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Reconsidering the Yasuní-ITT Initiative: How Conservation Could Have Aligned with Development

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Abstract: The announcement by President Rafael Correa in August of 2013 that Ecuador would cancel the Yasuní-ITT Initiative, and start drilling for the estimated 840 million barrels of oil lying underneath the national park left supporters in Ecuador and many environmentalists around the world angry and disheartened. Blame for the Initiative's failure has been placed on developed countries for being conservative, on President Correa for his erratic negotiating strategies, and even on China for providing billions in loans to Ecuador in return for future oil shipments. While these factors did not help the Initiative, alone they cannot explain the lack of contributions. The Initiative had serious flaws, particularly, that its ultimate goal was a post-CO2 energy matrix as opposed to reduced macroeconomic and budgetary dependence on oil, which is the reason why the government plans to expand drilling in Yasuní. This essay will examine why the expected donors chose to withhold from contributing, and then examine policy solutions that might have made the Initiative more viable.

Key Words: Yasuní, Ecuador, Environmental Politics, Conservation, Rafael Correa.

Resumen: El anuncio del Presidente Rafael Correa en agosto de 2013 de que Ecuador cancelaría la Iniciativa Yasuní-ITT y empezaría a explotar los estimados 840 millones de barriles de petróleo que yacen debajo del parque nacional, dejó a los adeptos de la Iniciativa y muchos ambientalistas del mundo enojados y desanimados. La culpa por el fracaso de la Iniciativa ha sido echada a los paises desarrollados por excesivamente conservadores, al Presidente Correa por el estilo errático de sus negociaciones, y aún a China por haberle proveido a Ecuador mil millónes de dólares en préstamos a cambio de futuras entregas de petróleo. Aunque estos factores no ayudaron al éxito de la iniciativa, tampoco pueden explicar por si mismos su fracaso. La Iniciativa tenía serias fallas, en particular que su meta principal era una mátriz energética post-CO2 en vez de una reducción en la dependencia de Ecuador al petróleo. Esas dependencias son la verdadera razón por la cual el gobierno decidió explotar los campos en Yasuní. Este ensayo examinará las razones por las cuales los donantes decidieron no contribuir y despues considerará cambios que podrian haberle vuelto la Iniciativa en una política más viable.

Palabras Clave: Yasuni, Ecuador, Politicas Mediambientales, Conservacion, Rafael Correa.

I. Introduction

The announcement by President Rafael Correa in August of 2013 that, faced with a lack of financial contributions from developed nations, Ecuador would cancel the Yasuní-ITT Initiative, and start drilling for the estimated 840 million barrels of oil lying underneath the national park left supporters in Ecuador and many environmentalists around the world angry and disheartened. Blame for the Initiative's failure has been placed on developed countries for being conservative and stingy, on President Correa for his erratic negotiating strategies, and even on China for providing billions in loans to Ecuador in return for future oil shipments (Deutsche Welle Sept. 13th, 2013). While it is true that tight international cooperation budgets made the project difficult if not possible, President Correa's often unpredictable attitude toward the proposal probably added to any initial doubts about it, and having to petition a German Minister of International Cooperation who hails from the center-right FDP was far from ideal (Minister Niebel publicly chastised Silvio Berlusconi in 2011 when, in the midst of the Eurozone crisis, Italy granted $36 million to the Initiative via debt-forgiveness) (El Comercio Oct. 9th, 2011) – alone they cannot explain the lack of contributions. The Initiative had serious flaws, particularly, that its ultimate goal was a post-CO2 energy matrix as opposed to reduced macroeconomic and budgetary dependence on oil, which is the reason why the government plans to expand drilling in Yasuní.

While the Initiative was flawed, it was never beyond repair, and it is worth reexamining because it represented an attempt to think big about sustainable development in a developing country. Hopes to limit drilling in Yasuní, or to establish similar initiatives in other developing countries, will require a plan that reduces dependence on oil exports for macroeconomic and budgetary stability, and articulates international cooperation policies that will be less burdensome and risky for developed nations and private donors. Ecuador has already begun to do the former in pursuit of poverty reduction, and this essay aims to show how those efforts could have been built upon to form a coherent plan for sustainable development that includes protecting Yasuní and might have attracted international contributions. After briefly recapping the history of the Initiative, this essay will examine why the expected donors chose to withhold from contributing. Although German and U.S. reasons for not contributing were convincing, the solutions offered to Ecuador failed to address the particular nature of the problem the Initiative

sought to address. The second half of this essay will attempt to address those particularities via potential policy solutions.

II. The Initiative

Located in the northeast corner of the Ecuadorian Amazon, Yasuní National Park is, along with the Galápagos and Gran Sumaco, one of Ecuador's three UNESCO Biosphere zones; and as such, it is among the "crown jewels" in a country of extreme biodiversity (Fontaine 2007). The average hectare in Yasuní has more native tree species than are found in the continental United States and Canada combined, and even within the Amazon basin, the park's biodiversity is unique. An international team of thirteen researchers recently determined that eastern Ecuador and northern Peru constitute a "unique bioregion where species richness for [amphibian, bird, mammal and vascular plant] reaches diversity maxima" (Bass *et al.* 2010: 3-5). The team also expects this region to remain unaffected by the droughts that climate change has started to cause in the eastern Amazon. Nevertheless, in spite of the importance of this bioregion, Yasuní, which represents 14% of it, is the only part with protected status, while 79% coincides with current or proposed oil concessions (Bass *et al.* 2010).

The idea of not drilling originated in civil society forums in the early years of the last decade as a way to protect the indigenous communities living in and the biodiversity of Yasuní from the fate suffered by Ecuador's original Amazonian oil fields, where private and state oil companies left millions of barrels of toxic waste water and oil in open pits. With the arrival of the left-leaning, U.S.-trained economist Rafael Correa to the presidency in 2006, civil society groups saw a chance to gain political support for the idea, and began transforming it into a revolutionary concept meant to change Ecuador's economy from one based on natural resource exploitation to a post-CO_2 one. In the words of Alberto Acosta, one of its staunchest supporters and Correa's first Minister of Energy and Mines, the Initiative had four pillars: to conserve biodiversity, protect the land and livelihood of indigenous communities living there in voluntary seclusion, take care of the global climate by preventing CO_2 emissions, and take a step toward a post-CO_2 economy (Acosta 2012).

In 2007, Correa adopted the Initiative as an official government policy, but declared that he would keep the option of drilling on the table, as a Plan B, in case international contributions were not forthcoming. A negotiating team, led by Roque Sevilla, president of Ecuador's most successful tourism company and a leading conservationist in Ecuador, eventually asked the developed world for $3.6 billion over thirteen years (which it calculated was the present value of half of the profits the State would have received from drilling) in order to keep the oil underground. Contributions would be administered by the UNDP, and would finance renewable energy projects. The revenue stream from these projects would have then been invested in protecting Ecuador's underfunded 4.8 million hectares of national parks, reforestation projects, national energy efficiency policies, and social development in communities around the national park. Ecuador and the UNDP promoted the idea that the Yasuní-ITT Initiative would become a model that developing countries in the tropics could replicate (Larrea and Warners 2009).

The small Andean country pinned its hopes on a major contribution from Germany, which it was thought, would create a domino effect of contributions from other developed nations. Although Germany's Bundestag supported the idea, in 2010 its Minister of International Cooperation, Dirk Niebel, announced that Germany would not be contributing. Minister Niebel gave several reasons for his decision: the precedent set by such a contribution could leave Germany exposed to large financial demands from other countries; the lack of a sufficient guarantee on Ecuador's part against drilling in the future; and in a letter to the World Bank, he reasserted the fundamental importance of the U.N. Millennium Development Goals in tight times, and called for a "greater focus on efficiency and effectiveness" in aid (Vidal Dec. 30th, 2011; Niebel 2010).

Although the United States never seriously considered contributing, a team from the Treasury met with Ecuadorian officials to listen to the idea. A note from economist Dr. Billy Pizer, who as Deputy Assistant Secretary for Energy and Environment at the Treasury at the time, met with the Ecuadorian negotiating team, shows that U.S. doubts both echoed and went beyond German ones. Dr. Pizer added that the Initiative would most likely have no affect on global CO2 emissions because global demand for oil would be unaffected by Ecuador leaving one billion barrels underground in several years time. Other supplies would come on-line to meet that future demand, and consequently, global emissions would not have been lowered as a result of Ecuadorian action. Dr. Pizer also pointed out that payments to the Initiative were not linked to activities intended to

reduce and eventually eliminate the incentives to drill for oil in the future, an important feature in other conservation mechanisms, such as REDD+. This policy omission is important because the oil would have retained its economic value even after the payments had ended. Finally, he noted that the $3.6 billion price tag seemed high compared to those used in other emissions reductions policies, and that it is difficult to justify such a price on the grounds of Yasuní's biodiversity, as the oil underground adds no value to the biodiversity above. Like Minister Niebel, Dr. Pizer encouraged Ecuador to try to secure funding from established initiatives, like the various REDD+ programs, that offer a system of payments in return for verifiable and quantifiable reductions in carbon emissions as a result of forest conservation (Pizer 2013).

It is difficult to argue with these critiques. The UNDP supported the idea of other tropical countries replicating the model, and there were reports and rumors that Nigeria and Gabon considered creating their own Initiatives (Vidal Dec. 30th). True or not, it is easy to imagine that other countries would have presented similar initiatives if Ecuador had received $3.6 billion not to drill, just as it is also easy to imagine how several multi-billion dollar plans intended to compensate the enormous opportunity costs of not drilling for oil could quickly become a burden on international cooperation budgets. Regarding avoided emissions, new Brazilian, Venezuelan, Russian and East African oil discoveries, along with the U.S. shale boom, have shown that global oil production, and with it, global CO_2 emissions, would have been unaffected by the relatively small amount of oil Ecuador would have been taking off the market. Meanwhile, demands for international cooperation remain numerous whereas available resources are scarce, and transfers for climate change policies have been even scarcer. To bring this point home, consider Norway's commitment of $1 billion to both Brazil and Indonesia if they reduce deforestation. That amount is significantly less than what Ecuador asked for, but no other nation has attempted anything nearly as ambitious. The money is being released over several years, but only if agreed-upon reductions in deforestation are achieved and related policies intended to reduce the incentives to deforest are implemented (Government of the Kingdom of Norway 2010; Norway's Ministry of the Environment: 2013). Further, these projects directly address the more urgent issue of climate change—Brazil and Indonesia have been the two largest emitters of greenhouse gases as a result of land-use changes whereas Ecuador's emissions from deforestation remain relatively minor—and Norway is a unique donor, having already surpassed the Millennium

Development Goal of dedicating 0.7% of GDP to international cooperation. It currently spends over 1% of its GDP on it, whereas Germany spends around 0.4% and the U.S. 0.2% (OECD 2013). Resources truly are scarce at the moment, which made dedicating $297 million a year to a single biodiversity project unlikely.

Finally, the question of trust is paramount. How could contributing nations have felt confident that fifteen years from now, when the $3.6 billion would have been spent, a new President would not drill in Yasuní? This question never received a satisfactory answer, and for the moment, it is hard to imagine one. This is because if a group of developed nations were to give Ecuador the money, and in fifteen years time, it still depended on oil exports for macroeconomic stability and as its principal source of government revenue, there would be a significant chance that it would drill in Yasuní because the domestic political and social consequences of not drilling (sluggish growth or even economic contraction) would far outweigh those of breaking an international agreement.

In their passion for protecting Yasuní, policy-makers and advocates came to view the Initiative as a silver bullet, but they have been unable to show how international contributions would resolve the underlying reason why Correa wants to drill there;[1] and while German and U.S. critiques of the Initiative took note of this flaw, the solutions they put forward do not address it either: Ecuador's extreme reliance on oil exports for macroeconomic stability and government revenue, combined with declining production in its traditional oil fields. Oil exports have been the principle driver of economic growth since the first fields came online in the late 1960's, and according to the Central Bank's Macroeconomic Statistics Report from 2011, oil and gas exports accounted for 41% of total exports from 1993 to 1999, with refined products adding an extra 4.8%; and from 2000-2010, oil and gas accounted for 37.2% of total exports, while refined products were 4.2%. However, in recent years this dependence has grown significantly as a result of the global commodity boom. Each year since 2008, crude exports have accounted for 50-62% of total exports (Banco Central de Ecuador 2008-2013). Profits from oil sales usually represent at least 25% of the national budget, and sometimes as much as 40%

[1] After international contributions failed to materialize, Yasunidos, one of the NGO's that attempted to obtain a public referendum on the issue of drilling in Yasuní-ITT, proposed a tax on wealthy Ecuadorians, which it calculated could have generated the revenue. Even if the tax were feasible, it fails to address the question of Ecuador's macroeconomic and budgetary dependence on oil exports.

(Ministerio de Finanzas del Ecuador 2011-2012; CEPAL 2012). On top of that, since 2009, Ecuador has been able to borrow around $9 billion from China by providing future oil shipments as payment. The importance of oil for Ecuador's economy can belie the fact that Ecuador is OPEC's smallest producer, and that, excluding the Yasuní-ITT fields, it currently has less than two billion barrels of proven reserves (Ministerio Coordinador de Política Económica 2013). The oil underneath Yasuní represents a significant part of Ecuador's future oil production, and although that oil does not increase the value of the national park's biodiversity, it clearly increases the pressure to destroy that biodiversity. Alone, a REDD+ program would be insufficient because, by only compensating Ecuador for avoided CO2 emissions from not deforesting, what it could offer would be dwarfed by the financial resources Ecuador would receive from drilling.

III. A Way Forward?

Rather than reduced global CO2 emissions and a post-CO2 economy for Ecuador, the principal goals of the Initiative should have been to maintain high levels of economic growth and public investment without drilling in Yasuní, and in the long term, to reduce the country's dependence on oil exports for both fiscal revenue and current account stability. Diversification of the energy matrix or financing of the country's national park system should have been incorporated in so far as they could contribute to these overarching goals, but they should have been secondary goals. At about 2.2 metric tons of annual per capita CO2 emissions, Ecuador remains a minor emitter of greenhouse gases, and more to the point, even if it had a CO2-free energy matrix, it might still need to drill in Yasuní for reasons related to both its balance of trade and national budget (World Bank 2013).[2] In their search for international cooperation, policymakers and advocates of the Initiative should have avoided seeking compensation for the opportunity costs of not drilling—as the previously cited numbers on official development aid show, there was little chance that a group of developed nations could have offered an amount approaching even half of those costs. Instead, policymakers

[2] Nicolas Stern has estimated that CO2 emission per persona would have to be around two metric tons per capita by 2050, when the population is expected to be 9 billion (Andres 2008), but the recently released IFCC's Fifth Assessment report stated that global net emissions would need to be reduced to zero simply to limit the risks of climate change (IFCC 2014).

needed to articulate a series of policies that would have allowed Ecuador to achieve the above-mentioned goals, and then identify which ones it would have been responsible for implementing and which could have benefited from or requireed international cooperation. For the latter, it should have incorporated German and U.S. advice, and first attempted to access established mechanisms of cooperation. Where no such programs exist, policymakers could have created experimental policies with low price tags or sought help from private institutions and philanthropists. Finally, any plan to protect Yasuní needed to be presented within the context of the development policies Ecuador has been pursuing. Doing so would have provided an appropriate framework for evaluating the country's efforts, and as will be seen in the following paragraphs, also shown that President Correa has already begun implementing many policies that should allow Ecuador to diversify its economy and export-base.

The first step in replacing the economic value of drilling in Yasuní should have been accurate estimates of how that oil is expected to contribute to Ecuador's future oil production, which had been about 500,000 barrels per day (bbd) until new investments for better recovery rates in mature fields raised that to 530,000 bbd in 2013 (Banco Central de Ecuador 2013). The principle questions that needed to be addressed were: is the oil from Yasuní expected to replace falling production in maturing fields or will it add to stable production levels? And would the Pacific Refinery, which is expected to process slightly under 300,000 barrels of crude a day by 2016 (Creamer 2010), require oil from Yasuní? The report from the Coordinating Ministry of Economic Planning, which was used in the congressional debates to cancel the Initiative, states that Ecuador currently has 1.97 billion barrels of proven reserves, with 75% of them in mature fields and the remaining 25% in fields that have recently entered production (Ministerio Coordinador de Política Económica 2013). The report estimated the economic benefits of drilling in Yasuní according to two price scenarios: an average of $70 per barrel over the field's lifetime versus an average of $91.50 per barrel. After accounting for operating costs and investments (which were assumed to be the same in both scenarios), the government expects the fields to provide between $41 and $59 billion to state coffers over twenty-three years. Production should peak in the seventh year of the project, and if oil is at $70, the State would receive between three and four billion dollars annually during the fifth

through the ninth years of production (Ministerio Coordinador de Política Económica 2013).[3]

It is important to note that the data regarding future production and even the actual amount of oil in Yasuní-ITT might be unreliable, as official estimates have, at times, been contradictory and challenged by outside opinions. In 2013, Wilson Pástor, who was Ecuador's Minister of Non-Renewable Natural Resources from 2010 until August of 2013, claimed that production without the Yasuní-ITT fields will reach 600,000/bbd this year, and that once in full production, the ITT fields would add between 100,000-200,000 bbd (Araujo Sept. 26th, 2013). However, at Ecuador's 2013 Oil and Power Fair, Secretary of Hydrocarbons Andrés Donoso predicted that production would start declining in 2014 without the Yasuní-ITT fields, and contradicting his former boss, said that with the Yasuní-ITT fields, Ecuador would reach 600,000 bbd by 2017 (Araujo Sept. 26th, 2013). To complicate matters further, Roberto Barragán, an oil geologist who worked in blocs near Yasuní when Occidental had contracts in Ecuador, pointed out that the Yasuní-ITT fields currently have only 400 million barrels of proven reserves; the higher number of 840 million barrels remains an estimate (El Comercio Sept. 20th, 2013).

How to avoid drilling in Yasuní-ITT had to depend, in part, on which forecast is accepted. If Ecuador could reach and hold production at 600,000/bbd without Yasuní, it would be able to service its multi-billion dollar debt to China, much of which is to be repaid in crude oil, while allowing for some growth in fiscal revenue. In this scenario, drilling would represent a major boon to the economy and government finances, but it would not be the last barrier to economic contraction. However, even if Yasuní is expected to gradually replace falling production in maturing fields (a plausible scenario considering the push the President has made to get drilling approved), in the medium-term, Ecuador could have made up for leaving the Yasuní-ITT fields untouched with a combination of policies designed to reduce unnecessary energy subsidies, increase funding for national park protection with the goal of at least doubling revenue from foreign tourists, and bring into production some untapped oil, and potentially mining, fields outside of national parks. The revenue generated from these policies should have then been invested in education with linkages to agriculture, services and some heavy

[3] If oil averages $91.5/barrel, the State would receive four to five billion dollars annually during the fifth through the tenth year of production.

industry, which offer the best chance to change the country's productive matrix, and in turn, protect its biodiversity. The next section will discuss how, under President Correa, the country has already begun to make such investments, and offer ideas for expanding on such policies that could leverage protection of Yasuní by incorporating international cooperation.

IV. Oil-Financed Development

Since entering national politics, Correa has aggressively sought to increase the State's share of revenue from oil sales, investing these new funds in infrastructure, education and healthcare. As Finance Minister in 2005, he cancelled a stabilization fund that had been using a significant percentage of oil profits received by the State to retire debt, and invested those resources in research and development (Jarrín and Salgado 2007; Le Calvez 2009). According to a report from Ecuador's Education Secretariat (Senecyst), the country's research and development intensity rate jumped from .06%/GDP to .47%/GDP as a result (SENESCYT 2013).[4] Fulfilling a presidential campaign promise to renegotiate what he considered to be illegitimate debt, Correa defaulted on $3.2 billion in bonds in 2008, subsequently buying back $2.9 billion in bonds for around $900 million, thus saving the state around $2 billion (The Economist: June 17th, 2009). And in 2010, he renegotiated contracts with private oil companies to increase the percentage of profits the State receives, the benefits of which were seen in a jump in State revenue in 2011 (CEPAL 2012).

With oil contracts renegotiated and sovereign debt lowered, an area where significant budgetary savings can still be made is energy subsidies. Although a net oil exporter, Ecuador is unable to meet domestic demand for refined products. It imports them at international prices, and then resells them at heavily subsidized ones. According to Ecuador's Central Bank, of the $17 billion that the State received from oil sales in 2012, $3.4 billion went to energy subsidies while only $4.03 billion went to the budget. From 2010 to 2012, it provided $2.78 billion in subsidies for gasoline, $4.03 billion for diesel,

[4] The government's goal is to reach a R&D intensity rate of 1% of GDP, an objective that it measures in the context of the R&D intensity rate of the United States and Japan, which according to the most recent data from the U.S. National Science Foundation, were respectively 2.9% and 3.3% in 2009 (SENESCYT 2013; National Science Board 2012, 4-40).

and $1.55 billion for propane; and looking to the future, the recently proposed 2014 budget has set aside $3 billion for these subsidies (Banco Central del Ecuador 2012-2013; Ministerio de Finanzas 2013). Part of these subsidies help low-income Ecuadorians, but a significant part goes to the middle and upper classes.

The government has been taking steps to address the issue of energy subsidies. Thermal power stations currently produce 42% of the country's electricity, but Chinese-led investment is scheduled to bring at least eight new hydroelectric plants online, which according to an essay by Miguel Castro in Carta Económica, will greatly increase capacity, allowing 88% of Ecuador's electricity to come from renewable sources by 2021 (Castro 2012). This will help reduce subsidies for propane, which is used for cooking in lower-income households. Once these new dams start coming online in 2016, the government plans to subsidize the purchase of energy-efficient electric stoves, and then eliminate propane subsidies (El Universo Aug. 4th, 2013). While this will help the government's budget, as Miguel Castro also points out, subsidies to the transportation sector, which accounts for 55% of energy consumption in Ecuador, are the principle drain on state resources (Castro 2012). President Correa has started to address this through a variety of measures: he eliminated fuel subsidies to airlines in late 2011; the Pacific Refinery, scheduled to be built by 2016, should make refined imports unnecessary, and increase Ecuador's value-added petroleum exports; with the help of an IDB loan, Ecuador will build its first subway that, once functional in 2016, is expected to save the state $68 million per year in operating costs, and reduce fossil fuel emissions as each day 360,000 Quiteños will be able to avoid commuting on heavily-subsidized diesel buses (El Universo 2013; IDB 2012). Finally, the President recently announced targeted policies to limit the amount of subsidized gasoline Ecuadorians can buy to three hundred gallons per year per vehicle (Andes Aug. 3rd, 2013).

Table 1. Imports of and Subsidies for Refined Petroleum Products

	2010	**2011**	**2012**	**2013**
Total Imports of Refined Petroleum Products	$3.58 billion	$4.4 billion	$5 billion	$5.5 billion
Total subsidies for Refined Petroleum Imports	$2.01 billion	$2.94 billion	$3.4 billion	$3.6 billion
Subsidies for Gasoline Imports	$524 milliion	$976 million	$1.28 billion	$1.26 billion
Subsidies for Diesel Imports	$1.09 billion	$1.33 billion	$1.6 billion	$1.88 billion
Subsidies for Propane	$399 million	$636 million	$523 million	$522 million

Source: Ecuador's Central Bank

The effects of most of these policies should start to be felt sometime between 2015 and 2017—around the time the Yasuní-ITT fields are expected to come online. Provided it does not require crude from the Yasuní fields, the Pacific Refinery alone will make up for most of Yasuní's expected contribution to Ecuador's current account. If crude is at $70 during the fields' sixth year, when production is expected to peak at 82.1 million barrels, the fields would add $5.7 billion in exports. By eliminating the need for refined petroleum imports, the Pacific Refinery would cover a significant portion of Yasuní's expected contribution to Ecuador's balance of payments. By way of example, if the Pacific Refinery had been up and running since 2010, Ecuador could have avoided over $18 billion worth of imports between 2010 and 2013; and as the new capacity for refined products created by the refinery will amply exceed domestic demand, Ecuador will be able to export more gasoline, diesel, and higher value derivatives like urea, further improving its balance of payments (Creamer: 2010). The exact numbers will depend on the international price for refined products and the annual production from the Yasuní-ITT fields.

It is difficult to calculate by how much targeted policies will reduce gasoline subsidies because World Bank data on Ecuador's motorization rate (number of vehicles per 1,000 inhabitants) groups together vehicles that run on gasoline with those that use diesel. Nevertheless, by making several assumptions we can form an idea of the fiscal savings Ecuador might realize. If we assume for a moment that all vehicles in Ecuador ran on gasoline, there were around 1.01 million vehicles in the country in 2010. In 2011, each

vehicle consumed an average of 698.6 gallons of gasoline, and as 56% of all gasoline was imported, each vehicle consumed an average of 391 gallons of imported gasoline, which was bought at $131.90 per barrel but sold domestically at $54.50 per barrel. In 2012, each vehicle consumed an average of 743 gallons, with an average of 441 gallons of imported gasoline, bought at $143 per barrel and sold at $53.80. If each vehicle had been entitled to only 300 gallons of subsidized gasoline per year, Ecuador could have avoided subsidizing imported gasoline; domestic production could cover the quota of subsidized transport fuel (where subsides can merely mean a loss of profit as opposed to an actual expenditure) even before the Pacific Refinery comes online. As seen in table 1, if this reduction had been in place in 2010, Ecuador would have saved almost $2.8 billion between that year and 2012. When we recall that the 1.01 million vehicles in Ecuador include diesel-powered ones, it becomes clear that each car consumes more gasoline per year than the above calculations assumed, meaning that with targeted subsidies, the State would save more money.

If the new hydroelectric dams and subsidized electric stoves could reduce propane consumption by even one-third, the State could save an additional $100 to $200 million per year. Considering that Ecuador had asked the developed world for $297 million per year to preserve Yasuní, it makes sense for the country to take action on energy subsidies. Bearing in mind that some remain necessary, advocates of the Initiative should link the elimination of unnecessary energy subsidies to protecting Yasuní. And while the government will be solely responsible for reducing these subsidies, developed countries could use progress on this front as an indicator of Ecuador's commitment to sustainable development, and take it into account when deciding to provide financial assistance in other areas. They could also offer assistance for clean energy policies intended to reduce Ecuador's diesel consumption, the subsidies for which will be most difficult to cut as doing so would hurt lower-income Ecuadorians who depend on public transportation. As fuel efficiency for hybrid buses improves, developed countries could potentially help cover part of the price difference between hybrid and diesel buses so that Ecuador could add the former to its fleet.

V. Education

Although Ecuador's plans to further develop its energy and agricultural are of immediate importance, economic diversification and development will ultimately depend upon the country's investments in education, where Ecuador has much ground to make up for. As is the case in most of Latin America, Ecuador suffers from the brain drain and a shortage of PhD's and professionals with backgrounds in science and engineering. Its Secretary of Higher Education, Science, Technology and Innovation (SENESCYT) recently found that the country has only 431 PhD's (.00002% of the population), and a mere 29 of them received their doctorate in Ecuador (El Comercio Oct. 1st, 2012). President Correa has perhaps been at his most ambitious with education investments, using oil wealth to increase the number of options for Ecuadorians to pursue higher education degrees, to improve the quality of the country's entire system, and linking both to attempts to halt and reverse the brain drain. The government has ploughed money into what had been an anemic scholarship program designed for students to obtain undergraduate and graduate degrees at top universities abroad. Focused on science and engineering, the program covers tuition, a stipend, school materials and airfare. In exchange, recipients agree to work in Ecuador for double the amount of time they received funding. Prior governments had financed a limited number of such scholarships—only 237 between 1995 and 2006—but since 2007, Correa's government has provided 5,200 of them, and in 2012 alone, 821 for post-graduate programs (Rosero Jun. 25th, 2013; El Comercio Sept. 6th, 2013).

The government's greatest efforts, however, are focused on improving its own education system, particularly in the areas of science and technology. The 2010 Higher Education Law introduced a requirement that all full professors posses a PhD, and that 70% of professors at an institution have a doctorate for it to be allowed to award PhD's. This goal might be too ambitious in the short-term, but it should quickly increase the number of professors with research backgrounds, which will benefit both students and the private sector. The law also mandates the building of four new universities to improve the country's entire education system. One will focus on pedagogy, training primary and high school teachers, with plans to open six more locations eventually. To ensure that future teachers receive proper training, the university is offering 500 well-paying teaching positions to professors from Spanish universities with proper qualifications and experience (Bow Jul. 22nd, 2013). The second university is located in the Amazon, and

will focus on sustainable development and biology; the third, in Guayaquil, will focus on the arts and entertainment industry. The centerpiece, however, is the new university city of Yachay, a research university that is being built on a 4,489 hectares about two hours from the new airport outside of Quito.

The first research university in Ecuador, Yachay will focus on biotechnology, nanotechnology, IT and agriculture. On multiple occasions, Correa has said that Yachay will be his principle legacy, and so far he has taken all the right steps to guarantee it is a worthy one: its developers have toured numerous premiere research universities and centers around the world, including CalTech, Toulousse University and the Berlin Institute of Technology. Aris Rosakis, who chairs the Division of Engineering and Applied Sciences at CalTech, is on the board, and he is working with an Ecuadorian professor of geo-engineering at CalTech to design the science and engineering programs, as well as the interaction those programs will have with the school's industrial park. The developers of South Korea's Icheon economic zone, which serves as a model of the university city, are acting as consultants in the campus' design. And to help guarantee that the country's entire higher education system benefits from this infusion of resources and technology, Yachay has already signed research partnerships with other Ecuadorian universities, both private and public (Rosakis 2013; Valencia Aug. 25th, 2013; Mack March 29th, 2013).

Optimism surrounds the project, but is also tempered by doubts about Ecuador's long-term ability to finance a state-of-the-art research institution, attract top researchers, and connect its areas of research with domestic industries and services. These doubts should be taken seriously, but there are examples of successful built-from-scratch research institutions. South Korea's Postech University was able to attract prominent South Korean academics and researchers who had been working abroad. According to Byung Shik Rhee, they returned out of a sense of commitment to Korea's national development, and with the help of generous compensation packages, which include "excellent research facilities, a teaching load of only two or three courses per year, a year-long sabbatical every six years, competitive salaries [by Korean standards], and faculty apartments near campus". It must be noted that POSCO, the world's second largest steelmaker, started the university (its endowment is currently $2 billion), and provided it with a clear link to industries, but the university started with a $15 million budget in 1987 (Rhee: 2011). Ecuador might lack the disposable resources of POSCO's CEO—the steel giant's annual revenues in 2012 were equivalent to about two-thirds of Ecuador's GDP—but it has

allocated generous funding for Yachay, and has begun attracting academics and researchers with a mixture of the ingredients used by Postech. Yasuní's preservation could play a role in answering the other doubts.

David Murdock, owner of the Dole Corporation and the philanthropist behind the North Carolina Research Campus (NCRC), might be providing one of the first university-industry linkages. As a producer and exporter of bananas and other tropical fruits, Dole is a major investor in Ecuador; and according to its website, the NCRC focuses on "studying the effects of fruits and vegetables on human health, identifying bioactive components in food, plants, and botanical medicines for the prevention, treatment of metabolic disorders like diabetes, obesity, and cancer", often collaborating with major agricultural companies (NCRC: 2013). Murdock recently gave President Correa a tour of the NCRC, and there has been talk of cooperation between it and Yachay (Pallares Nov. 3rd, 2012). Such an endeavor would clearly benefit from the preservation of Yasuní's biodiversity, and in fact, proponents of the Initiative have often argued that its biodiversity will lead to scientific and medicinal breakthroughs. Dr. Chivian, director of Harvard Medical School's Center for Health and the Global Environment, has illustrated this argument by citing examples like the Ecuadorian poison frog, whose venom is as strong a painkiller as morphine, but does not cause tolerance in humans. He hopes that further study could figure out how to reduce its toxicity so that humans can use it. Another example comes from a team of microbiologists, led by Yale's Dr. Scott Strober, that published a paper in 2011 on a fungi discovered in Yasuní that shows promise in the bioremediation of polyurethane, a foam used primarily in mattresses, automotive seating and footwear (Russel, et. al.: 2011). The potential for scientific breakthroughs is clear, but how they would benefit Ecuador remains less so. Considering that drilling would provide billions of dollars that would be invested in education and infrastructure, the development benefits of conservation need to become more concrete for Ecuador.

Increased cooperation with elite universities and private philanthropy are two ways to help accomplish this. Ecuador has begun working on the former, signing an agreement with Yale this September that will allow 15 scholars to visit per year, and it is working on another with the Berlin Institute of Technology to promote forestry studies at a new technical school in the Amazon (SENESCYT Oct. 1st, 2013; Ecuador Inmediatio.com Apr. 17th, 2013). These efforts must be built upon. The most difficult aspect of maintaining and benefiting from such exchanges is bridging the gulf that often exist

between resources and institutional cultures in developed and developing world universities. For their careers and livelihoods, visiting researchers from the developed world need to do cutting-edge work and earn salaries comparable to those they would in their country. If good facilities at Yachay can offer the first, endowment donations from philanthropists could help secure the latter goal. Annual interest on $30 million in donations, for example, could cover the salary difference for many good researchers and professors from top universities to spend a semester or year at Yachay, and university officials should try to get professors to stay that long. It would give both students and professors more of a chance to develop academic and professional relationships. If Ecuador could secure higher donations, it could do a lot more. As president of the Yasuní-ITT Initiative, Ivonne Baki sought funds from the private sector and philanthropists, but when the goal was $3.6 billion and international cooperation was not forthcoming, that was a daunting task. With the more modest goal of securing increased university endowments or assistance with student scholarships, private sources become a viable option again. Elite universities could also consider rewarding professors for such cooperation (perhaps in tenure or contract negotiations), and researchers doing fieldwork in Ecuador could incorporate more Ecuadorian students in their teams.

VI. Tourism and Mining

Returning to policies that could have an effect in the short and medium-term, the Initiative's idea of securing adequate funding for its national park system could have boosted economic growth, increased tax revenue, created jobs and improved the current account. Tourism has been growing at a rapid rate in Ecuador, but is still far from where it could be. According to statistics from the U.N.'s World Tourist Organization "Highlights of 2014" report, Ecuador reported $1.2 billion in receipts from foreign tourists in 2013 (up from $843 million in 2011), whereas Costa Rica took in $2.4 billion (UNWTO: 2014). Considering that Ecuador is a larger country, of comparable if not superior natural and historical beauty, the industry's potential for growth is great, and would only be boosted by commitment to the Yasuní-ITT Initiative. In an interview, Alberto Acosta said that people would want to visit the country that made such an effort at sustainable development, and considering the success Costa Rica's conservation policies have had in attracting eco-tourists, he is probably right. Ecuador's Ministry of

Tourism just received a major budget upgrade, and it should try to access REDD funds to help guarantee adequate park protection or ask for bilateral help that would last until taxes on tourism revenues could finance these expenditures. The Initiative's original idea of funding park protection with revenue from renewable energy projects is a lost opportunity that other countries might be able to take advantage of.

The most controversial aspect of this plan concerns how Ecuador could have incorporated other oil fields and perhaps mining. One of the more promising untapped oil fields in Ecuador is Pungarayacu, located in the southeast of the Ecuadorian Amazon. The field is close to but still outside of the Gran Sumaco National Park, and holds an extremely thick crude, comparable to that found in the Canadian oil sands. The company with the lease, Ivanhoe Energy, has developed a technology to process the oil on site, and in May, Bloomberg reported that it had succeeded in upgrading the crude (closer to bitumen) so that it could be transported via existing pipelines. A recent study by a Baker Hughes' subsidiary estimated that, Pungarayacu, holds between 4.3 and 6.4 billion barrels, but questions remain about whether that oil will be made to flow to surface and what the rate of recovery would be (Bloomberg May 5th, 2011). Ecuador currently has almost no mining industry, but major copper and gold reserves in the southeast have attracted international miners. All projects, however, are currently on hold for two reasons: large mining companies have balked at tax rates that are high by regional standards, and indigenous communities living near proposed mining sites and environmental groups have fought to keep large-scale mining out of Ecuador.

Promoting oil or mining projects in one part of the rainforest to save another part sounds paradoxical, and opponents are justified in being wary of the State's commitment to environmental protection, but this paper argues that they should still reconsider. In the long-term, a diversified economy is Ecuador's best hope for protecting the majority of its national parks, biodiversity, and remaining indigenous lands; and investing revenue from the extraction of natural resources in education and infrastructure is currently Ecuador's only route to financing development. President Correa has justified drilling by arguing that the financial resources are needed to fight poverty, and considering his record of public investment, it is a strong argument. Consequently, supporters of the Initiative have to show how Ecuador can develop without drilling in the national park. Rather than fight all oil and mining projects, environmental NGO's and indigenous

communities might consider establishing protection priorities, and using them to negotiate a deal that would include limits on future oil and mining projects, a strengthening of the Environmental Ministry, and adequate monitoring of mining and oil operations (perhaps with UNDP participation). They should push the government to issue clearer information on the potential of Pungarayacu before discussing mining—it is best to keep those floodgates closed if possible. Nonetheless, if mining becomes an option and the government can come to an agreement with civil society groups currently opposed to large-scale mining, it must quickly offer a more attractive tax structure to get projects started. As long as taxes on copper and gold in Peru, Chile and Argentina are significantly lower than those in Ecuador, it is unlikely that companies will invest.

As a final consideration, down the road, further tax reform will be essential so that income and corporate taxes come to account for a greater share of government revenue. President Correa has already made some progress here, increasing revenue from income taxes, and in the medium term, it is okay if, as a result of energy efficiency policies, revenue from oil exports increases as a percentage of total revenue, as long as those increases continue to be invested wisely. The Yasunidos idea of a could be pertinent here, but they have yet to elaborate upon the details of their proposal nor demonstrate its political viability.

VII. Conclusion

Supporters of the Yasuní-ITT Initiative have criticized President Correa harshly for turning his back on it, but as it was formulated, the Initiative failed to address the real reasons why the President planned to expand drilling in the national park. He is currently taking a path that countries like the United States and Canada beat long ago: develop one's natural resources, and invest the resulting revenue in infrastructure and education, with a focus on science and engineering. If environmentalists want the country to forego drilling for large oil deposits, they must chart a course toward economic development with export diversification that can convince President Correa. Supporters have to show how this path and protecting Yasuní or other national parks are compatible. Meanwhile, potential contributors, whether they be governments or philanthropists, should consider Ecuador's major investments in education and infrastructure, and if successful, its

reduction of energy subsidies as steps toward sustainable development. They must remember that even developed economies have problems protecting areas of great wildlife and biodiversity. The United States has the strongest and most diversified economy in the world, its budget does not rely heavily on revenue from the energy sector, and it has exponentially greater amounts of land than Ecuador, yet environmentalists there must fight tooth and nail every year to keep oil companies out of the Arctic National Wildlife Refuge. A great part of their success is owed to the fact that macroeconomic and budgetary stability in the U.S. does not depend on drilling in Alaska.

Although both Ecuador and the UNDP had hoped that the Initiative could be replicated by other developing countries in the tropics where mega-biodiversity is threatened by oil and gas projects, this is unlikely. Many of the countries that fit this description have quite different energy and economic profiles, not mention major differences in population: Nigeria and Venezuela are significantly more dependent on oil exports than Ecuador is; India, Indonesia and the Philippines import most of their energy needs, which is a significant economic strain on the former two; and the African nations in this group are significantly poorer than Ecuador, and might find it more difficult to bypass the revenue that oil and gas projects would provide. Nevertheless, success is rarely overlooked, and if Ecuador were able to develop and diversify its export base while protecting Yasuní, these countries would pay attention, and would probably adopt the policies that are transferable, and then develop others that address their specific circumstances. Countries like Venezuela and Nigeria might also find it easier to consider policy advice from Ecuador than from the developed world.

VI. Bibliografía

Acosta, Alberto. 2012. "The Yasuní-ITT Initiative: Daring to Think Outside the Box." *Harvard Kennedy School: Latin American Policy Journal.* Retrieved from: http://isites.harvard.edu/icb/icb.do?keyword=k85105&pageid=icb.page50_917

Andes. 2013. Aug. 3rd. "En 2015 se focalizará subsidio de gasolina en Ecuador." *Agencia Pública de Noticias del Ecuador y Suramérica.* Quito.

Araujo, Alberto. 2013. (Aug. 27th.) "Con el ITT, podrá llegar a producer 800,000 barriles diarios." *El Comercio.* Quito.

Araujo, Alberto. 2013. (Sept. 26th.) "El futuro petrolero se planea con el ITT." *El Comercio*. Quito.

Banco Central del Ecuador. 2008. *Análisis del Sector Petrolero: IV Trimestre 2008*.

Banco Central del Ecuador. 2011. *Estadísticas Macroeconómicas: Presentación Estrcutural 2011*.

Banco Central del Ecuador. 2012. *Reporte del Sector Petrolero. IV Trimestre de 2012*.

Banco Central del Ecuador. 2013. *Estadísticas Macroeconómicas: Presentación Estructural 2013*.

Banco Central del Ecuador. 2013. *Reporte del Sector Petrolero: IV Trimestre 2013*.

Bass, Margot S., Finer, Matt., Jenkins, Clinton N., Kreft, Holger., Cisneros-Heredia, Diego F., McCraken, Shwan., Pitman, Nigel., English, Peter., Swing, Kelly., Villa, Gorky., Di Fiore, Anthony., Voigt, Christian., Kunz, Thomas. 2010. "Global Conservation Significance of Ecuador's Yasuni National Park." *PLoS ONE* 5(1): e8767.doi:10.1371/journal.pone.0008767.

Bloomberg. 2011. (May 5th). "Ivanhoe Energy successfully upgrades heavy oil from its Pungarayacu field in Ecuador to pipeline quality." *New York*.

Bow, Juan Carlos. 2013. (July 22nd). "Ecuador ofrece salario, comida y vivienda a profesores españoles." *El País* (Madrid).

Castro, Miguel. 2012. "Breves Reflexiones en torno a la transición energética en Ecuador." *Carta Económica Año 18* 6: 4-6. CORDES: Corporación de Estudios para el Desarrollo.

CEPAL. 2012. *Informe Macroeconómico de América Latina y el Caribe: Junio de 2012*. Naciones Unidas: Santiago, Chile.

Creamer, Bernardo. 2010. "La Refinería del Pacífico, Oportunidad Real y fin de la Iniciativa Yasuní ITT?" *Instituto de Economía de la USFQ: Boletín de Koyuntura* 12 (2): 1-8.

Deutsche Welle. 2013. (Sept. 13th). *China to blame over Yasuni say critics*. Berlin.

EcuadorInmediato.com. 2013. (April 17th). *Ecuador estrechará lazos con universidades alemanas en beneficio de Yachay y Universidad Regional Amazónica*. Quito.

El Comercio. 2013. (Sept. 30th.) *El Yasuní es un proyecto con números inseguros*. Quito.

El Comercio. 2013. (Sept. 6th.) *821 estudiantes van al exterior con becas*. Quito.

El Comercio. 2012. (Oct. 1st.) *El 93% de los PhD sacó su título en el exterior*. Quito.

El Comercio. 2011. (Oct. 9th.) *Duras críticas de Alemania a proyecto ecuatoriano de Yasuní-ITT*. Quito.

El Universo. 2011. (Nov. 29th.) *Aerolíneas analizan la pérdida de su subsidio*. Quito.

El Universo. 2013. (Aug. 4th.) *Rafael Correa anuncia fin del subsidio al gas al operar las hidroeléectricas*. Quito.

Fontaine, Guillaume. 2007. *Problemas de la Cooperación Institucional: el Caso del Comité de Gestión de la Reserva de Biosfera Yasuní. Yasuní en el Siglo XXI*. Flacso: Quito.

Government of the Kingdom of Norway. 2010. *Letter of Intent between the Government of the Kingdom of Norway and the Government of the Republic of Indonesia on 'Cooperationon reducing greenhouse gas emissions from deforestation and forest degradation.* Retrieved from: http://www.regjeringen.no/upload/SMK/Vedlegg/2010/Indonesia_avtale.pdf

Inter-American Development Bank. 2012. *IDB approves $200 million to support urban transportation in Quito*. News Release.

Artola Jarrín, Verónica and Pazmiño Salgado, María Fernanda. 2007. "Análisis de los Fondos Petroleros en el Ecuador." *Apuntes de Economía* 53. Banco Central del Ecuador.

Larrea, Carlos and Warnar, Lavinia. 2009. "Ecuador's Yasuni-ITT Initiative: Avoiding Emissions by Keeping Petroleum Underground." *Energy for Sustainable Development* 13: 219-223.

Le Calvez, Marc. 2009. "El Impacto de las Políticas Nacionales en los Resdiseños de la Gobernanza Petrolera en Ecuador y Venezuela." *América Latina Hoy* 53: 67-83.

Mack, Eric. 2013. (March 29th.) "An Ecuadorian Silicon Valley: Pipeline to the future or pipedream?" *C-Net.com.*

Ministerio Coordinador de Política Económica. 2013. "Impacto Macreconómico de la Explotación Petrolera en el 0.1% del Parque Nacional Yasuní." Oficio Nro. MCPE-DM-C-2013-026. Retrieved from: http://www.geoyasuni.org/wpcontent/uploads/2013/09/All4MCPE.pdf

Ministerio de Finanzas de Ecuador. 2011. *Directrices de la Programación Presupuestaria 2011-2014 y Proforma del Presupuesto General del Estado 2011*. Quito.

Ministerio de Finanzas de Ecuador. 2012. *Directrices de la Programación Presupuestaria 2011-2014 y la Programacion Presupuestaria Cuatrianual 2012-2015*. Quito.

Ministerio de Finanzas de Ecuador. 2013. "Gobierno Nacional Presenta Pro Form Presupuestaria 2014." *Boletín de Prensa No 1*. Quito.

NCRC (North Caroline Research Campus). 2013. *Status and Progress at the North Carolina Research Campus*. Retrieved from: http://ncbioscience.net/NCBIOAdvocacy/Factsheets/North%20Carolina%20Research%20Campus%20Flyer.pdf

Niebel, Dirk. 2010. "Written Statement for the Annual Meeting World Bank/IMF." *Annual Meetings International Monetary Fund/World Bank Group*. Washington D.C.: The World Bank.

Norway's Ministry of the Environment. 2013. *Norway and the Amazon Fund.* Retrieved from http://www.regjeringen.no/en/dep/md/Selected-topics/climate/thegovernment-of-norways international-/norway-amazon-fund.html?id=593978 on Nov. 17th, 2013.

OECD. 2013. *Net Official Development Assistance from DAC Countries in 2012*. Retrieved from: http://www.oecd.org/dac/stats/ODA2012.pdf

Pallares, Martín. 2012. (Nov. 3rd.) "Las obsesiones de un magnete podrían definir el futuro del Yachay." *El Comercio*. Quito.

Pizer, William A. 2013. "Paying Ecuador to Protect the Rainforest." Retrieved from: http://common-resources.org/2013/paying-ecuador-to-protect-the-rainforest/

National Science Board. 2012. *Science and Engineering Indicators*. Arlington: Virginia.

Rhee, Byung Shik. 2011. "A World-Class Research University on the Periphery: the Pohang University of Science and Technology, the Republic of Korea." In: Philip Altbach and Jamil Salmi. *The Road to Academic Excellence: the Making of World-Class Research Universities*. Washington, D.C.: The World Bank.

Rosakis, Ares. 2013. Professional website at California Institute of Technology: Leadership Accomplishments. Accessed Nov. 17th, 2013.

Rosero, Mariela. 2013. (June 25th.) "Los Becados cuentan sus historias". *El Comercio*. Quito.

Russel, Jonathan. *et. al.* 2011. "Biodegration of Polyester Polyurethane by Endophytic Fungi." *Applied Environmental Microbiology* 77 (17): 6076-6084.

SENESCYT (Secretaría de Educación Superior, Ciencia, Tecnología y Inovación). 2013. Bases de Postulación: Programa de Becas "Convocatoria Abierta 2013—Segunda Fase".

SENESCYT (Secretaría de Educación Superior, Ciencia, Tecnología y Innovación). 2013. (Oct. 1st.). "Ecuador y Yale firman memorando de cooperación académica y cientíca". *Boletín de Prensa No. 171*. Quito.

The Economist. 2009. (June 17th.) *Ecuador's Winning Strategy*. London.

Valencia, Ana María. 2013. (Aug. 25th.) "Yachay , una promesa científica en el Ecuador?" *El Comercio*. Quito.

Vidal, John. 2011. (Dec. 30th.) "World pays Ecuador not to extract oil from rainforest". *The Guardian*. London.

Villavicencio, Arturo. 2014. *La Universidad Virtuosa*. Universidad Andina Simón Bolívar.

UNWTO (United Nations' World Tourism Organization). 2013. *Tourism Highlights*. Spain.

World Bank. 2013. *World Development Indicators: Ecuador*. Retrieved from http://data.worldbank.org/country/ecuador on Nov. 17th, 2013.

Interviews:

Acosta, Alberto. Research Professor at FLACSO-Ecuador. Office in FLACSO-Ecuador. February 17th, 2011.

Aklilu, Bisrat. Executive Coordinator, Multi-Donor Trust Fund Office, Bureau of Management, UNDP. Via Skype. April 2nd, 2011.

Baki, Ivonna. Ecuador's Chief Negotiator for the Yasuní-ITT Initiative. Café in Quito. February 28th, 2011.

Pizer, Dr. William. Faculty Fellow at the Nicholas Institute, Duke University. Via telephone. August 13th, 2013.

Sevilla, Roque. Ecuador's Former Chief Negotiator for the Yasuní-ITT Initiative. Metropilitan Touring's offices. February 18th, 2011.

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