](http://sosyasuni.org/en/files/ow_itt_proposal_v8-ingles.pdf)

Point Carbon. *Glossary*. Available online at: <http://www.pointcarbon.com/trading/cpm/resources/cpmglossary/>

Pearce, Fred. Carbon trading: dirty sexy Money. New Scientist (2008). Available online at <http://environment.newscientist.com/channel/earth/mg19826521.600-carbon-trading-struggles-to-cut-our-emissions.html>.

Petroproducción. *ITT Project Report* (2008). PowerPoint presentation.

Prouty, Ann. *The Clean Development Mechanism and its implications for climate justice*, Columbia Journal of Environmental Law. (2009) 34. Available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=536186](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=536186).

Sachs, Jeffrey D. Warner, Andrew. *Natural Resources and Economic Development. The curse of Natural Resources*. European Economic Review (2001)45.

- Schatz, Andrew. *Discounting the Clean Development Mechanism*. Georgetown International Environmental Law Review. (2008) 20.
- Schneider, Lambert. Graichen, Jakob. Matz, Nele. *Implications of the clean development mechanism under the Kyoto Protocol on other conventions*. Environmental Law Network International ELNI Review (2005) 1.
- Silvestrum.. *Analysis of the ITT-Yasuní Initiative vis-à-vis Carbon Markets* (2009).
- Schneider, Lambert. *Is the CDM fulfilling its environmental and sustainable development objectives? An evaluation of the CDM and options for improvement*. Report prepared for WWF (2007).
- Stern, Nicholas. *Stern Review: The Economics of Climate Changes*. Part VI: International collective action (2007).
- Rival, Laura. *The Yasuní-ITT Initiative: Oil Development and alternative form of wealth making in the Ecuadorian Amazon*. Working Paper Number 180. University of Oxford (2009).
- United Nations Environment Program. *Environment Ministers Meet to Accelerate Transition to a Low Carbon Society* (2008). Press Release, available at: <http://www.unep.org/documents.Multilingual/default.asp?documentID=528&articleID=5745&I=en>
- (2009) *Climate Change REDD+. Introduction*. Available at: <http://www.unep.org/climatechange/reddplus/Introduction/tabid/29525/Default.aspx>.
- (2011). *Risoe CDM/JI Pipeline Analysis and Database*, January 1st 2011. Available at: <http://cdmpipeline.org/overview.htm>
- UNITED NATIONS World Commission on Environmental and Development, *Our Common Future ES-7* (1987).
- (1992) *United Nations Framework Convention on Climate Change*, available at: <http://unfccc.int/resource/docs/convkp/conveng.pdf>
- (1997) *Kyoto Protocol to the United Nations framework convention on climate change*, available at: <http://unfccc.int/resource/docs/convkp/kpeng.pdf>

——(2000) United Nations Millennium Declaration. Available at:  
<http://un.org/millennium/declaration/ares552e.pdf>

——(2001) *The Marrakesh Accords*. Doc. FCCC/CP/2001/13/Add.2. Appendix B

——(2007) Conference in Bali. [http://unfccc.int/meetings/cop\\_13/items/4049.php](http://unfccc.int/meetings/cop_13/items/4049.php)

——(2009) *Copenhagen Accord*. Available at  
[http://unfccc.int/files/meetings/cop\\_15/application/pdf/cop15\\_cph\\_auv.pdf](http://unfccc.int/files/meetings/cop_15/application/pdf/cop15_cph_auv.pdf)

United States Energy Information Administration (EIA). *Country Analysis Briefs: Ecuador*. Washington, DC: United States Energy Information Administration (2010). Available at: <http://www.eia.doe.gov/cabs/Ecuador/Oil.html>

Van de Ven, Johannes. *Ecuador's Yasuní-ITT Trust Fund – A paradigmatic shift in Global Development Cooperation* (2010). Available at:  
<http://johannesvadeven.blogspot.com/2010/08/ecuadors-yasuni-national-park.html>

Wilder, Martijn. *The clean development mechanism*. University of New South Wales. (2001) 24.

The World Bank. World Development Report 2010. *Development and Climate Change* (2010).

Yasuní-ITT Initiative. *Ecuador's Yasuní – ITT Initiative: Why leave oil underground?* (2010). Available at: <http://yasuni-itt.gob.ec/blog/2010/08/04/ecuador-%E2%80%98s-yasuni-%E2%80%93-itt-initiative-why-leave-oil-underground/>