Pace University
DigitalCommons@Pace

Pace International Law Review Online Companion | School of Law

9-1-2010

# South/North Exchange of 2009 - The Challenges of Climate Change Regulation for Governments on the Political Left: A Comparison of Brazilian and United States Promises and Actions

Colin Crawford
*Tulane University Law School*

Solange Teles da Silva
*State University of Amazonas*

Kevin Morris
*Georgia State University College of Law*

Follow this and additional works at: http://digitalcommons.pace.edu/pilronline

Part of the Comparative and Foreign Law Commons, Environmental Law Commons, and the International Law Commons

Recommended Citation
Colin Crawford, Solange Teles da Silva & Kevin Morris, South/North Exchange of 2009 - The Challenges of Climate Change Regulation for Governments on the Political Left: A Comparison of Brazilian and United States Promises and Actions, Pace Int'l L. Rev. Online Companion, Sept. 2010, at 19.

This Article is brought to you for free and open access by the School of Law at DigitalCommons@Pace. It has been accepted for inclusion in Pace International Law Review Online Companion by an authorized administrator of DigitalCommons@Pace. For more information, please contact cpittson@law.pace.edu.

# THE CHALLENGES OF CLIMATE CHANGE REGULATION FOR GOVERNMENTS ON THE POLITICAL LEFT: A COMPARISON OF BRAZILIAN AND UNITED STATES PROMISES AND ACTIONS

**Colin Crawford***

**Solange Teles da Silva****

**Kevin Morris*****

## INTRODUCTION

At the December 2009 United Nations Climate Change Conference in Copenhagen, as is now well known, the parties failed to agree on any detailed course of action, much less enter into a binding agreement to control carbon emissions. However, four developing countries, Brazil, China, India and South Africa, formed a working group now known as "BASIC," and promised to try and resolve at least one key sticking point. Specifically, the BASIC countries brokered an accord with the United States under which both developing and more developed nations would later submit carbon emissions target cuts.[1]

On a more personal level, much was expected of U.S. President Ba-

---

* Professor and Co-Director, Center for the Comparative Study of Metropolitan Growth, Georgia State University College of Law (Atlanta, USA). Professor Crawford's contribution to this essay could not have been possible without the excellent research assistance of Kevin Morris, Georgia State University College of Law Class of 2010.

** Environmental Law Professor at State University of Amazonas (Manaus, Brazil) and at Mackenzie University (São Paulo. Brazil). International Director of a Lawyers for a Green Planet Institute (Brazil).

*** Georgia State University College of Law, Class of 2010 salutatorian. Clerk to Georgia Superior Court Judge Cindy Morris, 2010-2011.

[1] *See, e.g.*, Jason Groves & David Derbyshire, *Climate Change Summit Accepts "Toothless" US-Backed Agreement—But Deal is Not Legally Binding*, MAILONLINE, Dec. 19, 2009, *available at* http://www.dailymail.co.uk/news/worldnews/art-icle-1236659/Copenhagen-climate-change-conference-World-leaders-reach-Copenhagen-agreement--officials-admit-enough.html (last visited, Mar. 25, 2010).

rack Obama's presence at the conference, as many hoped that this signaled that the country, which had long been the world's single greatest emitter of carbon dioxide,[2] was finally going to ante up to its responsibility to cut emissions.[3] In the end, however, Obama and the U.S. position disappointed most. Brazil's leading newspaper, for example, indicated that Obama's inability to provide strong leadership on the issue was a "failure and disappointment."[4] By contrast, Brazilian President Luís Inácio Lula da Silva was perhaps the greatest star of the Copenhagen conference, acknowledging the need to establish an agreement based upon the principle of "common but differentiated responsibilities."[5] President Lula outlined a bold position defending targets for cutting greenhouse gas emissions in Brazil from 36.1% to 38.9% by 2020, as well as assuming that the country could finance part of the agreement.[6] The differenc-

---

[2] That dubious honor is now held by China. *See* JANE A. LEGGETT, JEFFREY LOGAN & ANNA MACKEY, CRS REPORT FOR CONGRESS: CHINA'S GREENHOUSE GAS EMISSIONS AND MITIGATION POLICIES 8 (2008).

[3] *See, e.g.*, John M. Broder, *Obama To Go To Copenhagen with Emissions Target*, N.Y. TIMES, Nov. 25, 2009, *available at* http://www.nytimes.com/2009/11/26/us/politics/26climate.html (last visited, March 25, 2010); *Obama To Attend Climate Change Summit*, CNN.COM, Nov. 25, 2009, *available at* http://www.cnn.com/2009/POLITICS/11/25/obama.copenhagen.climate/index.html (last visited, March 25, 2010).

[4] Chico de Goes, Deborah Berlinck & Roberto Jansen, *Fracasso e decepção: Líderes mundiais deixam Copenhague sem conseguir acordo forte para o clima (Failure and disappointment: World leaders leave Copenhagen without achieving strong climate agreement)*, O GLOBO (Brazil), Dec. 19, 2009, at 39.

[5] In a speech at the Copenhagen conference, the 15th session of the Conference of the Parties to the UN Framework Convention on Climate Change (COP-15), on December 18th 2009, President Lula affirmed that

> "[d]eveloped countries must put their money on the table because of the greenhouse gases they have emitted for two centuries, allowing them to industrialize before the developing world. The COP-15 should not be negotiations between the haves and have nots… rather these negotiations are about constructing sustainable opportunities for everyone around the world."

*Discurso Durante Sessão Plenária de Debate Informal na Conferência das Partes da Convenção das Nações Unidas sobre Mudança do Clima – COP-15 (Speech During Informal Plenary Debate at the Conference of Parties of the UN Convention on Climate Change – COP-15*, AMBIENTE BRASIL, *available at* http://cop.ambientebrasil.com.br/2009/12/20/discurso-do-presidente-luiz-inacio-lula-da-silva/ (last visited Mar. 25, 2010).

[6] Even if one acknowledges that Lula's position was progressive and bold in an international forum, it should be observed that his government's decisions concerning environmental matters continue to be cautious. For example, while speaking at COP15 for the climate change, the Brazilian House of Deputies passed Bill 12 of 2003 (December 16th, 2009) regulating the powers of each entity of government - federal, state and local - to license, monitor and punish offenses against the environment. The Ministry of the Environment and its partner agencies believe that such legislation, if enacted as is by the Brazilian Senate, will encourage deforestation and the destruction of biomes such as the

es in the presentation and reception of these two leaders and their countries in climate change negotiations, both before and after Copenhagen, prompts us to ask: do appearance and rhetoric match reality?

On the face of it, the leaders themselves share much in common. They are both politically progressive leaders with appealing life stories who were elected on platforms promising vast social and economic change, including new environmental commitments. Thus, a comparison of their individual rhetoric and actions—and that of their respective governments—on climate change may help illuminate some of the challenges facing the effort to take concerted global action on climate change.

Under the United Nations Framework Climate Change Convention ("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."[7] As the UNFCCC definition alludes, the phenomenon of global climate change has exposed the basis of modern economic and social development—human consumption of and dependence on fossil-based energy. Reflection on the phenomenon of climate change thus forces us to think about the interdependent relations between human societies and their environment, and will shape the way we balance economic and social development with environmental protection and natural resource management in the future.

As noted above, in both Brazil and the United States, progressive governments have been elected in recent years, beginning with the 2000 election of President "Lula," as he is known in Brazil , followed by the 2008 election of President Obama in the United States.[8] In terms of cli-

---

Amazon, since it removes the powers of the federal environmental agency (IBAMA) responsible for monitoring and punishing those responsible for projects whose environmental license was granted by state or municipal agencies. Eliane Oliveira & Catarina Alencastro, *A Lei da Selva (The Law of the Jungle)*, O GLOBO (Brazil), Dec. 18, 2009, *available at* http://www.jornaldaciencia.org.br/Detalhe.jsp?id=68010 (last visited, Mar. 25, 2010).

[7] United Nations Framework Convention on Climate Change art. 1, May 9, 1992, S. Treaty Doc. No. 102-38, 1771 U.N.T.S. 107, *available at* http://unfccc.int/resource/docs/convkp/conveng.pdf (last visited, Mar. 25, 2010) [hereinafter UNFCCC].

[8] In Brazil, after 22 years of seeking election, the Workers Party ("*Partido dos Trabalhadores*", or "PT") finally witnessed the election of Luís Inácio Lula da Silva as Pres-

mate change policy and action, any comparison between the two countries must, however, be undertaken with care and due respect for context. That is, one must consider differences in stages of development between the two countries, the different ecosystems which will be impacted by national climate change policies, as well as differences in the structure of, and inputs to, each nation's energy and transportation sectors. Differences in these factors will not only affect the amount of national carbon emissions, but will also have a pronounced effect on the national policies designed to address the issue. Nonetheless, it is a premise of this paper that because both nations are federal republics led by democratically elected progressive governments, a comparison of their policies may provide some insight regarding the challenges facing implementation of climate change policies even when a government is inclined—at least as judged by its rhetoric and political orientation—to act aggressively to curb carbon emissions and address the adaptation challenges presented by our changing climate.

To begin, it is worth noting that both nations have signed and ratified the UNFCCC and so have agreed to adopt national policies and take corresponding measures towards climate change mitigation[9] by limiting anthropogenic emissions of greenhouse gases and protecting and enhancing greenhouse gas sinks and reservoirs.[10] In the language of sustainable development, the nations have "common, but differentiated responsibilities."[11] The U.S. is classified as an Annex I Party including developed

---

ident of the Brazilian Federative Republic in 2002 for a mandate of 4 years (2003-2006). President Lula was reelected in 2006 for a second mandate (2007-2010). In the U.S., President Barack Obama was elected to a four-year term in November 2008, for the period 2009-2012.

[9] Climate change mitigation

> "comprises all human activities aimed at reducing the emissions or enhancing the sinks of greenhouse gases such as carbon dioxide, methane and nitrous oxide. Adaptation in the context of climate change refers to any adjustment that takes place in natural or human systems in response to actual or expected impacts of climate change, aimed at moderating harm or exploiting beneficial opportunities."

Richard J.T. Klein, E. Lisa F. Schipper & Suraje Dessai, *Integrating Mitigation and Adaptation into Climate and Development Policy: Three Research Questions*, 8 ENVTL. SCI. & POL'Y 579, 580 (2005). In this text we will take into account the policies mitigating the effects of climate change.

[10] *See* UNFCCC, *supra* note 7, art. 4.

[11] UNFCCC, *supra* note 7, art. 3(1); *cf.* U.N. Conference on Environment & Development, Rio de Janeiro, Braz., June 3-14, 1992, *Rio Declaration on Environment and Development* princ. 7, U.N. DOC. A/CONF.151/26/REV.1 (Vol. 1), Annex 1 (Aug. 12, 1992) (adopting the notion of common, but differentiated responsibilities "to conserve, protect and restore the health and integrity of the Earth's ecosystem"). For an analysis of this phrase in the context of on-going climate change negotiations as well as the obstacles facing its implementation, *see generally* Tuula Honkonen, *The Principle of Common But*

states and countries that are undergoing the process of transition to a market economy, and also as a developed state – Annex II Party – that must assume its historical responsibility for GHG emissions, and also. [12] The Kyoto Protocol, a mechanism established to implement the goals of the UNFCCC,[13] establishes quantified emission limitation and reduction commitments for industrialized countries, but the U.S. has not ratified it. Brazil, as a developing country, is classified as neither an Annex Part I nor II country under the UNFCCC, but is nevertheless obliged to cooperate in order to address climate change effects. As a signatory to the Kyoto Protocol, Brazil must (as must all parties to that convention) provide national inventories of anthropogenic emission data and "promote and cooperate in scientific, technological, technical, socio-economic, and other research"; formulate and implement regional and national programs containing measures to mitigate climate change; "cooperate in preparing for adaptation to the impacts of climate change" as well as promote and cooperate in order to develop technologies, practices, and processes that "control, reduce, or prevent anthropogenic emissions of greenhouse gases."[14] Thus, although the country has no quantified obligations to reduce emissions under the Kyoto Protocol, Brazil is obliged to cooperate with industrialized nations in achieving compliance with their quantified emission limitation and reduction commitments.

In light of this background, the remainder of this paper will address the following questions: is there a difference between the ways that the progressive governments of Brazil and the U.S. are facing the climate change issue, or do they instead approach the climate change challenge similarly? Specifically, do differences with respect to economic development between the two nations necessitate variant approaches in grappling with the effects of climate change and tailoring policies to combat those effects? Or can similarities in climate change policies nevertheless be identified by virtue of the governance challenges these large, as well

---

*Differentiated Responsibility in Post-2012 Climate Negotiations*, 18 REV. OF EUR. CMTY. & INT'L ENVTL. L. 257 (2009).

[12] UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE, FACT SHEET: UNFCCC EMISSIONS REPORTING 2 (2009), *available at* http://unfccc.int/-files/press/backgrounders/application/pdf/fact_sheet_unfccc_emissions_reporting.pdf (last visited, Mar. 25, 2010).

[13] UNFCCC, Kyoto Protocol, *available at* http://unfccc.int/kyoto_protocol/items/2830.php (last visited Mar. 25, 2010).

[14] UNFCCC, *supra* note 7, art. 4(1)(a), (b), (c), (e), (g).

as geographically, ethnically, and economically diverse, nations face? These are the questions that this paper will consider by comparing Brazilian and U.S. climate change plans and actions. Part I briefly examines the causes and nature of the climate change problem, as well as the relation of both ecological and progressive political thinking to that problem. Part II then examines the climate change policies—and priorities—of the U.S. and Brazilian Governments. Finally, Part III concludes that the approaches of each Administration exhibit a similar narrative—the expression of lofty goals, the implementation of which is fundamentally plagued by a lack of urgency and the subservience of environmental issues such as climate change to other, often economic, considerations.

## I. CLIMATE CHANGE AND PROGRESSIVE POLITICS

Recent studies have confirmed that atmospheric emissions of greenhouse gases ("GHGs")[15] have risen considerably due to human activities.[16] Emissions are attributable principally to two sources. On the one hand, emissions of carbon dioxide ("$CO_2$") result from the burning of fossil fuels (carbon, petroleum and natural gas) in thermoelectric plants and other heavy industry (especially metallurgic, steelwork, and transportation industries), as well as emissions from domestic heating systems, deliberate setting of forest fires to clear land for other uses (such as farming) as well as deforestation for timber harvesting. GHG emissions also result from anthropogenic emissions of methane ($CH_4$) via decomposition of organic material related to landfills, animal farming, and rice cultivation.[17] Climate change results from the accumulation of these GHGs in the Earth's atmosphere, which the UNFCCC definition quoted

---

[15] Greenhouse gases are so-named because they absorb and re-emit infrared radiation emitted from the Earth's surface, thus warming the planet. GHGs include water vapor ($H_2O$), carbon dioxide ($CO_2$), methane ($CH_4$), nitrous oxide ($N_2O$), ozone ($O_3$), chlorofluorocarbons (CFCs), hydrofluorocarbons (HFCs), and perfluorocarbons (PFCs). U.S. Energy Info. Admn, Energy and the Environment Explained: Greenhouse Gases, *available at* http://tonto.eia.doe.gov/-energyexplained/index.cfm?page=environment_about_ghg (last visited Mar. 25, 2010).

[16] *See, e.g.*, CLIMATE CHANGE 2007: THE PHYSICAL SCIENCE BASIS, WORKING GROUP I CONTRIBUTION TO THE FOURTH ASSESSMENT REPORT OF THE IPCC 135-52 (Susan Solomon et al. eds., 2007), *available at* http://www.ipcc-wg1.unibe.ch/publications/wg1-ar4/wg1-ar4.html (last visited Mar. 25, 2010). According to the IPCC report, "it is extremely likely that humans have exerted a substantial warming influence on climate." *Id.* at 131.

[17] *See, e.g.*, Harvey Augenbraun, Elaine Matthews & David Sarma, The Global Methane Cycle, NASA Goddard Institute for Space Studies, *available at* http://icp.giss.nasa.gov/education/methane/intro/cycle.html (last visited February 20, 2010) (concluding that human activities are responsible for approximately seventy percent of global methane emissions).

above asserts, is largely the result of human activity, including fossil fuel burning, deforestation, livestock farming and other human-directed activities.

*A. Common but Differentiated Responsibilities*

Both Brazil and the United States are parties to the UNFCCC and are therefore obliged under that agreement to take measures to mitigate climate change. After the election of Presidents Lula and Obama, based on their rhetoric and campaign promises,[18] climate change policies and actions should have been developed and adopted by both governments respecting the international community's desire to mitigate effects of climate change. Yet it merits remembering that the responsibilities of the two states differ under the UNFCCC. As already indicated, the UNFCCC adopts the principle of "common but differentiated responsibilities,"[19] which means that national mitigation efforts may take into account each State's respective capabilities and different social and economic conditions. This principle has two elements: (1) it entitles all concerned states to participate in international response measures to combat climate change effects, and (2) it requires different commitments from the signatories, taking into account each state's historical contribution to the effects of climate change, mitigation capabilities, social and economical circumstances, and future development needs.[20]

Under the applicable treaties, Brazil and the United States are required to do the following:

- develop national inventories of anthropogenic emissions by source and removal by sinks of all greenhouse gases not controlled by the

[18] *See generally* COLIGAÇÃO LULA PRESIDENTE, PROGRAMA DE GOVERNO 2002 (2002), *available at* http://www.fpabramo.org.br/uploads/programagoverno.pdf (last visited October 27, 2010) (outlining President Lula's environmental program design) [hereinafter COLIGAÇÃO]; Barack Obama & Joe Biden, New Energy for America (2008), *available at* http://my.barackobama.com/page/content/newenergy_more (last visited Mar. 25, 2010) (outlining President Obama's climate change strategy).

[19] UNFCCC, *supra* note 7, art. 3(1). For a history of this principle with respect to climate change dating back to the 1992 "Earth Summit" in Rio De Janeiro, *see generally* Paul G. Harris, *Common But Differentiated Responsibility: The Kyoto Protocal and United States Policy*, 7 N.Y.U. ENVTL. L.J. 27 (1999).

[20] This principle "seeks to respond to concerns over the legitimacy, equity and effectiveness of international environmental regimes." Honkonen, *supra* note 11, at 259.

Montreal Protocol,[21] using comparable methodologies to be agreed upon by the climate change Conference of the Parties;

- create "[a] general description of steps taken or envisaged by the Party to implement the Convention;" and include in their communication "[a]ny other information … relevant to the achievement of the objective of the Convention;"[22]

In 2004, Brazil submitted its National Communication, which included a national GHG emissions inventory using 1994 GHG emissions data[23] and a catalog of steps the country was taking toward reducing emissions. In contrast to other developed countries, where $CO_2$ emissions come primarily from the consumption of fossil fuels, in Brazil the main causes of $CO_2$ emissions in 1994 were land-use changes and the forestry sector, which together accounted for 75% of emissions. Meanwhile, the energy sector in Brazil accounted for only 23% of the nation's $CO_2$ emissions.[24] These differences remind us that climate change is not simply a scientifically discernable phenomenon, but must be also understood as reflecting social, economic, political, and cultural processes.

### *B. The Link between Climate Change Commitments and Political Ideology*

Those committed to "green" ideas often "describe themselves as 'neither left nor right but in front' because they want to affirm their difference from other ideologies."[25] However, ecological thinking—or

---

[21] Montreal Protocol on Substances that Deplete the Ozone Layer annex A, Sept. 16, 1987, S. Treaty Doc. No. 100-10, 1522 U.N.T.S. 3. The Montreal Protocol is an international treaty that was designed to combat deterioration of the Earth's ozone layer, strictly limiting the production and consumption of ozone-depleting chemicals. For a history of the Montreal Protocol and its remarkable success, *see generally* Elias Mossos, *The Montreal Protocol and the Difficulty with International Change*, 10 ALB. L. ENVTL. OUTLOOK J. 1 (2005).

[22] UNFCCC, *supra* note 7, art. 12(1)(b), (c).

[23] In July 2010, Brazil's Minister of Environment Carlos Minc announced that the country will conduct a second inventory using 2004 GHG emissions data. Cf. INVENTARIO BRASILEIRO DAS EMISSOES E REMOCOES ANTROPOCAS DE GASES DE EFEITO ESTUFA – INFORMAÇÕES GERAIS E VALORES PRELIMINARES (BRAZILIAN INVENTORY OF EMISSIONS AND REMOVALS ANTHROPOGENIC GREENHOUSE GASES EMISSIONS – GENENRAL PRELIMINARY INFORMATION AND VALUES), Nov. 30, 2009, http://www.mct.gov.br/upd_blob/0207/207624.pdf (last visited Oct. 27, 2010).

[24] ACACIO CONSONI ET AL., BRAZILIAN MINISTRY OF SCIENCE AND TECHNOLOGY, BRAZIL'S INITIAL NATIONAL COMMUNICATION TO THE UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE 87 (2004), *available at* http://unfccc.int/resource/docs/natc/brazilnc1e.pdf (last visited Mar. 25, 2010).

[25] NEIL CARTER, THE POLITICS OF THE ENVIRONMENT: IDEAS, ACTIVISM, POLICY 76 (2d ed. 2007).

"ecologism"—arguably has more in common with progressive ideologies that are

> (1) critical of capitalism and [that] have sought to transform it and (2) believe that human nature can and should be changed to make us less individualistic and less materialistic, although [ecologism] has also drawn on reformist doctrines that seek to dilute the worst aspects of the market, such as welfare liberalism and social democracy.[26]

Clearly, there is thus some overlap between ecologist and progressive political ideology, particularly with respect to the second portion of the ecologist creed stated above.

This point invites us to examine to what extent the progressive governments in Brazil and the U.S. are willing and or able to advocate ecologist thinking in their climate change policies. That is, in their climate change policies, have the Lula and Obama Governments sought to integrate environmental considerations in relevant social and economic political policies, programs, and actions? It must be acknowledged, of course, that Lula and his Government have been in power since 2003, while the Obama Administration only came into office in January 2009. Nonetheless, it is still possible to compare each administration's climate change mitigation platforms, policies, and actions.

## II. BRAZIL AND THE US: CLIMATE CHANGE POLICIES (AND PROMISES)

We begin by looking at the promises and priorities of the two candidates' political campaigns, drawing particular attention to their policies on environmental and energy sectors.

---

[26] *Id.* at 79. Carter continues:

> [t]hus ecologism stretches leftwards from just right of centre, but it does not reach the far left because greens want to control the market rather than remove it and their suspicion of the state means they reject any form of command economy. Ecologism goes no further to the right because sustainability is incompatible with an unfettered market economy. Moreover, greater participatory democracy and decentralisation would be impossible in either a command economy, by definition, or in a free market, where they would be curtailed by economic inequality and the capitalist dynamics of accumulation, competition and concentration. This approach leads to a conclusion that is slightly broader than that of Dobson: yes, ecologism does occupy broadly left-of-center territory, but it draws in a wider range of perspectives of anarchist-emancipatory framework.

*Id.*

*A. Lula's Promises and Policies*

While campaigning for President, Lula released his 73-page "2002 Government Program,"[27] which affirmed that the only way to achieve economic development and reduce social inequalities was to adopt a model of alternative development based on social reform and the democratization of state and social relations.[28] The Program therefore proposed a "soft" transition to a new way of sustainable growth with fiscal responsibility and social compromise. The Program asserted that the government would work for a new pattern of development with economic growth, social inclusion and environmental justice to guarantee to all a just and equitable distribution of natural resources and their benefits, taking into account the rights of future generations.[29] Intergenerational equity is a concept premised on two fundamental observations: on the one hand, the recognition that human life is "inseparable from environmental conditions" and, on the other hand, "that human beings have the capacity to alter the environment."[30] Lula's ambitious campaign program further expressed a commitment to the improvement of environmental quality based on three strategies: a) adoption of socio-environmental standards for public policies; b) implementation of targets for socio-environmental indicators of progress (including deforestation, hot spots, emission of $CO_2$ and CFC, sewage and sanitary treatment, water supply, control of pollution vectors, waste management, air quality, natural resources access, energy consumption, clean technologies); and c) social control by

---

[27] COLIGAÇÃO, *supra* note 18.

[28] *Id.*at 3.

[29] *Id.* at 14. The "rights of future generations" refers to the principle of "intergenerational equity," a principle derived from the Preamble to the United Nation's 1948 "Universal Declaration of Human Rights," which declared that a "recognition of the inherent dignity and of the equal and inalienable rights of all members of the human family is the foundation of freedom, justice and peace in the world." Universal Declaration of Human Rights pmbl., G.A. Res. 217 (III) A, U.N. Doc. A/RES/217(III) (Dec. 10, 1948). Expression of this same principle can be traced throughout the second half of the twentieth century. For example, the 1972 Stockholm Declaration on the Human Environment proclaimed the principle of "a solemn responsibility to protect and improve the environment for present and future generations." United Nations Conference on the Human Environment, Stockholm, Swed., June 5-16, 1972, *Declaration on the Human Environment*, princ. 1, U.N. Doc. A/Conf.48/14/Rev. 1 (June 16, 1972). Edith Weiss, surveying several modern international declarations and covenants on human rights, noted that "[t]hese instruments reveal a fundamental belief in the dignity of all members of human society and in an equality of rights that extends in *time* as well as space." Edith B. Weiss, *Agora: What Obligation Does Our Generation Owe to the Next? An Approach to Global Environmental Responsibility*, 84 AM. J. INT'L L. 190, 201 (1990) (emphasis added).

[30] THE OXFORD HANDBOOK OF INTERNATIONAL ENVIRONMENTAL LAW 643 (Daniel Bodansky et al., eds., 2007).

societal participation, environmental education and information. The document further asserted that the government would establish integrated energy planning, including hydroelectric, oil and natural gas, carbon, nuclear, alternative (e.g. aeolic, solar and biomass) sources, as well as concentrate on energy efficiency, co-generation and distribution of generation sources. In addition, the Program posited sustainable development as the objective of national energy policies, and sought to ensure sustainability by taking into account, and sought to optimize, the use of locally available energy sources.[31] In connection with the goal of sustainability, the Program also committed Brazil to continue to provide incentives for the production and use of ethanol—an area in which Brazil has long distinguished itself[32]—in light of the fuel's environmental and national economic value.[33]

Four years later, during President Lula's re-election effort, the campaign issued a much-abbreviated campaign platform, "President Lula: Government Program 2007–2010," grandly announced that during the first period of Lula's Government, Brazil had entered into a phase of sustainable development.[34] This Program describes the nation's achievements as well as its potential in 38 topical areas, three of which are important for the current analysis. First, the document celebrates industrial

---

[31] In Brazil, wind energy is one of the renewable forms of electric power that has been receiving the largest portion of investments from the Incentive Program for Alternate Electric Power Sources (PROINFA), coordinated by the Mines and Energy Ministry, but, "Solar power utilization brings long term benefits to the nation making possible the development of remote regions where the cost of electric power by the conventional methods would be too high for an attractive financial return on the investment. In addition, solar energy would contribute to regulate the energy during drought periods and thereby diminishing the dependency on the crude oil market with a consequent decrease in polluting gas emissions into the atmosphere as established by the Kyoto Conference". ENIO BUENO PEREIRA E ALI, ATLAS BRASILEIRO DE ENERGIA SOLAR (BRAZILIAN ATLAS OF SOLAR ENERGY), *avaiable at* http://www.fc-solar.com/conceitos/atlas_solar-reduced.pdf (last visited Oct. 27, 2010).

[32] *See, e.g.*, Joe A. Flores, *Future International Trade Issues: Is Brazil the Solution to World Energy Shortages through Ethanol Trade?*, 16 INT'L TRADE L.J. 62 (2008) (tracing the history of Brazil's ethanol industry and initiatives, dating back to the 1970's); Monte Reel, *Brazil's Road to Energy Independence*, WASH. POST, Aug. 20, 2006, *available at* http://www.washingtonpost.com/wp-dyn/content/article/2006/08/19/AR2006081900842.html (last visited March 25, 2010)

[33] COLIGAÇÃO, *supra* note 18.

[34] Lula Presidente, *Programa de Governo 2007/2010* (2006), *available at* http://www.pt.org.br/portalpt/images/arquivos/plano_governo.pdf. Note that the 2006 report is less than half the length of the 2002 report (last visited Mar. 25, 2010).

policies that aimed to simplify environmental legislation. Second, the program asserts Brazil's promise as an energy power,[35] highlighting the Lula Government's plan to built two hydroelectric dams on the Amazon—at Rio Madeira and Belo Monte[36]—as well as the consolidation of biofuel production[37]—including ethanol,[38] biodiesel,[39] and H-Bio—thus encouraging the exportation of biofuel technology to Latin America and Africa.[40] The plan also stresses the importance of developing energy efficiency programs and fomenting the adoption of more efficient automobile, engine, and household appliance technologies. Third and finally, the Program touts the environmental successes of the first Lula Administration, which the Program maintains earned distinction through creating and consolidating protected areas, reducing the annual deforestation rate in the Amazon and other biomes, creating incentives for clean technologies, and promoting sustainable energy use.

At first glance, the environmental emphasis and successes of the Lula Administration are obvious; however, a deeper look reveals that the

---

[35] Jeb Blount, *Brazil Expects Power Demand to Rise 7.4% and Is Ramping Up Hydro and Thermal Projects*, GLOBAL POWER REPORT, Jan. 21, 2010, *available at* 2010 WLNR 2341941.

[36] *See* Georgia O. Carvalho, *Environmental Resistance and the Politics of Energy Development in the Brazilian Amazon*, 15 J. ENV'T & DEV. 245 (2006); Philip M. Fearnside, *As Hidrelétricas de Belo Monte e Altamira (Babaquara) Como Fontes de Gases de Efeito Estufa*, 12 Novos Cadernos NAEA 5 (2009), *available at* http://www.periodicos.ufpa.br/index.php/ncn/article/view/315/-501 (last visited Mar. 25, 2010).

[37] *See* J.S. Clancy, *Are Biofuels Pro-Poor? Assessing the Evidence*. 20 EUR. J. DEV. RES. 416 (2008).

[38] Luiz A. Martinelli & Solange Filoso, *Expansion of Sugarcane Ethanol Production in Brazil: Environmental and Social Challenges*, 18 ECOL. APPS. 885 (2008), *available at* http://www.wilsoncenter.org/news/docs/brazil.mart-inelli.filoso.sugarcane.production.pdf (last visited Mar. 25, 2010).

[39] Solange Teles da Silva & Carolina Dutra, *Brazilian Policy on Biodiesels: A Sound Means of Mitigating Climate Change?*, *in* CLIMATE LAW AND DEVELOPING COUNTRIES: LEGAL AND POLICY CHALLENGES FOR THE WORLD ECONOMY 311–33 (Benjamin J. Richardson et al. eds., 2009).

[40] Brazil has signed memorandums of understanding to advance cooperation on ethanol fuel production and use with other nations in Latin America and Africa. *See* Paulo Sotero, *Brazil as an Emerging Donor: Huge Potential and Growing Pains*, WORLD BANK INST.: DEV. OUTREACH (Feb. 2009), *available at* http://www1.worldbank.org/devoutreach/textonlyid526.html (last visited Mar. 25, 2010). For example, these memorandums have been signed with Belize, Costa Rica, Egypt and Panamá (September 13, 2005), and with Guiana (September 12, 2005). The continued emergence of the global ethanol and biofuel markets has created further participatory opportunities for Brazil, which are discussed in Gilmar Masiero & Heloisa Lopes, *Etanol e Biodiesel Como Recursos Energéticos Alternativos:Perspectivas da América Latina e da Ásia*, 51 REV. BRAS. POLÍT. INT. 60 (2008), *available at* http://www.scielo.br/pdf/rbpi/v51n2/v51n2a05.pdf (last visited Mar. 25. 2010).

above asserted claims contain inherent contradictions. For example, some of the areas most needing protection in Brazil are located in the Amazon Basin, where the Government has aggressively pushed forward plans to build hydroelectric plants[41] and invested billions in "Frigorific Meat Companies", contributing to the advance of cattle ranching, in the opposite side of the policy to combat deforestation.[42]Thus, it merits asking whether in fact the Government delivered on all of its promises with respect to environmental concerns.[43]

Indeed, the Lula Government has actually done much better on economic and social policies than in environmental matters. For example, the government's record serving the poorest part of Brazilian population through its "*Bolsa-Família*" Program[44] is a clear success story in social terms,[45] as is the increase in the minimum wage.[46] By contrast, the envi-

---

[41] *See, e.g.*, Carvalho, *supra* note 3836; Tom Phillips, *Brazil to Build Controversial Bel Monte Hydroelectric Dam in Amazon Rainforest*, GUARDIAN.CO.UK, Feb. 3, 2010, *available at* http://www.guardian.co.uk/environ-ment/2010/feb/02/brazil-amazon-rainforest-hydroelectric-dam (last visited Mar. 25, 2010) (highlighting dam opposition by environmentalists and indigenous activists concerned about impacts on river ecology and local populations).

[42] See, Marta Salomon, *BNDES ajudou a patrocinar desmatamento da Amazônia, diz TCU (BNDES helped sponsor deforestation of the Amazon, says TCU)*, O Estado de São Paulo, Oct. 23, 2010, *avaiable at* http://www.estadao.com.br/noticias/vidae,bndes-ajudou-a-patrocinar-desmatamento-da-amazonia-diz-tcu,628829,0.htm (last visited Oct. 27, 2010).

[43] Under the "Ten Years Expansion Plan for Energy 2008-2017", federal government had plans to build 81 new units of thermal power plants by 2017, with 68 of them are based on fossil fuels that produce greenhouse gases. The New Ten Years Expansion Plan for Energy-2019 attempted to correct deviations of the previous plan and do not envisage any expansion of electricity with coal, gas and fuel oil beyond 2013. But it seems that it's a plan of hydroelectricity: by 2019 it is planned to build about 30 million megawatt hydroelectric (including Belo Monte). *Supra* note 43.

[44] Law No. 10.836, of 09 of January 2004.The program is designed to break "the cycle of intergenerational transmission" of poverty through the direct transfer of income to poor families in exchange for parental commitments to keep children in school and take them for health checks-ups. *Bolsa Família: Changing the Lives of Millions in Brazil*, THE WORLD BANK, *available at* http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/LACEXT/BRAZILEXTN/0,,contentMDK:21447054~pagePK:141137~piPK:141127~theSitePK:322341,00.html (last visited Mar. 27, 2010).

[45] *See* THE WORLD BANK, *supra* note 44 ("[T]he **Bolsa Família** Program may be the [program] that is having the greatest impact on the lives of millions of low-income Bra-

ronmental pillar of sustainable development has often been neglected by the Lula government, which has been widely criticized for failing to consider environmental values and regarding environmental legislation as an obstacle for economic development.[47] In this sense, the greatest challenge of this left-of-center government is to take affirmative steps to implement the discourse of sustainable development. In particular, action must be taken on energetic matrix choices in light of global climate change and its effects in order to combat deforestation and preserve Brazilian ecosystems. It remains to be seen whether Lula's discourse and positions at COP-15 represent an adjustment and transformation in this way.[48]

It is further important to observe that in 2007, as part of the Brazilian National Plan on Climate Change,[49] President Lula instituted the Inter-Ministerial Committee on Climate Change ("CIM" in its Portuguese acronym), a body guiding the formulation of the national plan on all issues related to climate change in Brazil.[50] Some non-profit groups, how-

---

zilians.").

[46] *See The Most Popular Politician on Earth*, NEWSWEEK.COM, Sept. 22, 2009, *available at* http://www.newsweek.com/id/215941 (last visited February 21, 2010) (noting that President Lula has increased the Brazilian minimum wage by sixty seven percent since 2003).

[47] "The problem is that, in the core of the government, there's no agreement of environmental question as part of the strategic solution for the development of the Country. Environment is treated like a problem that must be solved, like an obstacle". ("O problema é que não existe, no núcleo do governo, um entendimento de que a questão ambiental é parte de uma solução estratégica para o desenvolvimento do País. O meio ambiente é tratado como um problema a ser resolvido, como um empecilho".) *See* Herton Escobar, João *Paulo Capobianco: Ex-Secretário-Executivo do Ministério do Meio Ambiente (MMA)*, MOVIMENTO NOSSA SAO PAULO (Feb. 1, 2009), *available at* http://www.nossasaopaulo.org.br/portal/node/2305 (last visited Mar. 25, 2010).

[48] AMBIENTE BRASIL, *supra* note 5.

[49] Pres. Decree no. 6263, of 21 of November 2007. The Plan was officially adopted by the government in December 2008. Add Cite.

[50] CIM is coordinated by the Office of the President of the Republic, and is composed of seventeen federal bodies and the Brazilian Climate Change Forum (FBMC) (Presidential Decree nº 6.263/2007). The FMBC is itself headed by the President of the Republic and composed of several stakeholder members including Ministers of State, Presidents of Regulatory Agencies, State Secretaries for the Environment, representatives from the Business Sector, Civil Society, Universities and Non-Governmental Organizations (Presidential Decree nº 3.515/2000). The federal bodies that belong to CIM are: the Ministry of Agriculture and Supply, the Ministry of Science and Technology, the Ministry of Defense, the Ministry of Education, the Ministry of Finance, the Ministry of National Integration, the Ministry of Health, the Ministry of Cities, the Ministry of External Relations, the Ministry of Mines and Energy, the Ministry of Agrarian Development, the Ministry of Development, Industry and Foreign Trade, the Ministry of the Environment, the Ministry of Planning, the Budget and Planning, the Ministry of Transport, and the Strategic Issues Secretary of the Presidency of the Republic.

ever, have expressed disappointment at the delay in public consultation about the Plan, and also for the setting of targets to reduce GHG emissions, which must be measurable, reportable and verifiable.[51] In fact, the Plan established four strategic pillars: (i) reduction of GHG emissions, (ii) adaptation to the effects of climate change, (iii) research and development, and (iv) dissemination and training. Some voluntary targets have been adopted, such as the

> "reduction of 40% in the average deforestation rate by 2006-2009 periods in relation to the average rate of the ten years' reference period used in the Amazon Fund (1996-2005). For each of the next two periods of four years, reach 30% of extra reduction, in relation to the previous period."[52]

The Plan recognizes that in order to achieve sustainable development, further efforts must be made to reduce energy consumption through energy efficiency and conservation measures.[53] The target of reduction of GEEs of 36.1% and 38.9% by 2020, announced by the Brazilian delegation at COP-15, has become binding with Federal Law No. 12.187 of December 29, 2009, that adopts the National Policy on Climate Change (Política Nacional sobre Mudança do Clima – PNMC). Nevertheless, under this law, these targets are based on a voluntary approach and a federal decree must be adopted detailing all actions for achieving them. This law also affirms that all governmental programs and policies must take into account the principles, aims and mechanisms of the National Policy of Climate Change. Based on the precautionary principle and a commitment to sustainable development, this policy has among its aims the reduction of GHG anthropomorphic emissions and also the preservation, conservation, and recuperation of natural resources, particularly those that are considered national heritage sites.[54] Furthermore, the National

---

[51] *See Sociedade Civil Quer Que o Governo Defina Metas de Redução de Emissões de Gases de Efeito Estufa [Civil Society Wants the Government to Set Targets for Cutting Emissions of Greenhouse Gases],* SOCIOAMBIENTAL (Oct. 29, 2008, 11:30 AM), *available at* http://www.socioamb-iental.org/nsa/detalhe?id=2790 (last visited Mar. 25, 2010).

[52] Interministerial Committee on Climate Change, *Executive Summary: National Plan on Climate Change,* GOV'T OF BRAZ., 14 (Dec. 2008), *available at* http://www.mma.gov.br/estruturas/208/_arquivos/national_plan_208.pdf (last visited Mar. 25, 2010).

[53] For instance, the Plan seeks "a reduction in electricity consumption of around 10% in 2030 . . . which can avoid emissions of 30 million tons of CO2 the same year, in a conservative estimate." *Id.* at 8.

[54] Under Brazil's Federal Constitution, "[t]he Brazilian Amazonian Forest, the Atlantic Forest, the Serra do Mar, the Pantanal Mato-Grossense, and the coastal zone are

Fund of Climate Change[55] was also adopted, which establishes a mechanism for implementing this policy, and provides resources to support projects or studies and financing of projects aimed at mitigating climate change and adaptation to climate change and its effects.[56] However, it is necessary to highlight that the Government has vetoed three articles of National Policy on Climate Change Law: two of them concerning the replacement of fossil fuels. The first one established as one of the policy's aims "to stimulate the development and use of clean technologies and the gradual abandonment of the use of energy sources that use fossil fuels."[57] The second one asserted how it would be provided a gradual replacement of fossil fuels.[58]

Even if these laws have already been adopted, more than rhetoric is needed to integrate environmental concerns with other policies, particularly energy policies, which impact, for example, hydroelectric plant construction in the Amazon Region, biofuels and nuclear energy, and agriculture and cattle development. To put it bluntly, agribusiness in particular continues to view environmental protection as an obstacle to national economic development. The shared threat of climate change may be the opportunity to begin to achieve such policy integration. To date, however, the Lula Administration has not realized that goal.

---

part of the national patrimony." Constituicao Federal [C.F.] art. 225, par. 4 (Braz.).

[55] Law no. 12.114, of December 9, 2009.

[56] Under this federal law, the use of funds may be allocated to the following activities: I - education, training, and mobilization in the area of climate change; II - Science of Climate Impact Analysis and Vulnerability; III - the adaptation of society and ecosystems to the impacts of climate change; IV - projects to reduce emissions of greenhouse gases - emissions; V - projects to reduce carbon emissions from deforestation and forest degradation, with priority to natural areas threatened with destruction and strategies relevant to biodiversity conservation; VI - development and dissemination of technology to mitigate emissions of greenhouse gases; VII - the formulation of public policies for solving problems related to emission and mitigation of GHG emissions; VIII - research and creation of systems and design methodologies and inventories that contribute to reducing net emissions of greenhouse gases and reducing emissions from deforestation and changing land use; IX - the development of products and services that contribute to the dynamics of environmental conservation and stabilization of the concentration of greenhouse gases; X - support for sustainable production chains; XI - payments for environmental services to communities and individuals whose activities have contributed to carbon storage, linked to other environmental services; XII - agroforestry systems that contribute to reduction of deforestation and carbon uptake by sinks and income generation; XIII - restoration of degraded areas and forest restoration, prioritizing areas of Legal Reserve and Permanent Preservation Areas and priority areas for the generation and quality assurance of environmental services. *Id.*

[57] Law no. 12.187, art.4, III, of December 29, 2009.

[58] *Id.* art. 10.

*B. Obama's Promises and Priorities*

Shortly after his election in November 2008, then President-elect Obama boldly announced that when it came to climate change regulation, "delay [was] no longer an option."[59] As was the case with Lula, President Obama's designs for clean energy and climate change policy reform were comprehensively laid out on the campaign trail. While campaigning, Obama introduced his "New Energy for America" plan—an ambitious, integrated proposal that addressed "climate change, energy generation, energy efficiency, oil and gas, alternative fuels and vehicles, as well as clean air and clean water."[60] Taking note of the global "havoc" resulting from climate change, the plan expressed a commitment to regulating GHG emissions through an economy-wide cap-and-trade system designed to drastically reduce carbon emissions by 2050.[61] In addition, the plan emphasized the need for America to transition to a clean energy economy. Beginning with the premise that America's energy needs would be "best served through a sustained effort to diversify our energy sources,"[62] the plan called for at least 10% of all electricity used in the U.S. to be "derived from clean, sustainable energy sources, like solar, wind and geothermal by 2012.[63] Specifically in the area of alternative fuels, Obama's plan supported the development and integration of biofuels, including advanced biofuels such as cellulosic ethanol and biobutanol.[64]

As made evident by the "New Energy for America" plan espoused on the campaign trail, the new Administration's approach to the issue of climate change consists of two broad initiatives: innovation and regulation. The development of advanced energy technology has already received an enormous boost from federal stimulus funding. The American Recovery and Reinvestment Act ("ARRA") signed into law by the President on February 17, 2009, and designed to help the faltering U.S. econ-

---

[59] John M. Broder, *Obama Affirms Climate Change Goals*, N.Y. TIMES, Nov. 18, 2008, *available at* 2008 WLNR 22057302.

[60] *Barack Obama and Joe Biden: New Energy for America*, OBAMA FOR AMERICA (Aug. 3, 2008), *available at* http://www.barackobama.com/pdf/factsheet_energy_speech_080308.pdf (last visited Mar. 25, 2010).

[61] *Id.*

[62] *Id.*

[63] *Id.*

[64] *Id.*

omy, allocated $36.7 billion to the Department of Energy.[65] Among other things, the funds will be used to develop alternative fuel and energy efficiency technology such as fuel-cells, advanced building systems, commercial scale biorefinary projects, and industrial carbon capture applications.[66] As promising as this resource commitment may seem, however, it represents but a small fraction of the $787 billion ARRA stimulus package,[67] to say nothing of the bank and financial institution bailout that occurred several months before passage of the ARRA.[68]

In addition to funding technological development through ARRA, the Obama Administration has also taken initiative to ensure that such technology is deployed around the world in an effort to combat global climate change. For instance, in August 2009 President Obama, along with Mexican President Felipe Calderón and Canadian Prime Minister Stephen Harper, reaffirmed his commitment to clean energy with the North American Leaders' Declaration on Climate Change and Clean Energy.[69] The Declaration sets out a general framework for action as the region works towards "environmental cooperation, sustainable development, and clean energy research, development, and deployment."[70] Then, in November, the President announced a bilateral agreement with China to tackle the issue of climate change through joint clean energy initiatives, the purpose being to secure "wide-spread renewable energy deployment in both countries."[71]

In terms of climate change regulation, central to the Obama Administration's approach is a commitment to a market-based, cap-and-trade

---

[65] American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, 123 Stat. 115.

[66] U.S. Dept. of Energy, Recovery and Reinvestment: DOE Recovery Act Funding, *available at* http://energy.gov/recovery/pillars.htm (last visited Feb. 20, 2010) (providing a breakdown of ARRA DOE fund allocations).

[67] Recovery.gov, *available at* http://www.recovery.gov/Transparency/RecipientReportedData/Pages/StateTotalsByAgency.aspx (last visited Feb. 20, 2010) (detailing total funds allocated under ARRA as well as funds actually distributed).

[68] The Emergency Economic Stabilization Act (EESA) of 2008, Pub. L. No. 110-343, 122 Stat. 3765, was signed into law by President Bush on October 3, 2008. EESA created the Troubled Asset Relief Program (TARP), which authorized the Department of Treasury to purchase up to approximately $700 billion of troubled assets from financial institutions.

[69] Press Release, The White House Office of the Press Secretary, North American Leaders' Declaration on Climate Change and Clean Energy (Aug.10, 2009), *available at* http://www.whitehouse.gov/the_press_off-ice/North-American-Leaders-Declaration-on-Climate-Change-and-Clean-Energy/ (last visited Mar.29, 2010).

[70] *Id.*

[71] U.S. Dept. of Energy, U.S.-China Energy Announcements (Nov. 17, 2009), *available at* http://www.energy.gov/news2009/8292.htm (last visited Feb.27, 2010).

system,[72] a commitment first announced on the campaign trail and to which the President remained steadfast at the international Copenhagen conference in December 2009.[73] A host of alternative energy and climate change-related measures have been introduced in Congress, the most prominent among them the two cap and trade bills.[74] The cap and trade programs at the heart of both the American Clean Energy and Security Act ("ACESA"), introduced in the House, and the Clean Energy Jobs and American Power Act ("CEJAPA"), introduced in the Senate, are very similar in form.[75] Each bill would impose GHG emissions caps that strengthen over time and allow regulated entities to trade emissions allowances. The Senate bill, however, sets a slightly stronger cap on 2020 emissions[76] and reserves more EPA authority to regulate GHGs under the CAA.[77] ACESA passed the House in June 2009, though not without sig-

---

[72] The White House, Issues: Energy & Environment, *available at* http://www.whitehouse.gov/issues/energy-and-environment (last visited Jan. 20, 2010).

[73] *See* Juliet Eilperin, *In Wake of Copenhagen, Obama's Next Challenge is Cap and Trade*, BALTIMORE SUN, Dec. 26, 2009, at 14A, *available at* 2009 WLNR 25982616 ("Obama and his deputies have regarded international climate talks as a way to get the sort of commitments from major emerging economies that would allow them to sell a cap-and-trade bill to skeptical lawmakers back home.")

[74] The American Clean Energy and Security Act of 2009 (ACESA), H.R. 2454, 111th Cong. (2009), was introduced in the House by Rep. Henry Waxman (D-CA30) on May 15, 2009. Committee on Energy and Commerce, Chairmen Waxman and Markey Introduce "The American Clean Energy and Security Act", *available at* http://energycommerce.house.gov/index.php?option=com_content&view=article&id=1622 (last visited Aug. 20, 2010). On Sept. 30, 2009, Sen. John Kerry (D-MA) introduced in the Senate the Clean Energy Jobs and American Power Act (CEJAPA), S. 1733, 111th Cong. (2009). Press Release, U.S. Senate Committee on Environment & Public Works, Kerry, Boxer Introduce Clean Energy Jobs and American Power Act (Sept. 30, 2009), *available at* http://epw.senate.gov/public/index.cfm?FuseAction=Majority.PressReleases (last visited Aug. 20, 2010). Other related bills include the American Clean Energy Leadership Act, S. 1462, 111th Cong. (2009), and the Solar Technology Roadmap Act, H.R. 3585, 111th Cong. (2009).

[75] *See* U.S. ENVIRONMENTAL PROTECTION AGENCY OFFICE OF ATMOSPHERIC PROGRAMS, ECONOMIC IMPACTS OF S. 1733: THE CLEAN ENERGY JOBS AND AMERICAN POWER ACT OF 2009 (2009), *available at* http://www.epa.gov/climatechange/economics/pdfs/EPA_S1733_Analysis.pdf (last visited Feb 20, 2010) (comparing the House and Senate bills).

[76] CEJAPA, S. 1733, 111th Cong. § 101 (2009) sets the 2020 GHG emissions cap at eighty percent of 2005 emissions while ACESA, H.R. 2454, 111th Cong. § 311 (2009) sets the 2020 GHG emissions cap at eighty-three percent of 2005 emissions.

[77] ACESA, H.R. 2454, 111th Cong. § 331 (2009). (ACESA expressly removes the EPA's authority to set performance standards for climate change related GHG emissions

nificant political opposition.[78] CEJAPA, by contrast, was favorably reported by committee, but a vote in the Senate is not expected at least until the spring.[79] After Copenhagen, the domestic political climate in the United States cooled somewhat towards climate change—once again. As of this writing, it is difficult to predict whether climate change will draw the attention it deserves from the U.S. Congress and Executive branch.[80] But the introduction of a pared down energy bill in the Senate in July 2010, absent a cap and trade component, may have signaled the death knell for comprehensive carbon legislation in the near future.[81] Political opposition at this point is simply too staunch, and Senator majority leader Harry Reid appears to have pinned his hopes on wooing Republicans with more modest energy legislation.[82] Moreover, a recent declaration by one of the Republican supporters of the Senate bill that "cap-and-trade is dead"[83] certainly does not bode well for an economy-wide system.

Though cap and trade was and, at least at this point, remains the centerpiece of the Obama Administration's regulatory approach to climate change, other regulatory measures have also been advanced. For

---

from capped sources). CEJAPA contains no such language. *See* Sarah S. Brehm, *Environmental Law*, 57 LA. B. J. 261, 262 (Dec. 2009/Jan. 2010) (comparing ACESA and CEJAPA).

[78] *See, e.g.*, Peter Roff, *Numbers Adding Up Against Obama's "Cap and Trade" Bill in Senate*, U.S. NEWS & WORLD REPORT, July 7, 2009, *available at* http://www.usnews.com/blogs/peter-roff/2009/07/07/numbers-adding-up-against-obamas-cap-and-trade-bill-in-the-senate.html (last visited Feb. 20, 2010).

[79] Ben German, *Kerry Says Copenhagen Key to Paving the Way for U.S. Law on Emissions Cuts*, THE HILL, Dec. 16, 2009, *available at* http://thehill.com/homenews/senate/72627-kerry-says-copenhagen-key-to-us-law-on-emission-cuts (last visited Feb. 21, 2010).

[80] *See* John M. Broder, *Advocates of Climate Bill Scale Down Their Goals*, N.Y. TIMES, Jan. 27, 2010, at A4, *available at* http://www.nytimes.com/2010/01/27/science/earth/27climate.html (last visited Feb 21, 2010) (discussing the uncertain fate of cap and trade measures).

[81] Clean Energy Jobs and Oil Company Accountability Act of 2010, S. 3663, 111th Cong. (2010). In response to the bill, President Obama stated that it is "an important step in the right direction" but that he intends to "keep pushing for broader reform, including climate legislation." Mark Clayton, *Stripped Down Energy Bill Leaves Out "Cap and Trade*," CHRISTIAN SCIENCE MONITOR, July 27, 2010, *available at* http://www.csmonitor.com/USA/Politics/2010/0727/Stripped-down-energy-bill-leaves-out-cap-and-trade (last visited September 26, 2010).

[82] *See, e.g.*, Clayton, *supra* note 82; Timothy Gardner, *Reid Hopeful for GOP Energy Votes after Elections*, REUTERS.COM, Aug. 31, 2010, *available at* http://www.reuters.com/article/idUSTRE67U52F20100831?feedType=RSS&feedName=politicsNews&rpc=22&sp=true (last visited September 26, 2010).

[83] Juliet Eilperin & Steven Mufson, *Senators to Propose Abandoning Cap-and-Trade*, WASH. POST, Feb. 27, 2010, *available at* 2010 WLNR 4119662 (quoting Sen. Lindsey Graham (R-S.C.)).

instance, the President signed an executive order in October 2009 "to establish an integrated strategy towards sustainability in the Federal Government and to make reduction of greenhouse gas emissions a priority for Federal agencies."[84] The executive order requires federal agencies to develop sustainability plans, set GHG reduction targets, and reduce fleet petroleum use.[85] This may seem a small measure, but the federal government is the largest energy consumer in the U.S.[86] Moreover, much more significant GHG regulation could be on the horizon. The EPA does not currently regulate GHG emissions with respect to climate change, but that could change significantly under the Obama Administration. In December 2009, the U.S. Environmental Protection Agency ("EPA") issued its final finding that GHGs endanger public health and welfare.[87] This finding marks a radical departure from previous EPA policy under the Bush and earlier Administrations, setting the stage for future EPA regulation of GHGs under the Clean Air Act.[88] Though the President has expressed a preference for a legislative response to the issue of GHG emissions,[89] the endangerment finding does enable the EPA to regulate emissions should Congress fail to pass a cap and trade bill.

With respect to the still-young Obama Administration, in short, it

---

[84] Exec. Order No. 13,514, 74 Fed. Reg. 52,117 (Oct. 5, 2009).

[85] *Id.*

[86] U.S. Dept. of Energy, Executive Order 13514 Signed on Federal Leadership in Environmental, Energy, and Economic Performance, *available at* http://www1.eere.energy.gov/femp/news/news_detail.html?news_id=15528 (last visited February 27, 2010).

U.S. Environmental Protection Agency, Endangerment and Cause or Contribute Findings for Greenhouse Gases under Section 202(a) of the Clean Air Act, 74 Fed. Reg. 66,496 (Dec. 15, 2009).

[88] 42 U.S.C. § 7521(a) (2006). In 2007, the Supreme Court held in *Massachusetts v. EPA*, 549 U.S. 497 (2007), that "[i]f EPA makes a finding of endangerment, the Clean Air Act requires the agency to regulate emissions of the deleterious pollutant from new motor vehicles." *Id.* at 533. The EPA in 2007, under the Bush Administration, sought to avoid regulation of carbon dioxide, citing a purported lack of authority. *Id.* at 500. However, the Court rejected the EPA's claim and held that the "sweeping" language of the Clean Air Act not only authorized carbon dioxide regulation, but required such regulation in the event of a public endangerment finding. *Id.* at 533. The EPA's December finding thus paves the way for future carbon dioxide emissions regulation.

[89] U.S. Environmental Protection Agency, EPA Finds Greenhouse Gases Pose Threat to Public Health, Welfare, http://yosemite.epa.gov/opa/admpress.nsf/0/0EF7DF675805295D8525759B00566924 (last visited Feb. 27, 2010) (noting that both President Obama and EPA Administrator Lisa Jackson prefer a comprehensive legislative response to GHG emissions).

must be said that it has expressed laudable enthusiasm for climate change regulation and initiatives. However, at this point, rhetoric has outpaced political results. Though it is far too early to pass judgment on the Obama Administration's climate change legacy, a sober assessment of the current situation reveals that the Administration has not yet executed the level of change many expected after his election. The prospects of cap and trade legislation, a centerpiece of Obama's climate change policy, are uncertain and may be dwindling. Moreover, many were disappointed with the tepid results of the December 2009 Copenhagen Convention,[90] which concluded with nothing more than a non-binding international political agreement.[91] Already staunch domestic political opposition to Obama's progressive climate change agenda appears to have been galvanized by the Administration's plodding.[92] Despite the Administration's conspicuous first year political struggles regarding climate change policy, it is important to bear in mind that billions of economic stimulus dollars have already been poured into alternative energy and energy conservation initiatives designed to spur technological development. These efforts will in many cases require years of germination, but could in the end yield the type of transformative results that political action has failed to achieve.

## III. FINAL CONSIDERATIONS

As is now widely recognized, contemporary capitalism, built as it is on the generalized free-exchange of goods and services, is an "energivore" and thus constitutes the principal cause of anthropogenic carbon emissions.[93] In light of that reality, this brief article has attempted to assist in understanding whether there is a difference between the ways that the progressive administrations now governing in Brazil and the U.S. ap-

---

[90] *See, e.g.*, Juliet Eilperin and Anthony Faiola, *Climate Deal Falls Short of Key Goals*, WASH. POST, Dec. 19, 2009, *available at* http://www.washingtonpost.com/wpdyn/content/article/2009/12/18/AR2009121800637.html (last visited Mar. 29, 2010) (noting the disappointment with the results of Copenhagen expressed by European officials, environmentalists, and even the President himself).

[91] U.N. FRAMEWORK CONVENTION ON CLIMATE CHANGE, COPENHAGEN ACCORD, Dec. 18, 2009, *available at* http://unfccc.int/resource/docs/2009/cop15/eng/l07.pdf (last visited Mar. 29, 2010)

[92] For example, the January 2010 election of Republican Senator Scott Brown in Massachusetts, who opposes a national cap and trade program, has been seen by some as a rejection of the Administration's climate change policy. *See* Darren Samuelsohn, *Brown's Win Adds More Question Marks to Senate Cap-and-Trade Debate*, N.Y. TIMES, Jan. 20, 2010, *available at* http://www.nytimes.com/cwire/2010/01/20/20climatewire-sen-elect-browns-win-adds-more-question-mark-48190.html (last visited Mar. 29, 2010).

[93] *See, e.g.*, Atlas du Monde Diplomatique, at 91.

proach this issue, or whether they instead approach the climate change challenge similarly. Specifically, we have sought to begin to understand whether the government of a developed country like the United States has acted differently in comparison to a nation in development like Brazil as to climate change effects and policies adopted to combat them only because of differences in development, or whether similarities in climate change policies can be identified by virtue of the governance challenges these large, as well as geographically, ethnically and economically diverse, nations face.

It is our conclusion that despite differences between the two nations, their records with respect to climate change mitigation activities are not vastly different. Rhetoric notwithstanding, climate change goals and policy have been trumped by non-environmental interests. For example, when the global financial crisis began in 2008, both administrations undertook to support the automobile industries. In Brazil, Federal Value-Added Tax on Industrialized Goods on automobile were reduced to incentivize the purchase of cars and trucks. The indirect result, however, would be an increase of future $CO_2$ auto-emissions. Further evidence that the environmental aspirations contained in President Lula's campaign literature have sometimes been relegated to secondary status comes from the fact that various governmental initiatives to halt the progress of deforestation, a primary cause of $CO_2$ emissions in Brazil, have been pushed aside in favor of rural agribusiness under pressure from the National Congress.[94] Recently, the Brazilian National Congress, influenced by the agribusiness and agroenergy sectors, seeks to change the legislation – defined in the Forest Code – legally sanctioning deforestation and undermining all efforts to protect the forest and to fight climate change.[95]

---

[94] *See* Steve Winter, *The Amazon Gets Less and Less Green*, TIME, Jan. 25, 2008, *available at* http://www.time.com/time/health/article/0,8599,1707121,00.html (last visited Mar. 29, 2010).

[95] Brazil's forest code of 1965 requires all Brazilians to preserve native forest on private lands and establishes two types of protected areas: a) permanently protected areas ("areas de preservação permanente") (habitat along rivers, slopes and hilltops) in rural and urban areas; b) legal forest reserve ("reserve legal") in rural areas: landowners must preserve 20 percent of their property along the Atlantic Forest; 35 percent in savannahs and 80 percent in areas of forests in the Legal Amazon. Of course,

In the U.S., the threat of economic catastrophe spurred quick and decisive action with the passage of the $700 million bank bailout and nearly $800 million stimulus bill. The threat of environmental catastrophe that may result from global climate change, however, has engendered a far more restrained response. As noted above, only a relatively small percentage of the stimulus funds were allocated to the development of alternative energy to address emissions mitigation. In addition, the Administration does not appear to have made climate change regulation a major priority during its the first eighteen months. The President undertook an important step, at least symbolically, by attending the U.N. conference in Copenhagen in December 2009. At home, however, the prospects of economy wide cap and trade are growing bleak, and the EPA has recently announced that it will delay GHG regulation of power plant emissions under the Clean Air Act until at least January 2011.[96]

Another important issue of central importance to each nation's climate change policy is the current focus on biofuels. The push for biofuels has dominated discussion of alternative energy in both countries, even while the possible GHG effects of these "alternatives" remains unclear. Moreover, it must be remembered that despite the emphasis recently placed on biofuels, the economies in both countries continue to run on a solid base of fossil fuels. To illustrate, when large reserves of petroleum were recently identified off the coast of Rio de Janeiro, the

---

> "these requirements were never enough to overcome the brute force of frontier economics". "Aldo Rebelo, a Communist Party deputy from the state of Sao Paulo, has headed the reform effort. The commission's report would put more power in the hands of state governments, allowing them to unilaterally decrease the amount of habitat landowners must preserve to 50 percent in the Amazon and 20 percent in the savannahs. Although Rebelo dropped language that would have scaled back permanent protections along rivers, the commission approved language that would provide amnesty to any and all landowners who illegally cleared their land prior to 22 July 2008".

Jeff Tollefson, *Proposal to scale back Brazilian forest code advances*, July 6, 2010, *available at* http://blogs.nature.com/news/thegreatbeyond/2010/07/proposal_to_scale_back_brazili.html (last visited Oct. 27, 2010). Now, the proposal will be voted by the full Congress.

[96] U.S. Environmental Protection Agency, Reconsideration of Interpretation of Regulations that Determine Pollutants Covered by Clean Air Act Permitting Programs 87–88, *available at* http://www.epa.gov/nsr/documents/psd_me-mo_recon_032910.pdf; *see also* Peter S. Glaser, *Another Week, More Developments on EPA Regulation of GHGs*, MARTINDALE.COM, Mar. 19, 2010, *available at* http://www.martindale.com/environmental-law/article_Troutman-Sanders-LLP_944958.htm (last visited Mar. 30, 2010).

Brazilian Government sounded more like its North American counterpart than a sustainability visionary when it vetoed portions of the law that created the National Climate Change Policy suggesting that national fuel needs preempted the strict observance of the climate change policy. In addition, in the U.S., in March 2010, President Obama announced a plan to open millions of acres of coastline along the Atlantic, Gulf of Mexico, and Alaska to offshore drilling.[97] The enormous scale of the announced proposal signals a reversal of Obama's 2008 campaign position, which originally rejected offshore drilling[98] but eventually expressed an openness to only limited offshore drilling.[99]

In short, neither country's behavior demonstrates the kind of deep, sustained commitment to alternative energy, sustainable practices, and new consumer behaviors that must be exhibited if the threat of climate change is to be adequately combated. The progressive administrations in Brazil and the U.S. purport to recognize the scale and immediacy of the climate change threat, and both nations have undertaken measures designed to combat that threat. The sense of urgency needed to respond effectively to the issue of climate change and other environmental issues, however, has regularly been overcome by other considerations, often economic in nature. As result, the actual remedial steps taken by both administrations have in many instances deviated from the paths blazed by their rhetoric.

---

[97] John M. Broder, *Obama to Open Offshore Areas to Oil Drilling for First Time*, N.Y. TIMES, Mar. 30, 2010, at A1, *available at* http://www.nytimes.com/2010/03/31/science/earth/31energy.html?fta=y (last visited Apr. 1, 2010).

[98] Ed Hornick & Alexander Marquardt, *Obama Says Offshore Drilling Stance Nothing New*, CNN.COM, Aug. 3, 2008, *available at* http://www.cnn.com/2008/POLITICS/08/02/campaign.wrap/ (last visited Apr. 1, 2010) (noting candidate Obama's shifting opposition to offshore drilling on the campaign trail).

[99] Kent Garber, *Obama Shows New Openness to Offshore Oil Drilling*, U.S. NEWS & WORLD REPORT, Aug. 4, 2008, *available at* http://www.usnews.com/articles/news/campaign-2008/2008/08/04/obama-shows-new-openness-to-offshore-oil-drilling.html (last visited Apr. 1, 2010).