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Debating Sustainable Development in Global Climate Change Policy:

The "Cancún Agreements" v. the "People's Agreement of Cochabamba"

A Thesis

Presented in

Partial Fulfillment of the

Requirements for the Degree of

Master of Arts

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Introduction

In December 2010 the United Nations Framework Convention on Climate Change (UNFCCC), the body of the UN responsible for crafting global climate change policy, met in Cancún, Mexico and agreed to the "Cancún Agreements" – a loose framework of policy proposals based upon the controversial "Copenhagen Accord" proposed by the United States, Brazil, China, India and South Africa just one year earlier. While less than 40 states originally agreed to the "Copenhagen Accord" in December 2009, every state in the world signed onto the "Cancún Agreements" with the exception of Bolivia, who stood by an alternative set of proposals (the "People's Agreement of Cochabamba") put forth by the World People's Conference on Climate Change (WPCCC) – a climate conference hosted by Bolivian President Evo Morales in April 2010.

All of these policy makers and political actors agree that anthropogenic climate change is a threat to human societies and ecosystems around the world, and both claim to be arguing in favor of "sustainable development," yet the two agreements structure climate policy in dramatically different ways with very different practical implications, and there are passionate advocates on both sides of this heated debate. In the following project I will argue that this climate policy discussion is an important piece of the larger debate about "sustainable development." But what does "sustainable development" mean in the modern climate policy debate? What exactly is being "sustained"? How has the United Nations defined it, and how has that framed the way that representatives at the UNFCCC have thought about modern climate policy? What about President Evo Morales and the participants at the WPCCC – how do they conceptualize "sustainable development," how has that influenced their opposition to the UNFCCC's proposals, and how has it informed the creation of their alternative? What dynamic is happening between these two proposals? And most importantly, what real world implications will result from each of these various climate policies, and how will that affect human societies and ecosystems across the world?

In this project I will seek to answer these and other related questions by looking deeper into the two conferences, critically evaluating the resulting climate policy proposals (the "Cancún Agreements" and the "People's Agreement of Cochabamba;" hereafter referred to as "Cancún" and "Cochabamba"),

and demonstrating how political power and economic interests have shaped the debate. I will explore who the participants and decision-makers were within each conference, describe the difference between these two opposing proposals, explore the logics underlying each framework, and discuss how political and economic power has disciplined the climate policy debate as it has played out over the past few years. Juxtaposing these two conferences will demonstrate that these two different policy frameworks are advocated for by opposing sets of political actors who each define "sustainable development" differently, based off of their own perceived self-interests and conceptualizations of "nature" and "development." In doing so, I argue that "Cancún" reflects a policy framework designed to sustain the modern neoliberal and industrial model of capitalist development while "Cochabamba" attempts to embed industrial and consumer capitalism within a set of broader social concerns (i.e. human and environmental rights) in an effort to form a counter movement against neoliberal capitalism.

The key distinction between these two perspectives has to do with how climate change is understood as a threat, and why. Generally speaking, the wealthier, more industrialized nations supporting "Cancún" see climate change as a threat to economic development, measured and understood mostly through market valuation and GDP growth. Alternatively, the "poorer" country of Bolivia, and allied social movements and organizations from the "Global South" see climate change as a threat to human societies (especially the most vulnerable), various natural ecosystems, and the survival of local cultures because of its potentially devastating and disproportionate damage caused to communities around the world who had little or nothing to do with contributing to the crisis. For this reason, they believe the capitalist form of development that "Cancún" seeks to sustain is actually the problem, not the solution. There is a large gulf between these two positions, and various other interests and motivations for climate policy between them. However, at the UN when the many other actors involved in this debate were given a choice between these two perspectives, they fell in line behind "Cancún" for various geopolitical reasons (more on this in Chapter 3).

In the end, I hope to demonstrate three key points. *First*, climate change policy cannot merely be thought of as simply pertaining to environmental protection but instead must be seen as inherently

intertwined with political and economic concerns, interests, and power. One cannot separate the issue of climate change from fundamental questions about political and economic systems because the crisis of climate change is a direct result of industrialized development for over 2 centuries. More specifically, I will argue that the dynamic between these two proposals can be adequately understood through the theory of the "Double Movement" proposed by Karl Polanyi. Second, the proposals agreed to in "Cancún" inadequately understand climate change as merely a hindrance to global economic output. This narrow view of the dangers of climate change misses a whole host of other serious issues that are raised by the "Cochabamba" proposals: the effect that climate change will have on the world's most vulnerable (people living in poverty, indigenous peoples, climate migrants), the effect on ecosystems and non-human life around the world, and deeper and more fundamental questions about how "nature" is conceptualized and whether or not capitalism itself is "sustainable." To demonstrate how this is a reflection of Polanyi's "Double Movement," I will explain how "Cochabamba" continuously highlights how market capitalism leads to vast social dislocation among various populations and widespread ecological destruction, thus rationalizing their call for the need to embed market activity within larger social concerns to ensure adequate human and environmental protections. *Third*, I will argue that despite its shortcomings, "Cancún" is likely to become the basis for the future international climate regime given the way political and economic powers have shaped the policy debate.

"Cancún" is designed by and in the interests of global political and economic elites and those dependent upon the industrial economic system. Given the way in which those powers have shaped the debate there is little reason to believe that a more comprehensive (or just) climate policy will result. Thus, I will finally conclude that adequately addressing the threat of climate change requires policy makers, social movements, and world leaders to fundamentally question the predominance of the global industrial capitalist system. We all must truly grapple with what "sustainable development" means in the era of industrial capitalism and climate change. This is something that "Cochabamba" attempted to do at the UN, yet its proponents were quickly ignored and dismissed by the policy community. They may not have the perfect solution, but they bring up fundamental questions that cannot be ignored for long.

Implicit in these characterizations are many terms that are loaded, problematic, and/or often misused and misunderstood. I define "Cancún" as *neoliberal* and as supporting *industrialized* free market *capitalist* development. This will be explored more fully in Chapter 1, however, it is important to clarify what I mean when I use these terms. I characterize "Cancún" as *neoliberal* because it seeks all of its solutions through market mechanisms (commodifying even pollution) with a minimized role for state regulation or interference into market activity (or in the case of proposed carbon markets - utilizing the state to build a *new* market). I characterize "Cancún" as *industrial* and free market *capitalist* because it places the focus of climate policy on maintaining an economic system predicated upon mass production and consumption via accumulation of capital and profit. "Cochabamba" seeks challenge these dynamics through a countermovement, explicitly citing that logic and method of market-driven development as the problem causing climate change, not the solution. Thus, they propose to situate an alternative climate regime whereby market activity occurs within larger social concerns based upon human and environmental rights.

The term *neoliberalism* is a loaded term used by many academics, typically to describe the most current formulation of capitalism that emerged after the Cold War. Many dispute whether or not it is even useful in analyzing development policy given that it has meant different things to different authors at different times. I recognize this, but I will still use the term neoliberalism to categorize "Cancún" because it most accurately reflects the way in which the policy is designed, and the type of mechanisms used to implement it. I will use the definition of "neoliberalism" put forth by David Harvey. He defines neoliberalism as "a theory of political economic practices that proposes that human well-being can best be advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterized by strong private property rights, free markets, and free trade." Neoliberalism is, in essence, a political and economic configuration in which states create, maintain, and/or facilitate the spread of an institutional framework that promotes 1) commodification and/or the creation of private property, 2) markets free of regulation, and 3) the elimination of barriers to international trade. This complex process requires a number of political and economic actors at international, regional, national,

and local levels to promote widespread commodification and privatization, dramatically reduce social welfare spending and governmental regulations in most areas (such as environmental protection or financial regulation), increase regulations in other areas (such as property rights and intellectual property rights), and establish mechanisms for global free trade (such as the elimination of tariffs). As Chapter 2 will discuss in much greater detail, "Cancún" utilizes these mechanisms as the basis for its proposed climate regime (specifically the further commodification and privatization of pollution, and the establishment of international "carbon markets," taking power of regulating carbon pollution out of the purview of states and into the hands of market forces).

I also use the term *industrial* to characterize the model of economic development sustained by "Cancún." This is important because the industrial nature of the capitalist system cannot be taken out of any discussion of climate change given that the GHG emissions that have caused the crisis are directly the result of the industrialized production and consumption patterns inherent in industrial development (and this is true for both capitalist and socialist forms of development). Industrial development (i.e. "Fordist" and "post-Fordist") mass-produces vast amounts of goods and services for various social groups, and has relied heavily upon the burning of fossil fuels to do this. It also understands "nature" as property, and an input into larger systems of production and consumption, and nothing more.

Lastly, and perhaps most importantly, is the term *capitalism* itself. I characterize "Cancún" as designed to sustain capitalism because it sustains an economic model predicated upon endless capital accumulation and profit seeking. Once again, I will borrow from Harvey in describing capitalism as a system requiring perpetual growth. He argues that "in the absence of any limits or barriers, the need to reinvest in order to remain a capitalist propels capitalism to expand at a compound rate. This then creates a perpetual need to find new fields of activity to absorb the reinvested capital: hence 'the capital surplus absorption problem'... Clearly, there is no limit to the monetary capacity to fuel growth." Here, he gives voice to a popular Marxist understanding of capitalism as a system that requires an endless compound growth in order to survive. Thus, capitalist development is constantly expanding and seeking new sectors of society in which capital can be accumulated (e.g. agriculture, goods, services, global trade, financial

markets, debt, etc.). In fact, Harvey agues that capitalism falls into crisis if/when a new sector for profit and accumulation cannot be found (recently pointing to the 2007-2008 financial crisis as an example).^A

Therefore, taken together, I argue that "Cancún" utilizes *neoliberal* mechanisms (private property, "free" markets, and international trade) to support and maintain *industrial* (mass production treating nature as an input) *capitalism* (a system requiring endless growth and accumulation to survive).

Climate change is perhaps the most pressing crisis facing the world today because it poses a serious threat not only to human societies but also to ecosystems throughout the planet. Global civil society must pressure international policy makers and relevant industries to act immediately if the worst impacts of climate change are to be avoided.⁵ The climate policy debate will, in the coming years, likely result in an international "climate regime" that will have a dramatic impact on international development, politics, and various social relations for generations. Given the severity of the climate crisis and the need to adequately address the issue quickly it is my hope that this analysis will highlight the complexities of the international climate policy debate, clarify the political context within which it is taking place, and help lead to a more appropriate policy response. Additionally, the climate crisis is inherently intertwined with international political and economic systems because it is a direct result of the way in which human societies produce and consume goods and services, especially energy.⁶ Therefore, this project will hopefully contribute to the growing literature surrounding fundamental questions of "sustainability," especially with respect to the dominant industrial capitalist political and economic systems.⁷

Background

In this section I will provide an overview of anthropogenic climate change, identify its projected impact on human society and the environment, and discuss the general policy framework proposed by climate scientists as the appropriate response to the crisis. Then, I will provide a brief overview of climate policy history as it relates to the two conferences considered in this proposal. Then I will present an Overview outlining the rest of the paper.

^A This is also the only period in modern history in which global greenhouse gas emissions reduced, further demonstrating the relationship between the global industrial capitalist system and climate change.

Anthropogenic Climate Change: Origins, Impacts and Responses

The most recent and authoritative scientific report on the origins and expected impacts of anthropogenic climate change is arguably the Fourth Assessment Report from the Intergovernmental Panel on Climate Change (IPCC) released in 2007.8 The IPCC was established by the United Nations Environmental Program (UNEP) and the World Meteorological Organization (WMO) and endorsed by the United Nations General Assembly (UNGA) to be the leading authority on assessing and synthesizing science about anthropogenic climate change. Their Fourth Assessment Report (2007) summarizes the consensus of over 3,000 scientists from an extensive international peer-review process. Additionally, both the UNFCCC and the WPCCC largely accept the consensus put forth by the IPCC's 2007 report as the foundation for their climate policy proposals⁹ in a similar way that the IPCC's Second Assessment Report (1995) provided the basis for the Kyoto Protocol. ¹⁰ The 2007 report had notable differences from the report published in 1995, mainly in that it argued much more forcefully that climate change is a result of human activity, the climate system was warming quicker than previously anticipated, and its projected impacts were expected to be much more dangerous than previously estimated. Specifically, the 2007 report establishes that "warming of the climate system is unequivocal" citing a 0.74°C increase in average global surface temperature from 1906-2006, and this warming trend dramatically accelerated from 1956-2006. 11 It further argues that "most of the observed increase in global average temperatures since the mid-20th century is *very likely* due to the observed increase in anthropogenic [greenhouse gas] GHG concentrations [emphasis in original]." These GHGs are primarily carbon dioxide (CO₂), methane (CH_4) , and nitrous oxide (N_2O) , and their increased concentration in the atmosphere is largely the cause of human activity since 1750, specifically from fossil fuel use and other sizeable contributions coming from land-use change (e.g. deforestation) and industrialized agriculture. B,13

This process of increased GHG concentrations as a result of human activities leading to an

^B Industrial agriculture requires more fossil fuels to centrally mass-produce agriculture products and transport them over long distances. Some types of industrial agriculture, such as livestock, also produce excess methane gas, which is much more potent of a GHG than carbon dioxide. Lastly, the large amount of land required for industrial agriculture has often provided further drivers to changes in land-use patterns (mostly deforestation), thus further contributing to increasing GHG emissions.

increase in average global temperatures is what the IPCC refers to as "anthropogenic climate change." This has already led to observed changes in the global ecosystem (including changes in ice/snow patterns, the terrestrial biosphere, and marine/freshwater biological systems). These changes have impacted natural systems (such as plant growth, animal behavior and migration) as well as human systems (including agricultural output and human health). As anthropogenic climate change accelerates, the severity of these impacts will depend upon the average increase in global temperature (which is projected to increase up to 5°C by the end of the century if current emission trends continue). These impacts will largely affect five major areas: water, ecosystems, food, coasts, and health.

Impacts on water systems will be substantial, including water stress for hundreds of millions of people as a result of increased precipitation/floods in certain regions and decreased precipitation/water availability in others. Impacts on ecosystems include widespread environmental destruction as a result of climate change-related disturbances (such as floods, droughts, wildfires, insect behavior, and ocean acidification) and other drivers of climate change (such as land-use change, pollution, and overexploitation of resources). Roughly 20-30% of plant and animal species run the risk of extinction if global temperature increases rise between 1.5°C and 2.5°C, and entire ecosystems may be destroyed if temperatures increase beyond that range. Impacts on food systems will vary greatly depending on temperature increase and region. While slight increases of temperature (1-3°C) may result in increased crop productivity in high-latitude regions and decreased productivity in mid and low-latitude regions, great increases of temperature (3-5°C) will likely result in decreased crop productivity in most areas. Impacts on coastal regions will include erosion of coastal land and increased flooding. The worst impacts on coastal areas will likely result if temperatures increase beyond 2-3°C, with the potential of millions of people (primarily those in low-lying deltas in Africa, Asia and small island nations) to be affected by flooding or loss of land. Impacts on human health will result primarily because of increased deaths from weather-related events (such as heat waves or other extreme weather events) but also due to the spread of water-borne and insect-borne illnesses (such as cholera, dengue fever, and malaria).

When discussing the impacts that anthropogenic climate change will have on human society it is important to note that most of them will disproportionately affect poorer communities around the world because they are the most vulnerable to climatic changes and have the fewest resources available to them to adapt. Climate change is expected to have a dramatically negative impact on African farmers' output and food security, ¹⁴ lead to as many as 200 million forced migrants (also called "climate refugees") in sub-Saharan Africa, China, India, and Latin America by the year 2050, ¹⁵ significantly increase water scarcity in the Middle East/North Africa (MENA) region. ¹⁶ There are countless other examples of how climate change is projected to affect poorer and "less-developed" countries, which has led international development organizations such as the World Bank to conclude that "development goals are threatened by climate change, with the heaviest impacts on poor countries and poor people." Additionally, the populations expected to be most impacted by climate change are also those who are least responsible for the historical emissions of GHGs causing the climate crisis. ¹⁸

Given the various overwhelmingly negative impacts that climate change is likely to bring about for the global ecosystem and human society, the IPCC has put forth a framework for formulating an appropriate response to the problem of anthropogenic climate change. This framework, which is loosely adopted by most policy makers, promotes two complementary responses: 1) *mitigation* (the reduction of future GHG emissions) and 2) *adaptation* (socially and ecologically adapting to climate change impacts). The capacity for human societies to mitigate/adapt largely depends upon their socio-economic circumstance, and required adaptation is largely dependent upon the level of mitigation (more mitigation requires less adaptation, less mitigation requires more adaptation). While "Cancún" and the "Cochabamba" both put forth dramatically different policy proposals for addressing climate change, they both adopt mitigation and adaptation as the fundamental pillars of their overall policy framework (this will be explored more in Chapter 2), but the way in which they would mitigate GHG emissions and mobilize resources for adaptation differ dramatically.

Climate Policy History

Given the threat that anthropogenic climate change poses to the environment and human society,

policy makers have taken numerous steps towards crafting an international response to address the issue. In Rio de Janeiro, Brazil in 1992 the United Nations hosted the first "Earth Summit" to bring together heads of state from around the world to address environmental protection and sustainable development. One of the outcomes of this summit was the creation of the United Nations Framework Convention on Climate Change (UNFCCC). Under this Convention, the UNFCCC became the legally-recognized organ of the UN that deals with the process of tracking GHG emissions around the world, coordinating mitigation and adaptation efforts, and providing a venue for debating future climate agreements.

Beginning in 1995, the UNFCCC began annual summits, or "Conference of Parties" (COP).

During the third annual summit (COP3) held in Kyoto, Japan in 1997, the UNFCCC formally adopted the "Kyoto Protocol." This put in place a legally-binding framework in which most industrialized countries pledged to reduce their GHG emissions by 5% of 1990 levels during the period 2008-2012. The Kyoto Protocol also created a number of legal and financial mechanisms such as a voluntary global GHG emissions market and a Clean Development Mechanism (CDM) in which developed countries could "offset" their GHG emissions through investments in "clean development" projects in less-developed countries. The Kyoto Protocol was ratified by most of the world's leading industrialized nations, with the exception of Australia and the United States (although Australia later went on to ratify the treaty). Russia signed on with extremely weak emissions reductions targets, and countries like Brazil, China, and India signed on but were not required to make any emissions reductions.

The Kyoto Protocol is currently the climate policy that is in place until it expires in 2012, so the UNFCCC continues to hold annual COP summits and policy makers there are working on a treaty that will replace it. There were high expectations for the COP15 summit in Copenhagen, Denmark that took place in 2009 (primarily because the new US President Barack Obama had signaled willingness to engage in the process unlike his predecessor, George W. Bush). Unfortunately, Copenhagen did not lead to a legally-binding treaty to replace the Kyoto Protocol (which most policy analysts believe was because neither the US nor China were willing to commit to legally-binding emission reductions). Instead, the US, along with Brazil, China, India and South Africa, proposed the "Copenhagen Accord." This proposal

moved the policy debate forward in many areas by pledging to cap warming of the climate system by 2°C above pre-industrial levels and pledging to mobilize significantly large financing for mitigation and adaptation efforts in less-developed countries.²¹ However, the "Copenhagen Accord" was only "noted" in the COP15 summit because it only received support from 37 of the 192 countries that are parties to the UNFCCC. Most of the opposition to the Accord came from less-developed countries, small island nations, NGOs, indigenous groups, environmentalists, and other proponents of stricter regulation and greater emission reductions because, they argued, the targets pledged in Copenhagen would fail to reach the goal of capping the global temperature increase at 2°C.²² They also criticized the Accord's emission reduction commitments and pledges for financing because they were voluntary (not legally-binding) and thus, industrial nations were not required to mitigate their emissions or provide climate aid financing.²³

Shortly after, President Evo Morales of Bolivia attempted to seize upon the disappointment in Copenhagen by calling together the World People's Conference on Climate Change (WPCCC) in Cochabamba, Bolivia. Morales argued that the "Copenhagen Accord" was anti-democratic because it was crafted behind closed doors without input from most of the world, primarily the voices of environmental justice activists, NGOs, indigenous people, farmers/peasants, and national government representatives from less-developed countries.²⁴ He also argued that the "Copenhagen Accord" failed to adequately address the threat of climate change because its mitigation targets were too low and adaptation financing was minimal.²⁵ Therefore, he invited people from around the world, especially those that were excluded from the negotiations that led to the "Copenhagen Accord," to come together and formulate an alternative approach. This conference resulted in "Cochabamba" (see Chapter 3 for more specific details).

During the next UNFCCC Summit (COP16) in Cancún, Mexico in December 2010, the Bolivian government (led by Morales) formally proposed these policies for consideration. They were rejected because they were seen as too radical by industrialized/industrializing national governments. Instead, COP16 resulted in "Cancún" which built off of the framework proposed in the "Copenhagen Accord" (i.e. voluntary emission reductions and voluntary climate financing pledges). However, unlike the year earlier

in Copenhagen when these proposals received the support of only 37 countries, Bolivia was the only country (out of the 192 parties to the UNFCCC) to oppose "Cancún." There is speculation as to why the other governments represented at the UNFCCC shifted their support so quickly to something they had rejected just one year earlier, but documents released by the whistle-blower website "Wikileaks" point to diplomatic manipulation of climate-related aid by the Obama Administration as the primary reason that many governments of poorer/less developed countries ended up lending their support. Specifically, following their outspoken opposition to the "Copenhagen Accord," the Obama Administration cut off all climate-related aid from the US to states like Bolivia and Ecuador, while (behind closed doors) making promises of millions of US dollars in climate aid to states like the Maldives who desperately need it (the Maldives in particular is one of the states projected to be dramatically impacted early on by rising sea levels because they are a low-lying small island nation). Other proponents of stricter climate policies also lent their support to the "Cancún" because while they recognized it as inadequate they viewed it as a first step towards a climate treaty that would be legally-binding in the future.

This brief history of climate policy debates over the past few years demonstrates the political complexity within which the modern climate debate is taking place. The UNFCCC is ultimately responsible for deriving whatever legally-binding agreement will replace the Kyoto Protocol (if any), yet the debate there tends to be dominated by the world's wealthiest economies (who are also the biggest emitters of GHG). The mere existence of the WPCCC as an alternative forum to the UNFCCC reveals that many voices are excluded from the official debate within the UN. When the political constraints are loosened, and climate activists and others who are arguably most affected by climate change are able to speak, they formulate a much different policy response. As mentioned earlier, what is at the central core of the debate between these two conferences is an understanding of "sustainable development" with respect to the modern capitalist form of industrial development, the UNFCCC attempting to sustain the modern neoliberal economic model and the WPCCC seeking seeking to build a countermovement to it. Overview

The rest of this paper will be divided into 3 chapters, followed by a conclusion. Chapter 1 will

explore the complex relationship between capitalism, climate change, and "sustainable development." I will first describe how fossil fuel-based industrial development is responsible for climate change. Then I will explore six theoretical perspectives about climate change policy along a spectrum of views on industrial development. Then I will explore how "sustainable development" is broadly understood by these perspectives (central to this is how "need" and "nature" are conceptualized). Lastly, I will explain how the debate between "Cancún" and "Cochabamba" can be adequately understood through the theoretical framework of Karl Ponanyi's "Double Movement" whereby groups dislocated by everexpanding marketization of society seek to embed market activity into larger social concerns and systems (in this case, human and environmental rights protections).

Chapter 2 will directly compare and contrast "Cancún" and "Cochabamba" by exploring who was in attendance at each conference, describing in detail what each policy proposes, and explaining what the logical basis for each approach is. I will then connect this specific policy discussion together with the theoretical perspectives outlined in Chapter 1 to demonstrate how the two policy proposals fit into the larger discourses on sustainable development.

Chapter 3 will then place the climate policy debate between the "Cancún" and "Cochabamba" within a political and economic context demonstrating that "Cochabamba" is politically unfeasible and that, despite its inadequacy, "Cancún" is likely to emerge as the basis for future climate policy. I will explore why this is the case by specifically focusing on how the climate negotiations have been influenced by political power and economic interests, including state politics, energy politics, and various political actors within global civil society. This chapter will demonstrate how the modern climate policy debate has been disciplined by political and economic power, and again I will connect this with the larger discourses on "sustainable development" explored in Chapters 1 and 2.

Lastly, I will conclude by revisiting the question of "what does 'sustainable development' mean in the modern climate policy debate?" I will then situate this discussion within the larger debate about ecological sustainability and capitalism, returning to some of the fundamental questions raised throughout the discussion. Finally, I will close with what this analysis means for the future of climate policy and the

politics surrounding development more broadly.

Chapter 1: Capitalism, Climate Change, and "Sustainable Development"

In order to adequately understand the modern climate debate it is first important to properly understand the relationship between anthropogenic climate change, the international capitalist system, and the concept of "sustainable development." As outlined in the introductory chapter, I will argue that the debate between "Cancún" and "Cochabamba" is a reflection of a larger debate about the nature and future of capitalist development, and a reflection of Polanyi's "Double Movement." "Cancún" sees climate change as a threat only insofar as it will place limits on the ability for capital to be endlessly accumulated, and thus prescribes a climate regime made up of neoliberal mechanisms (such as further commodification and privatization, the expansion of "free" markets, and more international trade). "Cochabamba" sees climate change as a threat to the world's poorest communities, and local ecosystems throughout the world, and identifies capitalism as the root cause of climate change itself. This debate is centered on how the two different perspectives conceptualize "development" and "sustainable development." A key distinction for each has to do with how "need" and "nature" are defined and understood in relation to human society. In other words, the way in which a society understands "need" will largely determine how they conceptualize "development," and the way in which a society understands the relationship between "nature" and society will largely determine how they conceptualize "sustainable development." For "Cancún," human "need" is monetized and understood as the need for perpetual growth of capital accumulation in search of profit, and "nature" is simply viewed as a an input into industrial production. Alternatively, for "Cochabamba," human "need" is understood more as the ability for all human beings to have their physiological needs met, their local cultures sustained, and various "human rights" protected while "nature" is understood as a large, diverse network of ecosystems inherently intertwined with human cultures and well-being. Thus, "Cancún" seeks to "sustain" neoliberal, industrial capitalism while "Cochabamba" seeks to challenge "self-regulating," free-market capitalism and instead embed industrial development within a climate regime based off of human and environmental rights.

Introduction: Capitalism and Climate Change

As discussed in the Introduction, anthropogenic climate change is a result of increased emissions of greenhouse gases (GHG) that intensify the "greenhouse effect" and lead to a rise in the earth's average global surface temperature. But in order to adequately understand the origins of the climate crisis one must examine how it is inherently intertwined with models of economic development that promote production and consumption based on energy from fossil fuels. The baseline data that climate scientists, including the IPCC, use for comparison of GHG levels and average global surface temperatures is pre-1750 and the onset of industrial development, predicated primarily upon the harnessing of energy from burning fossil fuels. According to the IPCC, the chief GHG responsible for contributing to anthropogenic climate change is carbon dioxide (CO₂)³¹, and today's current levels of CO₂ are the highest they have been in over 650,000 years. Modern carbon emissions come mainly from the process of burning fossil fuels, primarily coal and oil, and demand for these resources has been increasing since the dawn of the industrial era.

It is important to understand GHG emissions in the appropriate political and historical context. The climate crisis poses a serious threat to the planet and all human beings, but the worst impacts of climate change will likely be felt by the most vulnerable people around the world, specifically those living in poverty.³³ While the people who are most vulnerable to the impacts of climate change live in resource-poor countries (sometimes referred to as countries of the "Third World" or "Global South"), it is the resource-rich, "developed" countries (sometimes referred to as the "First World" or the "Global North") that are most responsible for the cumulative GHG emissions that are the cause of the crisis. Data from the World Resources Institute (WRI) demonstrate in the figures below that GHGs have been continuously rising since 1900, with most of the emissions coming from the post-World War II period (Figure 1) and that the greatest share of historical CO₂ emissions (76%) comes from "developed" countries (primarily the US and the EU countries) when compared with "developing" countries (24%; Figure 2). These data demonstrate that while nearly two centuries of industrial development allowed the economies of the United States and the European Union (and more recently China and India) to generate

unprecedented levels of material wealth, they were also emitting unprecedented levels of GHGs. Thus, the climate crisis is inherently intertwined with the process of fossil-fuel based industrial development (which has historically been both capitalist as well as state-owned industrial development found in socialist and communist regimes). If the climate crisis is going to be adequately addressed, the industrial system of development that has led to unprecedented emissions must be critically examined. The following section will further explore six theoretical perspectives about the link between industrial development and climate change policy.

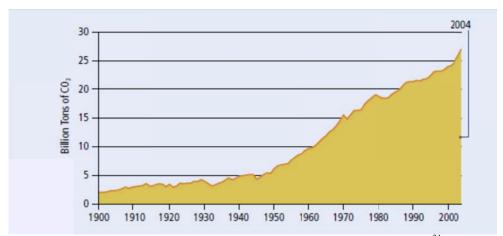


Figure 1. Global Emissions of CO₂ from Fossil Fuels (1900-2004)³⁴

Country	% of World	(Rank)	
United States	29.3	(1)	
EU-25	26.5	(2)	
Russia	8.1	(3)	
China	7.6	(4)	
Germany	7.3	(5)	
United Kingdom	6.3	(6)	
Japan	4.1	(7)	
France	2.9	(8)	
India	2.2	(9)	
Ukraine	2.2	(10)	
Canada	2.1	(11)	
Poland	2.1	(12)	
Italy	1.6	(13)	
South Africa	1.2	(14)	
Australia	1.1	(15)	
Mexico	1.0	(16)	
Spain	0.9	(20)	
Brazil	0.8	(22)	
South Korea	0.8	(23)	
Iran	0.6	(24)	
Indonesia	0.5	(27)	
Saudi Arabia	0.5	(28)	
Argentina	0.5	(29)	
Turkey	0.4	(31)	
Pakistan	0.2	(48)	
Developed	76		
Developing	24		

Figure 2. Cumulative CO₂ Emissions (1850-2002)³⁵

Six Theoretical Perspectives on Capitalism and Climate Change Policy

There is a wide spectrum of political interests represented in various capacities within the overall climate policy debate. Additionally, numerous theoretical and ideological perspectives have emerged in this complex debate. In this literature review I will provide an overview of six main perspectives for climate policy and discuss each of them in relation to the central issue of industrial development. Then I will place the two competing frameworks considered in this proposal ("Cancun" and "Cochabamba") along that spectrum of climate policy makers to frame the debate. While the climate policy debate that is taking place at the UNFCCC is between national state governments, the perspectives considered here span a variety of political actors (e.g. corporate business interests, human rights advocates, environmental activists, peasants/farmers, indigenous peoples, etc.) who in turn have varying levels of political power within their respective central governments. I will attempt to situate the debate between and "Cancún" and "Cochabamba" within this larger spectrum.

In this section I will review six theoretical perspectives related to climate policy: 1) Climate Change Deniers, 2) Orthodox Liberals, 3) Institutional Liberals, 4) Human Rights Advocates, 5) Environmental Rights Advocates, and 6) Deep Ecologists.

Climate Change Deniers – Many policy makers, politicians, think tanks, and academics have critiqued the underlying scientific basis of anthropogenic climate change. These criticisms range from denying that there have been any recorded changes in the earth's climate³⁶ to denial that the observed changes are the result of human activity.³⁷ Others claim that the impacts of anthropogenic climate change may actually be beneficial to certain aspects of human society, especially for wealthier countries.³⁸ However, by now there is a wide scientific consensus that these claims are unsubstantiated and lack credible evidence to be taken seriously. In fact, most research and policy campaigns that claim to delegitimize the IPCC or the scientific basis for anthropogenic climate change are largely funded by corporations or individuals with economic or political interest in preventing any form of regulation of GHG emissions (namely, fossil fuel industries).³⁹ There is more about this in Chapter 3.

Orthodox Liberals – This theoretical perspective is most closely aligned with advocates of a "free

market" capitalist economic system. They recognize the legitimacy of climate science and accept that GHG emissions are leading to increased global temperatures, however they do not blame industrial production or capitalist economic development because they believe a "free market" operates best if it is left to self-regulation. Therefore, they advocate for voluntary, consumer-driven, market-based solutions to deal with climate change. Numerous authors have pointed to trends in the insurance industry that have already begun modeling climate change and its expected impacts.⁴⁰ Orthodox liberals argue that as climate change grows worse, these costs will soon be figured into the cost of production and consumption, therefore driving up prices and directing consumers away from GHG-emitting industries and practices. Others have written about the emergence of "Corporate Social Responsibility" (CSR) and the decision by leading multinational corporations to move towards more socially responsible business models, some opting to voluntarily reduce their GHG-emissions without government regulation or market manipulation. 41 Others believe that corporations will establish "green supply chains" which will emit fewer GHG and also reduce the cost of production due to savings in energy costs. 42 Orthodox liberals generally prefer a limited role for the government in regulating economic activity, and therefore do not advocate a large role for the state in addressing climate change. The most government involvement orthodox liberals are willing to advocate would be government regulation of labeling products and/or corporations as being "green" and thus allowing consumers to decide where to spend their money.⁴³

Institutional Liberals – Others have written about the limits that the above voluntary approaches have, and very few believe it will adequately address the climate crisis. Instead, alternative market-based approaches supportive of capitalist development have gained popularity. This position is perhaps best articulated by Nicholas Stern, former Chief Economist of the World Bank (2000-2003) and was the chief advisor to the United Kingdom on climate change and economic policy in 2007 when he was commissioned to produce an influential report called *The Economics of Climate Change: The Stern Review*, which argues that the emission of GHG is a market externality that has been excluded from market transactions and therefore must be accounted for with government regulation.⁴⁴ Stern's market-based approach argues that the overall cost that climate change will have on society (measured by costs of

adaptation, losses in GDP due to extreme weather impacts, reduced agricultural output, etc.) will be greater than the cost of properly putting into place a mitigation and adaptation regulatory regime. While Stern has been criticized by many other liberal economists, including William Nordhaus and Robert Mendelsohn, their critiques have largely focused on the way in which he calculated the cost to society vs. the cost of mitigation/adaptation and thus remained within the cost-benefit analysis of a market-based analytical approach.⁴⁵ The approach advocated by some institutional liberals (those who deem the cost of inaction to outweigh the cost of action) would be for the government to impose a mandatory cost/tax on GHG emissions, primarily CO₂, and use those funds to finance or subsidize mitigation/adaptation efforts. This could be accomplished by establishing an international CO₂ emissions trading mechanism (cap-and-trade) or a global tax on CO₂ emissions. The institutional liberal approach recognizes a flaw in a market-driven industrial economic model but believes that it is an example of market failure that could be addressed with increased market regulation rather than abandoning the utilization of markets entirely.

Human Rights Advocates – Some analysts have criticized the way in which the above liberal perspectives have failed to uphold basic human rights in the face of anthropogenic climatic change. A number of scholars and policy analysts have examined the relationship between climate change and human rights⁴⁶, specifically as it relates to issues such as forced migration⁴⁷ and increased vulnerability from poverty⁴⁸, or by theoretically examining the human rights of future generations and "intergenerational justice." Most of these advocates take existing human rights protections (notably, the "Universal Declaration of Human Rights" and related human rights laws) and examine how expected climate change impacts will affect these rights (i.e. increased food insecurity, water insecurity, forced migration issues, etc.). While some have put forth a human rights-based approach as an alternative to market-centered, industrial development, others have argued that human rights have been utilized to justify or further entrench market mechanisms and/or private property regimes. Given this diversity of perspectives, these critics do not inherently reject capitalist and/or industrial development but rather critique it for not being able to ensure adequate human rights protections for all. Thus, they advocate for various mechanisms of aid, increased legal protections (e.g. for forced migrants and "climate refugees"),

or alternative models of development to ensure these protections for human populations.

One popular framework for how climate change and human rights are linked with economic development is the Greenhouse Development Rights Framework (GDR).⁵² This approach acknowledges that it is necessary to mitigate GHG emissions while at the same time recognizing that certain economies are in better positions to do so than others. For example, some countries may experience severely negative economic and social consequences if they are forced to cease or dramatically reduce GHG emissions (namely, if it impedes with their ability to address poverty, hunger or other development goals). The GDR framework evaluates countries independently and assigns different targets for GHG emissions for each, depending on their economic capacity. This framework is seen as a more equitable way of ensuring that climate change is adequately addressed while also recognizing that "development rights" take precedence over GHG mitigation, thus shifting the burden or mitigation to more "developed" countries. Another approach for addressing climate change, specifically as it relates to forced migration, argues that the legal definition of "refugee" should be altered to include providing legal protections for someone who is internally displaced or forced to flee their country of origin due to natural disasters (floods, droughts, desertification, or any other extreme event resulting from anthropogenic climate change).⁵³ Other proponents of human rights have focused specifically on climate change and the rights of indigenous peoples, and have called for any international climate treaty to recognize the U.N. Declaration on the Rights of Indigenous Peoples⁵⁴, and sometimes this approach is invoked to critique market mechanisms such as carbon offsets that may threaten the cultural or economic rights of indigenous peoples.⁵⁵ In each of these cases, the capitalist model of industrial development is not inherently rejected; however, it is manipulated or embedded within a larger international legal framework to ensure the protection of individual human rights.

Environmental Rights Advocates – Some have criticized the individual human rights advocates for being anthropocentric and individualistic, instead arguing that climate change is not only a threat to human beings but also to other animals, plants, and/or entire ecosystems. These advocates argue that environmental legal protections need to be put in place to protect biodiversity and the sustainability of

ecosystems.⁵⁶ Most of these advocates tend to be environmentalist organizations and/or conservationists, however some state governments have passed laws granting rights protections to the environment (separate from human rights). Similar to the individual human rights' advocates, not all environmental rights advocates inherently reject industrial development, but instead they broadly argue that any model of economic development must ensure adequate environmental protections. However, some actors have used this approach in an attempt to argue against the basic structure of market-centered development, namely private property regimes. They have done so by arguing that market-based development has destroyed "the commons" where human beings and other species are free to enjoy nature without any single person, organization, or species dominating, controlling or manipulating it.⁵⁷

Deep Ecologists – All of the above perspectives have either supported outright industrial development (whether it be capitalist or socialist industry). Others have called both the market-based and the rights-based approaches into question by arguing that any model of industrial development will be inherently unsustainable. They sometimes refer to themselves as "deep ecologists," "social ecologists" or "social anarchists" and argue that the only way to adequately address climate change would be to move away industrial development entirely. On popular advocate of this position is Vandana Shiva, an Indian physicist, environmental activist, and self-described "eco-feminist." In her book Soil Not Oil she argues for an alternative approach to industrial agriculture that does not rely on fossil fuels, seeds protected by intellectual property rights, or long supply chains but instead relies upon human labor, organic seed production, and local distribution. Unlike the human rights and environmental rights advocates, deep ecologists like Shiva directly call into question capitalist/industrial development and argue that climate change highlights the need to alter the fundamental mechanisms underlying industrial economic growth, such as mechanized production, private property regimes, and/or free trade.

Additionally, many of these deep ecologists are rooted in critical theories of the development

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^C Notable groups include Friends of the Earth International and the Indigenous Environmental Network.

^D The state of Bolivia is leading in this effort, recently granting laws to grant numerous environmental rights similar to those proposed in the "Cochabamba" agreements (to be discussed in Chapter 2). Also, the state of Kenya recently ratified a new Constitution which grants the government the ability to protect environmental rights as a way of maintaining a healthy environment for future generations.

project more broadly. Arturo Escobar describes a "development discourse" that emerged after the Second World War. He argues that this discourse "determines what can be thought and said" by academics, policy makers, and political actors regarding international governance. He sees development as a complex set of relationships "established between institutions, socioeconomic processes, forms of knowledge, technological factors, and so on." These relationships establish a "discursive practice that sets the rules of the game: who can speak, from what points of view, with what authority, and according to what criteria of expertise; it sets the rules that must be followed for this or that problem, theory or object to emerge and be named, analyzed and eventually transformed into a policy or a plan." In this way, the discourse determines what can be characterized as "knowledge" and who can be considered an "expert." This discourse frames the boundaries of acceptable debate, and anyone wishing to critique the process must do so within its narrow confines. And most importantly, this development discourse occurs among academics, policy makers, and various other political actors. Therefore, the way in which these actors construct development discourses determines what actually happens in the real world regarding political and economic policy. For Escobar, and other theorists critical of "development," the challenge is to question the entire project of "development" in general. The way that the "development discourse" has emerged assumes that the project of development can and must be undertaken, that there is a world that is "undeveloped" or "underdeveloped," and there is a world that is "developed." Rather than find an alterative form of development, these critics call for an alternative to development. It is a very different way of viewing climate change than the others, and presents a key distinction found in "Cochabamba."

As demonstrated above, there exists a large spectrum of theoretical perspectives for climate change policy, and these perspectives are situated within larger discourses on nature, development, and sustainability. Because climate deniers do not recognize the overwhelming scientific consensus behind anthropogenic climate change, their perspective is not be considered in this project. The other five perspectives will be considered. "Cancún" and "Cochabamba" draw upon multiple perspectives and frameworks (see Figure 3) but have significantly different approaches to "sustainable development" as it relates to climate policy.

Theoretical	Climate	Orthodox	Institutional	Human Rights	Environmental	Deep
Perspective	Deniers	Liberals	Liberals	Advocates	Rights Advocates	Ecologists
Framework		Market-based		Righ	Rights-based	
Policy Proposal		"Cancún"		"("Cochabamba"	

Figure 3. Theoretical Perspectives, Frameworks and Policy Proposals Considered in this Project

While "Cancún" and "Cochabamba" have some areas of overlap regarding their theoretical perspectives (both, for instance, call for some elements of human rights protections), they center upon two different mechanisms as the basis for their climate regime: the market-based approach of "Cancún" and the rights-based approach of "Cochabamba."

Understanding the Debate between "Cancún" and "Cochabamba": Karl Polanyi's Double Movement

To adequately understand the relationship between "Cancún" and "Cochabamba" it is helpful to look to the Karl Polanyi's concept of the "Double Movement," as this theory adequately frames the dynamic between the two. Polanyi looks to the enclosure movement and the Poor Law reforms of the 19th century as the foundation for the modern institutions of private property and the labor market, both of which are essential institutions for the modern market economy. He sees this as an important shift not only because it forms the basis of the market economy that spurred the Industrial Revolution but also because this economic and political shift had serious impacts on the larger society. Negative social consequences resulted from this unprecedented market expansion because of the emergence of "fictitious commodities." A commodity, by definition, is something that is produced for sale on the market. Polanyi argues that "land, labor and money are obviously not commodities; the postulate that anything that is bought and sold must have been produced for sale is emphatically untrue in regard to them."62 Polanvi sees the commodification of land (during the enclosure movement) and labor (during the Poor Law Reforms) as having profound consequences for the larger society because each are inherently part of other social relationships. Land is linked to how people engage nature, cohabitate, or make food. Labor is an extension of a person's inherent creative and productive activity and is linked with many social and cultural realities. The commodification of these socially embedded institutions allowed for a market economy to emerge, but required the transformation of complex social, political and economic institutions and relationships.

Polanyi describes how the emergence of a market economy had dramatic, and often negative, impacts on society at large there is often a simultaneous movement against marketization by numerous sectors of a society. The process of market expansion coupled with the societal response to limit this expansion is what Polanyi describes as the "Double Movement". Fred Block characterizes Polanyi by arguing "that market societies are constituted by two opposing movements - the laissez-faire movement to expand the scope of the market, and the protective countermovement that emerges to resist the disembedding of the economy."63 As social relationships became increasingly commodified and marketized during the Industrial Revolution, the social relationships began to transform so dramatically that this marketization was met with an almost equally transformative resistance. Polanyi sees the Double Movement as the driver behind the creation of the modern liberal state in asserting that the role of the state ought not to be the transformation of society into a market economy but rather to slow the process in an attempt to limit the negative consequences. He writes, "the role [of the state is] often in altering the rate of change, speeding it up or slowing it down as the case may be."64 It is this dynamic that properly describes "Cancún" and "Cochabamba": "Cancún" would build upon and expand the laissez-faire movement to expand the scope of the market and "Cochabamba" forms the protective countermovement that is trying to resist the disembedding of the economy in an attempt to protect existing social, political, or economic relationships that are being challenged or transformed through the marketization of society. In juxtaposing these two proposals I will demonstrate that they are being put forth by opposing sets of political actors who each seek to define "sustainable development" differently, based off of their own perceived self-interests and conceptualizations of "nature" and "development."

Conceptualizing "Sustainable Development": Understanding "Need" and "Nature"

To understand how Polanyi's Double Movement has shaped this debate over "sustainable development" one must further explore the "development discourse" by and how the relationship between how "need" is conceptualized in relation to "development" and how "nature" is conceptualized in relation to "sustainable development." These elements of the "development discourse" are key to understanding the distinctions between "Cancún" and "Cochabamba" with relation to the modern climate policy debate:

"Cancún" understands "need" as the need to satisfy perpetual growth for the international capitalist system, and views "nature" as merely an input into that process. "Cochabamba" attempts to challenge those basic conceptualizations and instead focus on fulfilling a range of human needs (from physiological needs and "human rights" to the preservation of local human cultures in relation to "nature").

Development and "Need"

How are we to understand human "need"? This section will examine two opposing views. The first is within the school of utilitarianism, which understands human needs as clearly objective and natural, and measured through market valuations. Utilitarians such as Thomas Malthus, most famous for his contribution to population studies, argued that an "equilibrium" would be reached in society between food resources and the size of the human population. If food were not available, then people would starve to death, thus establishing this equilibrium. Any attempt to intervene in this equilibrium would lead to overpopulation, and be unsustainable. This was expanded by upon by Jeremy Bentham who promoted a plan to remove welfare systems from feeding people who were not working in order to force them into a cheap labor market or starve.⁶⁵ While the focus here is on distributing resources and creating a cheap labor market, the idea is that human need is objectively defined and natural: food and physiological resources, all of which can be measured monetarily. Gary Becker expands on this with "rational choice" theory, which essentially states that individuals will "rationally" choose to pursue their own needs (or "interests"), but most importantly that market rationale can measure, understand, and explain this in nearly all areas of human decision making.⁶⁶ Here, human "need" is defined and understood through an entirely utilitarian form of market-logic.

A second understanding of human "need" comes from within critical schools (both post-developmentalist and Marxist), which understand human "need" as dependent upon social conceptualizations and historical circumstance and framed within competing interests to define what "need" is or ought to be. Post-developmentalist and Marxist critical theorists do not understand human "need" in terms of strict market valuation of objectively defined criteria (like food), but instead situate conceptualizations of need within social relationships and structures. Post-developmentalists such as

Arturo Escobar argues that "need" has been monetized and marketized within the "development discourse" around poverty, the modern understanding of which is a socially constructed concept that reflects a Western, commodified understanding of "need." That is, poverty defined as having little or no income to purchase necessary goods. ⁶⁷ A similar idea is put forth by Ashis Nandy who further deconstructs the idea of poverty by drawing a sharp distinction between "poverty" and "destitution." Poverty is a phenomenon that has always been with us – some people have less material wealth than others. Modern "poverty" is a monetized notion that understands well-being as material wealth, most commonly measured through market value. This is different than "destitution," which is a more contemporary phenomenon altogether different than poverty. Destitution describes the complete absence of human necessities: food and water, shelter from extreme conditions. As Nandy points out, throughout much of history a person could be poor (i.e. lacking material wealth) but not live a life of destitution.

Escobar, Nandy, and others have critiqued the entire project of "development" as being inherently misguided because the entire discourse around human need has been monetized. Alternatively, Marxists like David Harvey have characterized the system of capitalism as requiring perpetual growth at a compound rate in order to survive, often resulting in relentless competition and various crises. Market expansion becomes an imperative for the very survival of the system, regardless of who is directing the project. For Harvey, "need" is defined as the need for capitalism to expand perpetually. In each instance, the post-developmentalists and Marxists both understand that "need" is socially constructed. Sustainable Development and "Nature"

The way in which one conceptualizes "need" determines how they conceptualize "development."

Utilitarians define "need" in strictly objective and monetary terms, and thus understand development as
the project of expanding income and economic growth, regardless of local understandings of need, or
existing social relationships or structures. Critical theorists like Escobar and Nandy critique that

^E Harvey explains how capitalism has evolved over the past few centuries in this vein: First industrial development sought to commodify nature and labor. Then capital continues to search for new sectors to expand to, so capitalist countries begin aggressively pursuing and opening up emerging markets in the "developing" world. Later, large portions of the US and European economies undergo massive financialization, and financial markets expand dramatically, etc.

understanding of "development" and the modern "development discourse" for misunderstanding and marketizing the concept of "need." For Marxists like Harvey, "need" is merely understood as the need for perpetual growth of capital accumulation. In a similar fashion, critiquing "sustainable development" requires us to focus on how "nature" has also been marketized and/or commodified, and "sustainable development" policies have largely been framed through this lens.

There is a considerable lengthy literature, mostly in the field of political ecology, that critically examines how the market has affected various conceptualizations of "nature" and the "nature-society" relationship, and what this means for "sustainability." The plant biologist, A.G. Tansley, has argued for what is called an "ecosystem concept" in which all aspects of an ecosystem "organic and inorganic, biome and habitat – may be regarded as interacting factors which, in a mature ecosystem, are in approximate equilibrium." Roderick Neumann points out that a key assumption in this approach to sustainability is "that ecosystems are characterized by homeostasis and equilibrium." This became an approach that was attractive to many human geographers and anthropologists who sought to argue that human cultures developed adaptations over time to be at "equilibrium" with their environments. Therefore, under this understanding of nature-society relations, sustainability would mean returning to those cultural adaptations that ensure that an ecosystem maintains an equilibrium balance between humans and their non-human environment. Other geographers, such as Michael Watts, have critiqued this approach because it distinguishes between two different spheres: human and environment. Watts criticizes the use of biological metaphors for understanding ecosystem in equilibrium, and instead argues to look through the lens of how political economy has shaped this relationship instead. Doing so allows one to understand not how human-nature relationships more fully and then more appropriately understand sustainable development policy as an extension of this.

Philosopher Slavoj Zizek continues this analytical line of thought in arguing that "Nature does not exist." In other words, there is no perfect, balanced equilibrium-based "Nature" that needs to be sustained because "Nature" is constantly in flux and constantly evolving in relation to human society. Rob Krueger and David Gibbs argue that framing the debate in this way "avoids asking the politically sensitive but

vital question as to what kind of socioenvironmental arrangements we wish to produce, how these can be achieved, and what sort of natures we wish to inhabit." Rather, it is more adequate to understand the relationship between human society and nature as constantly in flux, both affecting one another all the time, and constantly changing together. This conceptualization of the nature-society relationship asks a fundamentally different question with regards to "sustainability" by recognizing that multiple concepts of "nature" exist, and it is up to each society and their policy makers to determine which one ought to be sustained. For this reason, Krueger and Gibbs argue that modern "sustainable development" policies that often take precedence among today's neoliberal policy makers are "those that prioritize the value of capital and the maintenance of existing patterns of social relations." Here, one can theoretically understand how the "development discourse" has framed not only the debate around "development" but also "sustainable development," both relating to how society conceptualizes "need" and "nature."

Arturo Escobar presents a more concrete example of how these dynamics have played out in the debate around "sustainable development" in his call for a "poststructural" political ecology. He points to the "Brundtland Report," a result of the UN World Commission on Environment and Development, which famously defined "sustainable development" as "development that meets the needs of the present without jeopardizing the ability of future generations to meet their own needs." Specifically, he critiques modern notions of "sustainable development" by emphasizing what James O'Connor calls the "second contradiction of capitalism" and then claims that the "new" project of sustainable development is really just a continuation of the "old" project of capitalist development. The "contradiction" upon which he centers his analysis is a result of capitalism's commodification of nature in which it is incorporated as capital into the production process, resulting in the destruction of nature. This therefore limits capitalism's ability to expand. Driven by competition for increased profits between individuals or firms, capitalism requires growth and expansion in order to survive. Thus, it is a "contradiction" because it destroys a necessary input into the production process: commodified nature. Escobar argues that the Western notion of "sustainable development," articulated and popularized by the Brundtland Report, was primarily concerned with addressing this inherent contradiction in capitalist development rather than

some altruistic drive to sustain nature, culture, or ecosystems. He writes that the Bundtland Report attempts to reconcile "two old enemies – economic growth and preservation of the environment – without significant adjustments to the market system." Thus, he concludes that in the sustainable development discourse, "nature is reinvented as environment so that capital, not nature and culture, may be sustained." Krueger and Gibbs echo the same sentiment, arguing that "instead of throwing a wrench into the capitalist machine, sustainability subsequently gets redefined as one of the possible routes for a neoliberal renewal of the capitalist accumulation process." Here, "environment" is meant to reflect commodified nature – something that human society manages and/or controls – and "sustainable development" is simply a project seeking to continue the project of capitalist development by addressing the second contradiction of capitalism and thus allowing for sustainable accumulation of capital despite its negative impact on nature.

Chapter 1 Conclusion

In this chapter I introduced how climate change has inherently been intertwined with industrial capitalist development. Not only has industrial capitalist development led to the significant rise in GHG emissions that cause climate change, but it has also fundamentally transformed how human societies conceptualize "need" and "nature." Capitalism has monetized "need" and defined them in exclusively market terms, placing the imperative for perpetual economic growth above all else. It has also fundamentally transformed the relationship between human societies and nature, commodifying "nature" as an input into the industrial production process, ignoring all other forms of physical or cultural conceptualizations of human "need" and "nature" that any given society may have. As the next Chapter will demonstrate, this is the main critique of "Cancún" put forth by "Cochabamba." Critiques argue that "Cancún" approaches the issue of climate change strictly through a capitalist lens, seeing the issue a possible hindrance to perpetual growth and capital accumulation while ignoring other human and environmental needs. As the next Chapter will demonstrate, the critical theories discussed in this Chapter are embraced by the "Cochabamba" proposals as they seek to build a countermovement to capitalism, opening the climate policy debate to more fundamental questions of political and economic governance.

Chapter 2: "Cancún Agreements" v. the "People's Agreement of Cochabamba"

Chapter 1 introduced the way critique of "sustainable development" and provided key theoretical frameworks for examining the modern sustainable development discourse surrounding the climate change policy debate. Specifically, the spectrum of theoretical perspectives considered have to do with the way in which neoliberal, industrial capitalism has contributed to climate policy, and to what extent that system should be involved in any future climate regime. These dynamics have framed the debate not only in terms of how to mitigate the emission of GHGs (At what level should GHG emissions be capped? How should mitigation occur?) but also how to adapt to climate changes (What adaptations ought to be made? How should adaptation be financed? Who should be responsible for making these decisions?). In the Chapter that follows I will demonstrate, through an in-depth analysis of the various components of each agreement, how the "Cancún" and "Cochabamba" embody these differing approaches to "sustainable development." I will argue that the "Cancún" is designed to sustain neoliberalism with a market-based approach to climate policy while "Cochabamba" is designed to challenge neoliberalism with a rights-based approach to climate policy.

In this Chapter I will focus on three main areas in comparing/contrasting these competing proposals: 1) the *political actors* represented within the UNFCCC v. the WPCCC; 2) the *policy proposals* themselves and how they address mitigation, adaptation, and climate regime governance; and 3) the *logical basis* behind each set of proposals, namely the market-environmentalist approach of the "Cancún" v. the rights-based approach of "Cochabamba." This analysis will demonstrate that the modern climate policy debate occurring between advocates of the "Cancún" and advocates of the "People's Agreement of Cochabamba" is an embodiment of the critiques of "development" and "sustainable development" that were explored in Chapter 1.

Political Actors

If one is to adequately understand how and why "Cancún" differs from "Cochabamba" it is important to first understand who is represented at each of the summits that produced them (the UNFCCC which produced "Cancún" v. the WPCCC which produced "Cochabamba"). Who were the political

actors present at each conference? How were decisions about climate policy made? Whose political and economic interests do they represent? The answers to these questions will paint a very stark contrast between the political actors involved in crafting each set of policy proposals: Most of the world's political and economic elite are very well represented within the UNFCCC, while many less-powerful groups such as indigenous people, grassroots environmental activists, and climate justice advocates felt excluded from that process and thus participated in the alternative WPCCC. Given whose interests were represented within each conference it is easy to see how "Cancún" reflects a climate policy designed to sustain the dominant neoliberal model of economic development while "Cochabamba" challenges that model and advocates for an alternative approach empowering the groups represented there.

United Nations Framework Convention on Climate Change (UNFCCC)

The UNFCCC was created in 1992 to be the legally-recognized body within the United Nations responsible for drafting international climate change policy. Since 1995 the UNFCCC has held annual "Conference of Parties" (COP) summits to move the climate policy debate forward. The political actors represented at the UNFCCC that are responsible for crafting climate policy there are representatives of the member states of the UN. In order for the UNFCCC to officially agree upon a climate policy proposal, all member states must unanimously consent to it, which makes reaching consensus a political challenge.

Drafting international climate change policy is admittedly a very complex process, with varying political and economic interests represented from the diverse array of every state government in the UN represented. However, the two most influential political actors within the debate at the UNFCCC are arguably the United States and China. Together, these two states are the two largest economies in the world and simultaneously the two greatest emitters of GHGs in the world.⁷⁷ For this reason, they largely determine the parameters of the climate policy debate because any agreement that does not have their cooperation will inherently be ineffective at reducing global GHG emissions or mobilizing enough financing for adaptation and mitigation efforts around the world. This is largely why the "Copenhagen Accord," which was originally an agreement that was reached between the US and China (and endorsed by Brazil, India and South Africa), eventually became the foundation for "Cancún." Thus, "Cancún" can

adequately be understood as an agreement between the US and Chinese governments, with reluctant support from many other member states of the UN who were critical of the agreement but ultimately lent their support in order to move the debate forward.⁷⁸

While the UNFCCC's decision-making process is officially controlled by representatives of the member states of the UN, it is not accurate to say that they are the only influence in the debate. Indeed, many political actors from civil society are also given the opportunity to participate in the debate. These include NGOs, multinational corporations, and other private sector actors. While they cannot make the final decision about climate policy, they are able to participate in the COP16 summit as delegates, submit their own policy analyses, and lobby state governments to represent their perspectives in the debate.

Arguably, the two most influential groups from civil society that have the greatest amount of influence within the UNFCCC are the bigger and well-funded environmental NGOs (such as Greenpeace, the Sierra Club, and the World Wildlife Fund) and larger energy multinational corporations (such as fossil fuel companies like BP, Chevron, Exxon Mobile, and Royal Dutch Shell). Other groups, such as more radical/grassroots environmentalist organizations or alterative energy corporations, can also participate, but given that the UNFCCC is so largely dominated by elite political and economic interests only the largest and most well-funded groups within civil society can yield much influence.⁷⁹

The COP16 summit in Cancún comprised of 12,000 participants. Of them, 5,200 were government officials, 5,400 were representatives of UN bodies, international organizations, or NGOs, and 1,270 were members of the media. It was at this summit that "Cancún" was officially adopted. The UNFCCC calls this agreement the "most far-reaching international response to climate change the world has ever seen." The agreement is essentially a formal adoption of the "Copenhagen Accord" that was proposed one year earlier. The "Copenhagen Accord" failed to receive support from even a majority of UNFCCC member states; therefore it was only "noted" and not officially passed as an agreement. It is significant to point out that "Cancún" also failed to receive unanimous consent because the government of Bolivia refused to endorse it, but through a procedural maneuver by the Mexican government hosting the COP16 summit the "Cancún Agreements" formally passed and they became the official agreement. 81

Given the political actors represented within the UNFCCC it is not surprising that "Cancún" largely represent the political and economic interests of the world's most powerful state governments, governments geopolitically aligned with them, with influence from large multinational energy companies and bigger environmental NGOs. For this reason, there have been many criticisms leveled at the UNFCCC for excluding the voices of less-politically powerful groups, for not being democratic, or for being an ineffective venue for drafting international climate change policy. Perhaps the most vocal advocate of this position is Evo Morales, President of Bolivia. After the failure at COP15 in Copenhagen, Morales called for the "World People's Conference on Climate Change" (WPCCC) as an alternative venue to propose an alternative approach to climate policy.

World People's Conference on Climate Change (WPCCC)

After the COP15 summit in Copenhagen in 2009 Evo Morales called the "Copenhagen Accord" a failure and criticized the UNFCCC for being anti-democratic and unrepresentative. In an Op-Ed published in the *Los Angeles Times* Morales called on people of the world to participate in the WPCCC as an alterative to the UNFCCC negotiations:

When I arrived at the United Nations climate summit in Copenhagen in late last year, the first thing that struck me were environmental activists braving the freezing weather to voice their disappointment at being locked out of the largest ever international meeting on climate change. Inside the conference, I realized that Bolivia was in a position similar to that of the protesters outside. We, the representatives of the majority of the world's peoples, were effectively being left in the cold while a tiny group dominated by a few rich governments met in private to produce an unacceptable compromise... Bolivia will not accept an agreement reached between the world's biggest polluters that is based on the exclusion of the very countries, communities and peoples who will suffer most from the consequences of climate change.

Here, Morales characterizes the UNFCCC as being dominated by rich governments who are most responsible for climate change while excluding the voices of the majority of the world's people, most of whom are coincidentally the least responsible for climate change but most vulnerable to its impacts.

Additionally, the style that Morales uses to talk about these issues reflects his goal of casting himself as the crusader of the people of the world on the issue of climate change. He draws upon his experience as the first indigenous president in Bolivia, and the only indigenous president in South America, to give credence to his ability to speak on behalf of others. In the same Op-Ed he writes, "as an

indigenous leader from Bolivia, I know what exclusion looks like... [Bolivia] is committed to ending the colonialism, racism and exclusion that many of our people lived under for many centuries." Here, Morales is articulating an argument similar to that of Arturo Escobar by equating the climate negotiations and their proposed policies as a continuation of colonialism, racism and exclusion. Of course it is important to understand that Morales himself is not the sole proponent of "Cochabamba," he is instead a representative of his political party and the segment of the Bolivian population that elected him. There are large social movements throughout global civil society that called for this alternative conference, and Morales was merely the prominent voice who brought these critiques to the international stage.

The WPCCC was held just outside Cochabamba, Bolivia in April 2011. There were over 31,000 participants from over 140 countries, and 48 governments were formally represented by either heads of state or other government officials. Most participants were representatives of environmental justice organizations, indigenous peoples, small farmers, and other individuals and organizations who felt excluded from the UNFCCC process. All participants were free to participate in any of 17 different Working Groups that covered a range of topics related to climate change policy. Each Working Group reached consensus on their climate policy proposals, and together they make up "Cochabamba."

The people and organizations present at the WPCCC were very different than the representatives at the UNFCCC, and this is evidenced by the remarkably different approach to climate policy advocated by each resulting set of proposals. "Cancún" reflects the interests of the world's most powerful state governments (primarily those such as the US, the EU, China, and India, but also other state governments geopolitically aligned with them), and the most influential civil society actors (large environmental organizations and energy companies) while "Cochabamba" reflects the interests the Bolivian state and the often-excluded voices from civil society (indigenous peoples, small farmers, and other environmental justice advocates). The next section will describe the two policy proposals and will explain how they are reflective of the different political and economic interests of the participants from each conference.

Policy Proposals

"Cancún" and "Cochabamba" both seek to address climate change through the general framework

of *mitigation* and *adaptation*. However, the way they seek to achieve these goals and the overall framework for climate regime governance are remarkably different (see Figure 4).

"Cancún Agreements"	"People's Agreement of Cochabamba"			
1. Background on Understanding Anthropogenic Climate Change				
-Recognize the legitimacy of IPCC scientists and GHG	-Recognize the legitimacy of IPCC scientists and GHG			
emissions as the cause of anthropogenic climate change	emissions as the cause of anthropogenic climate change,			
	but argue that this is a direct result of capitalist			
	production			
2. Goal of Allowable Global Temperature Increase				
-Establishes a goal of a global temperature increase of	-Establishes a goal of global temperature increases of			
no-greater than 2.0°C	no-greater than 1.0°C			
-Recognizes the need to consider in the future a goal of				
no-greater than 1.5°C				
3. Mitigation of	GHG Emissions			
-Calls on industrialized countries to submit their own	-Calls on industrialized countries to reduce their GHG			
GHG emission reduction targets	emissions by 50% of 1990 levels between 2012-2017			
-Makes GHG emission reduction <i>voluntary</i>	-Makes GHG emission reduction <i>mandatory</i>			
-Allows for the use of "carbon offsets"	-Bans the use of "carbon offsets"			
4. Role of Carbon Markets				
-Calls upon the UNFCCC to create market-based and	-Explicitly bans the use of any market-based			
non-market-based mechanisms in the future	mechanisms			
	gime Financing			
-Calls for financing from the public and private sources	-Calls for financing from public sources only			
-Creates the "Green Climate Fund" and invites the	-Explicitly bans the World Bank from being used for			
World Bank to be Trustee	climate financing, and calls for an independent agency to			
-Pledges "climate aid" of \$10bn annually from 2010-	be created for climate finance administration			
2012 and \$100bn annually starting in 2020	-Demands "climate debt" of 6% of global GDP annually			
6. The Role of Intellectual Property Rights in Technology Transfer				
-Calls upon the UNFCCC to create technology transfer	-Calls for technology transfer mechanisms free from any			
mechanisms that include intellectual property rights	intellectual property rights			
7. Forest Management Policy				
-Continues the use of the REDD mechanisms	-Explicitly bans the use of REDD mechanisms			
-Notes that the rights of indigenous people should be	-Challenges any definition of "forest" that would define			
accounted for during implementation of REDD	it as a monoculture plantation			
	licy in Climate Change Policy			
-No mention of agriculture policy	-Calls for the promotion of local, sustainable, organic			
	agriculture as a solution to climate change			
9. Other Special Legal Considerations for the Climate Regime				
-Notes the "Declaration on the Rights of Indigenous	-Mandates that the "Declaration on the Rights of			
Peoples" as part of a final climate regime	Indigenous Peoples" be central to final climate regime			
-No special legal consideration for climate migrants	-Creates a legal classification for "climate migrants"			
	-Calls for the adoption of the "Declaration on the Rights			
-No mention or establishment of environmental rights	of Mother Earth" establishing environmental rights			
	-Establishes a "Climate and Environmental Justice			
	Tribunal" with legally-binding authority to enforce the			
	climate regime and environmental rights			

Figure 4. Summary of the "Cancún Agreements" and "People's Agreement of Cochabamba"

This section will describe the components of each agreement in relation to the 9 key areas of climate policy addressed by each agreement: 1) Background on Understanding Anthropogenic Climate Change,

2) the Goal for Allowable Global Temperature Increase, 3) Mitigation of GHG Emissions, 4) Role of Carbon Markets 5) Climate Regime Financing, 6) Role of Intellectual Property Rights in Technology Transfer, 7) Forests Management Policy, 8) Role of Agriculture in Climate Policy, and 9) Other Special Legal Considerations for the Climate Regime.

Background on Understanding Anthropogenic Climate Change

Both agreements begin with their understanding of climate change's origins and impacts:

Recognizing that climate change represents an urgently and potentially irreversible threat to human societies and the planet, and thus requires to be urgently addressed by all Parties. Affirming the the legitimate need of developing country Parties for the achievement of sustained economic growth and the eradication of poverty, so as to be able to deal with climate change. Noting... that the adverse effects of climate change have a range of direct and indirect implications for the effective enjoyment of human rights... [The COP] recognizes that the warming of the climate system is unequivocal and that most of the observed increase in global average temperatures since the mid twentieth century is very likely due to the observed increase in anthropogenic greenhouse gas concentrations, as assessed by the Intergovernmental Panel on Climate Change in its Fourth Assessment Report.

-Cancún Agreements⁸⁵

If global warming increases by more than 2 degrees Celsius... there is a 50% probability that the damages caused to our Mother Earth will be completely irreversible. Between 20% and 30% of species would be in danger of disappearing. Large extensions of forest would be affected, droughts and floods would affect different regions of the planet, deserts would expand, and the melting of the polar ice caps and the glaciers in the Andes and Himalayas would worsen. Many island states would disappear, and Africa would suffer an increase in temperature of more than 3 degrees Celsius. Likewise, the production of food would diminish in the world, causing catastrophic impact on the survival of inhabitants from vast regions in the planet, and the number of people in the world suffering from hunger would increase dramatically, a figure that already exceeds 1.02 billion people. The corporations and governments of the so-called "developed" countries, in complicity with a segment of the scientific community, have led us to discuss climate change as a problem limited to the rise in temperature without questioning the cause, which is the capitalist system. We confront the terminal crisis of a civilizing model that is patriarchal and based on the submission and destruction of human beings and nature that accelerated since the industrial revolution. The capitalist system has imposed on us a logic of competition, progress and limitless growth. This regime of production and consumption seeks profit without limits, separating human beings from nature and imposing a logic of domination upon nature, transforming everything into commodities: water, earth, the human genome, ancestral cultures, biodiversity, justice, ethics, the rights of peoples, and life itself. Under capitalism, Mother Earth is converted into a source of raw materials, and human beings into consumers and a means of production, into people that are seen as valuable only for what they own, and not for what they are. Capitalism... is an imperialist system of colonization of the planet.

-People's Agreement of Cochabamba⁸⁶

The contrast between how each of the agreements frame the issue of climate change is quite significant in that it reflects the views of the different participants that put them together, and demonstrative of the critiques of "development" discussed in Chapter 2. "Cancún" sees climate change as a threat to

"development" that is defined as the ability to alleviate poverty (i.e. a marketized understanding of poverty), and the ability of global economic growth to continue perpetually, with mention also how implications for inhibiting individual human rights. It also make direct reference to the IPCC's Fourth Assessment Report (discussed in detail in the Introduction of this paper) and argue that climate change is a result of "anthropogenic greenhouse gas emissions." By contrast, the "People's Agreement of Cochabamba" sees climate change as a threat to ecosystems throughout the planet and a threat human beings in specific locations of people that are most vulnerable to impacts of climate change (e.g. people of the Andes mountains, Africans, people who suffer from hunger, etc.). It references much of the same climate-related data that is found within the IPCC's Fourth Assessment Report, but directly calls into question the de-politicized assertion of the IPCC that the cause of climate change is merely anthropogenic greenhouse gas emissions. Rather, they directly argue that these emissions, and the climate crisis more broadly, are a result of industrial capitalist development, a system that requires the commodification of everything for the pursuit of limitless production and consumption. Capitalist development is portrayed as a neo-colonial project that threatens nature, humanity, and the human-nature relationship.

Goal for Allowable Global Temperature Increase

Each of the agreements also have specific goals for climate change mitigation, which are measured by the goal for allowable average global temperature increases ought to be:

Further recognizes that deep cuts in global greenhouse gas emissions are required... with a view to reducing global greenhouse gas emissions so as to hold the increase in global average temperature below 2°C above pre-industrial levels... Also recognizes the need to consider... strengthening the long-term global goal on the basis of the best available scientific knowledge, including in relation to global average temperature rise of 1.5°C.

-Cancún Agreements⁸⁷

Our vision is based on the principle of historical common but differentiated responsibilities, to demand the developed countries to commit with quantifiable goals of emission reduction that will allow to return the concentration of greenhouse gases to 300 ppm, therefore the increase in the average world temperature to a maximum of 1.0°C.

-People's Agreement of Cochabamba⁸⁸

Here, "Cancún" places the goal for allowable global temperature increase at 2°C, while the "Cochabamba" places it much lower, at 1°C. First is that average global temperatures have already

increased from pre-industrial levels by 0.74°C. ⁸⁹ Given this, it is not altogether clear if it is even possible to reach the 1°C goal identified in "Cochabamba" (see Figure 5 below). The second point to note is that "Cancún" does not assign a specific target for allowable level of CO₂ (measured in parts per million, or ppm) but instead argues that the temperature goal should be "on the basis with the best available scientific knowledge." By contrast the "Cochabamba" specifically cites stabilization at 300ppm.

Scenario	CO ₂ Concentration Stabilization (ppm)	Peak Year for CO ₂ Emissions (year)	Change in CO ₂ Emissions in 2050 (from 2000 levels)	Average Temperature Increase from Pre- Industrial Equilibrium
1	350-400	2000-2015	-85% to -50%	2.0°C - 2.4°C
2	400-440	2000-2020	-60% to -30%	2.4°C - 2.8°C
3	440-485	2010-2030	-30% to +5%	2.8°C - 3.2°C
4	485-570	2020-2060	+10% to +60%	3.2°C - 4.0°C
5	570-660	2050-2080	+25% to +85%	4.0°C - 4.9°C
6	660-790	2060-2090	+90% to +140%	4.9°C - 6.1°C

Figure 5. Mitigation Scenarios and Projected Increase in Average Global Temperature⁹⁰

By not stating a specific concentration of CO_2 in the atmosphere, "Cancún" leaves open for debate what the final cap on GHG emissions ought to be, and this may be in line with the level of doubt in the scientific community. The IPCC details various scenarios of CO_2 stabilization, peak year for CO_2 emissions, and the corresponding increase in global temperatures that would likely result. Based on this, the Cochabamba goal of a 1.0° C reduction would appear to be impossible.

This is perhaps the best example of how some of the WPCCC participants challenge or politicize some of the findings of the scientific community, without directly calling into question the entire field of climate science. As stated in the previous section, "Cochabamba" does echo most of the scientific findings articulated by the IPCC, but they also argue that "a segment of the scientific community" is complicit with "corporations and world governments." This is one key area where this because apparent, with "Cochabamba" calling for emission reductions below what is even calculated as a possible scenario by the IPCC, thus arguing for a much more immediate and dramatic reduction in GHG emissions.

Mitigation of Greenhouse Gas (GHG) Emissions

In addition to debating the overall goal for GHG concentrations, the two agreements also have very different strategies for how mitigation ought to occur:

Acknowledging that the largest share of historical global emissions of greenhouse gases originated in developed countries, and that owing to historical responsibility, developed country Parties must take the lead in combating climate change and the adverse effects thereof... [the COP] takes note of quantified economy-wide emission reduction targets to be implemented by Parties included in Annex 1 to the Convention as communicated by them...

Developed countries should submit annual greenhouse gas inventories and inventory reports... on their progress in achieving emission reductions, including information on mitigation actions to achieve their quantified economy-wide emissions targets and emission reductions achieved... [The COP] *invites* developing country Parties to submit to the secretariat information on nationally appropriate mitigation actions for which they are seeking support, along with estimated costs and emission reductions, and the anticipated time frame for implementation.

-Cancún Agreements⁹¹

[The next COP] should approve an amendment to the Kyoto Protocol for the second commitment period from 2013 to 2017 under which developed countries must agree to significant domestic emissions reductions of at least 50% based on 1990 levels... The United States, as the only Annex 1 country on Earth that did not ratify the Kyoto Protocol, has a responsibility toward all peoples of the world to ratify this document...

-People's Agreement of Cochabamba⁹²

Here, "Cancún" proposes a number of mechanisms to move forward with international mitigation efforts. First, they recognize that the primary burden for mitigation lies with "developed" countries (i.e. "Annex 1 countries" if one were to use the language found within the UNFCCC). Second, they call for each country to submit *their own* mitigation targets to the UNFCCC. Third, they call on all the UNFCCC to establish a system for monitoring and evaluating mitigation efforts, but entirely through self-reporting from each nation. It is important to note that within "Cancún" the mitigation targets submitted by each country are entirely *voluntary*, and the monitoring and evaluation of country-wide progress towards these goals is also entire *self-reported* and *voluntary*. By contrast, "Cochabamba" calls for a recommitment to the Kyoto Protocol, which is a *legally binding* treaty requiring *mandatory* emissions reductions through 2012. By calling for a second recommitment period under the Kyoto protocol, and specifically calling upon the US to ratify it, they are calling for *mandatory* emission reductions.

Additionally, the amount of emissions reductions that "Cochabamba" calls for are *significantly* larger than the commitments referred to in "Cancún." Because "Cancún" does not require mandatory reductions, or assign different reductions to any Party, each country *may* submit their own targets individually. For instance, the United States (the 2nd largest emitter of global GHGs) has pledged to reduce their 2005 emissions by 17% by the year 2020, which would amount to a mere 4% reduction of

1990 levels (it is important to note that the Kyoto Protocol, and most of the countries submitting emissions reductions targets use 1990 as a baseline, but the United States and others, including China, use 2005 because emissions were much greater and thus using it as a baseline allows for smaller absolute reductions). An independent scientific analysis of the current submissions (as recent as September 2011) that have been made to the UNFCCC since "Cancún" has demonstrated the relatively small amount of reductions that have been pledged. This analysis concludes that if targets are reached in accordance with each county's submissions, the overall temperature increase would be 4.3°C, as compared to 5.0°C if there is "business as usual." Both of these fall dramatically short of the stated 2-1.5°C goal for "Cancún." Therefore, "Cochabamba" would call for dramatically higher *mandatory* emissions reeducations than the *voluntary* commitments from "Cancún." This is especially apparent with respect to the United States, which would reduce GHG emissions by 50% under 1990 levels by 2017 under "Cochabamba" as compared to a 4% reduction of 1990 levels by 2020 under "Cancún."

Role of Carbon Markets

The "Cancún Agreements" and the "Peoples Agreement of Cochabamba" differ in their mitigation policy not only in relation to what level of GHG emissions ought to be permissible in the global atmosphere but also in regards to *how* mitigation will occur. The primary disagreement has to do with whether or not, and to what extent, carbon markets ought to be utilized in the process of GHG mitigation:

Decides to consider the establishment... of one or more market-based mechanisms to enhance the cost-effectiveness of, and to promote, mitigation actions...

Undertakes... to maintain and build upon existing mechanisms, including those established under the Kyoto Protocol...

Decides to consider the establishment... of one or more non-market-based mechanisms to enhance the cost-effectiveness of, and to promote mitigation actions.

-Cancún Agreements⁹⁴

The carbon market has become a lucrative business, commodifying our Mother Earth. It is therefore not an alternative for tackle climate change, as it loots and ravages the land, water, and

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F The mechanisms through which these "mandatory" emissions would be legally-binding are not as strong, even in the Kyoto Protocol. "Cochabamba" creates an "Environmental Justice Tribunal" within the UN with legally-binding power to prosecute anyone who exceeds allowable emissions targets, but the effectiveness of this mechanism is debatable. Most successful environmental treaties require domestic enforcement within local state governments, and there are varying degrees of adherence.

even life itself... The recent financial crisis has demonstrated that the market is incapable of regulating the financial system, which is fragile and uncertain due to speculation and the emergence of intermediary brokers. Therefore, it would be totally irresponsible to leave in their hands the care and protection of human existence and of our Mother Earth. We consider inadmissible that current negotiations propose the creation of new mechanisms that extend and promote the carbon market, for existing mechanisms have not resolved the problem of climate change nor led to real and direct actions to reduce greenhouse gases.

-People's Agreement of Cochabamba⁹⁵

"Cancún" relies significantly upon carbon markets to address mitigation of GHG emissions. It calls for the creation of new market mechanisms for mitigation purposes, as well as the continuation of existing carbon market mechanisms already in place from the Kyoto Protocol. The most significant mechanism created in the Kyoto Protocol is arguably the Clean Development Mechanism (CDM). Under this mechanism, Annex 1 (i.e. "developed") countries may "offset" their emissions by investing "clean development," or low-carbon emitting, projects in non-Annex 1 (i.e. "under-developed") countries. The CDM currently constitutes the largest international market-based mechanism for GHG mitigation. "Cancún" proposes that the main purpose for these mechanisms is to support "cost-effective" mitigation.

"Cochabamba" explicitly rejects the use of any carbon markets mechanisms for GHG mitigation. First, they argue against the commodification of pollution because it leads to further environmental degradation by further commodifying nature. Through commodification, the "right" to pollute becomes enshrined in the economic process because one is able to purchase land, air, or some other commodified form of nature and practice exclusive control over it. Second, they argue that markets are inefficient and unreliable at reducing GHG emissions. They give the example of the carbon markets that have been created, like the EU carbon market and the various carbon markets established by the Kyoto Protocol, which both have failed to reach the desired mitigation targets. Lastly, they critique carbon markets for facilitating "carbon offsets" which "mask the failure of actual reductions in greenhouse gas emissions." Here, the explicit rejection of carbon offsets places the responsibility for mitigation of GHG emissions on each of the polluting Annex 1 countries instead of allowing them to continue polluting and merely "offsetting" these by making cheaper investments in non-Annex 1 countries.

Climate Regime Financing

Both "Cancún" and "Cochabamba" establish a system for financing mitigation and adaptation. They both establish a system where Annex 1 countries transfer funds to non-Annex 1 countries. This topic is expansive and encompasses financing for numerous projects, including everything from funding mitigation efforts (such as constructing renewable energy power plants, retrofitting existing power plants and factories to reduce emissions, or preventing deforestation or forest degredation) to financing adaptation projects in areas impacted by climatic change (such as the building of dykes around low-lying areas, constructing/re-constructing irrigation systems to prevent agricultural losses from reduced rainfall, increased disaster response preparedness for extreme weather events, increased public health infrastructures for areas affected by the spread of illnesses related to climate change, etc.). The specifics of which projects would receive funding, or mechanisms for exactly how, have yet to be determined. Right now the debate is centered on *how much* financing would be mobilized, *where* this financing would come from, *who* will administer this financing, and *how* it would be distributed:

Takes note of the collective commitment by developed countries to provide new and additional resources... approaching USD 300 billion for the period 2010-2012...

Decides that... adequate funding shall be provided to developing country Parties, taking into account the urgent and immediate needs of developing countries that are particularly vulnerable to the adverse effects of climate change...

Recognizes that develop country Parties commit... to a goal of mobilizing jointly USD 100 billion per year by 2020 to address the needs of developing countries...

Decides that a significant share of new multilateral funding for adaptation should flow through the Green Climate Fund...

Decides to establish a Green Climate Fund, to be designated as an operating entity of the financial mechanism of the Convention...

Also decides that the Fund shall be governed by a board of 24 members comprising an equal number of members from developing and developed country Parties...

Invites the World Bank to serve as the interim trustee of the Green Climate Fund...

-Cancún Agreements⁹⁷

Current funding directed toward developing countries for climate change and the proposal of the Copenhagen Accord is insignificant. In addition to Official Development Assistance and public sources, developed countries must commit to a new annual funding of at least 6% of GDP to tackle climate change in developing countries. This is viable considering that a similar amount is spent on national defense... This funding should be direct and free of conditions, and should not interfere with the national sovereignty or self-determination of the most affected communities and groups...

A new funding mechanism should be established... functioning under the authority of the Conference of the Parties (COP) under the United Nations Framework Convention on Climate Change and held accountable to it, with significant representation of developing countries, to ensure compliance with the funding commitments of Annex 1 countries.

-People's Agreement of Cochabamba⁹⁸

"Cancún" moved the issue of climate financing forward quite a bit. In fact, it was hailed by many prominent environmentalist groups as its single greatest achievement. ⁹⁹ This was because leaders of the "developed" countries agreed to mobilize financing of \$100 billion USD per year by the year 2020 for climate change mitigation and adaptation in "developing" countries, and established a Green Climate Fund to be responsible for administration of these funds. The most likely reason for why the UNFCCC chose this amount and timeframe was because a significant study conducted by the World Bank in 2010 estimated that this would be the cost of adaptation in developing countries (calculated through estimates of economic losses). ¹⁰⁰ Furthermore, they struck an agreement with non-Annex 1 countries to allow the Green Climate Fund to be housed within the World Bank as long as it is accountable to the UNFCCC under an independent secretariat comprised equally of representatives from "developed" and "developing" countries. Given that this fund would not be operational until 2020, the Agreements also "noted" that "developed" countries agreed to mobilize \$30 billion USD over the short-term between 2010-2012. It is important to note that these commitments are merely *voluntary* pledges, and they will come from public and private sources, including monies from carbon markets.

Conversely, "Cochabamba" calls for significantly more money to be mobilized to be given to countries and communities impacted by climate change to assist with adaptation projects, as well as to pay a "carbon debt" that they believe they are owed for centuries of pollution. Additionally, "Cochabamba" would dramatically different method for administering the fund. First, instead of the \$100 billion USD (roughly .05% of GDP) per year figure from "Cancún," "Cochabamba" calls for 6% of GDP. This is twelve times the amount of climate finance mobilized in "Cancún." The justification given for the 6% of GDP figure is because this is how much the world currently spends on "national defense" spending. Furthermore, the "People's Agreement of Cochabamba" strongly opposes allowing the World Bank to take over administration of the Green Climate Fund. Instead, they call for a completely independent institution that has significant representation from countries most impacted by climate change. This is further evidence of how "Cochabamba" embodies the critiques of "development" discussed in Chapter 1. Many of those arguments centered around critiques of the World Bank and other

neoliberal financial institutions for their role shaping the "development discourse" and for using their influence to spread neoliberal market reforms. It is also important to note that the "Cochabamba" calls for this money to come solely from public sources (i.e. commitments from central governments) and rejects the use of carbon markets or other private sources of funding.

Another significant difference between the two agreements is how to frame the issue of climate finance. "Cochabamba" purposefully differentiates between "aid" and "climate debt." In calling for the latter they are establishing a relationship in which countries most responsible for climate change (Annex 1) owe a "debt" to those who are least responsible for climate change, yet likely to be the most impacted by it. By refusing to call this money "aid," which is often seen as given willingly from rich countries to poor countries and thus with strings often attached to that money, they argue for a climate financial system that is much larger than the Green Climate Fund proposed "Cancún" (i.e. 6% of global GDP as opposed to .05% GDP) and that is more in control of non-Annex 1 countries (i.e. not the World Bank). Additionally, "aid" would be given specifically to finance mitigation and adaptation efforts in "less-developed" countries, while "debt" would be simply given to less-industrialized countries who have not historically polluted.

The Role of Intellectual Property Rights in Technology Transfer

Another significant aspect of climate policy has to do with the transfer of technology related to climate change mitigation and adaptation from Annex 1 to non-Annex 1 countries:

Decides to establish a Technology Mechanism... which will consist of the following components: (a) A Technology Executive Committee... [and] (b) A Climate Technology Centre and Network... *Underlines* the importance of continued dialogue... in order to make the Technology Mechanism fully operational in 2012.

-The Cancún Agreements 101

It is necessary to... reject the "technology showcase" proposed by developed countries that only markets technology. It is essential to establish guidelines in order to create a multilateral and multidisciplinary mechanism for participatory control, management, and evaluation of the exchange of technologies. These technologies must be useful, clean and socially sound. Likewise, it is fundamental to establish a fund for the financing and inventory of technologies that are appropriate and free of intellectual property rights. Patents, in particular, should move from the hands of private monopolies to the public domain in order to promote accessibility and low costs.

-People's Agreement of Cochabamba 102

Both "Cancún" and "Cochabamba" have specific policies put in place to facilitate the transfer of "green"

or "renewable energy" technology developed in industrialized Annex 1 states to be utilized cheaply and more widespread in non-Annex 1, less-industrialized states. The idea here is that in order for GHG emissions to remain low, countries without large emissions today will need to be put on the path of developing energy using low-carbon intensive technologies and generate electricity from more renewable sources. However, this is costly and to make non-Annex 1 economies do this without providing a mechanism through which these newer and less-polluting technologies can be transferred would be unfair and inefficient. "Cancún" is quite vague about technology transfer, and it leaves most of the specific decision-making about exactly how technology will be transferred from wealthy Annex 1 countries to non-Annex 1 countries to be decided later. "Cochabamba" is more specific in calling for a technology transfer mechanism that is equitable and participatory. The main area of disagreement between the two has to do with intellectual property rights, or IPR. "Cochabamba" explicitly bans IPR, specifically patents, from being incorporated into the technology transfer mechanism arguing that it establishes private monopolies that make technologies that are required for climate adaptation or mitigation high in cost and inaccessible to the communities that need and deserve them the most.

Forest Management Policy

Given the importance of forests (and de-forestation) to the climate change mitigation and adaptation, both agreements have specific policies regarding forest management and how this will be incorporated into an international climate regime.

Encourages developing country Parties to contribute to mitigation actions in the forest sector by undertaking the following activities, as deemed appropriate by each Party and in accordance with their respective capabilities and national circumstances: (a) Reducing emissions from deforestation; (b) Reducing emissions from forest degradation; (c) Conservation of forest carbon stocks; (d) Sustainable management of forest; and (e) Enhancement of forest carbon stocks.

Also requests developing country Parties, when developing and implementing their national strategies or action plans, to address, inter alia, drivers of deforestation and forest degradation, land tenure issues, gender considerations... ensuring the full and effective participation of relevant stakeholders, inter alia, indigenous peoples and local communities.

-Cancún Agreements¹⁰³

The definition of forests used in the negotiations of the UNFCCC, which includes plantations, is unacceptable. Monoculture plantations are not forests. Therefore, we require a definition for negotiation purposes that recognizes that native forests, jungles, and the diverse ecosystems on Earth.

The United Nations Declaration on the Rights of Indigenous Peoples must be fully recognized,

implemented and integrated into climate change negotiations. The best strategy and action to avoid deforestation and degradation and protect native forests and jungles is to recognize and guarantee collective rights to lands and territories, especially considering that most of the forests are located within the territories of indigenous peoples and nations and other traditional communities.

We condemn market mechanisms such as REDD (Reducing Emissions from Deforestation and Forest Degradation)... which are violating the sovereignty of peoples and their right to prior free and informed consent as well as the sovereignty of national States, the customs of Peoples, and the Rights of Nature.

-People's Agreement of Cochabamba¹⁰⁴

"Cancún" and "Cochabamba" differ on forest policy in three main areas: 1) how forests are defined, 2) the "Reducing Emissions from Deforestation and Forest Degradation" (REDD) mechanism, and 3) the rights of indigenous peoples and their relationship with forests. First, as stated above, "Cochabamba" finds the definition that the UNFCCC uses for forests as unacceptable. Specifically, they take issue with commercial monoculture plantations planted to replace destroyed tropical rainforests in Latin America, which they do not believe are forests. The reason for this is because the WPCCC participants see them as industrial tree plantations, and as long as this is defined as a "forest" within the UNFCCC it will create perverse incentives to cut down native forests and plant tree plantations instead. This process results in a net increase in carbon emissions because tree plantations store a smaller amount of carbon than native forests and jungles, which are comprised not only of trees but of entire thriving ecosystems and various other forms of plant (and animal) life. Also, cutting down native forests and replacing them with tree plantations entirely ignores the issue of biodiversity loss. Forests are not merely a collection of trees, but instead support entire ecosystems, and deforestation is therefore seen as not only a driver of climate change but also the destruction of nature.

The second major issue debated between the two agreements has to do with the market-based REDD mechanism. This mechanism currently exists in many contexts, including the World Bank, the United Nations, and within bilateral agreements between states. REDD allows Annex 1 countries to "offset" their GHG emissions by paying non-Annex 1 countries to protect forests from deforestation and/or forest degradation. In doing so, this mechanism will transfer ownership and/or use of the forest being considered from its current legal status (whether commonly-held, public property, or private property) to become environmentally-protected public property controlled by the state within which it

resides. Under a mechanism like REDD, nature is "protected" from any human "exploitation" and human society is severed from interacting with that section of land. Some environmentalist schools of thought see this as conservation, by allowing nature to have an autonomous existence outside of human society. Others, however, are critical of this method of conservation because it sees "nature" and "society" as two different spheres (sometimes referred to as a "nature island" 105), rather than seeing how the two are inherently intertwined with one another (sometimes referred to as a "nature-society hybrid" 106). The question then becomes not *if* nature should be "exploited" but, how, why, and for what purpose. These questions have practical implications for who controls this land (if anyone), who has access to it, and how it interacts with human society, which are all deeply political questions. "Cochabamba" has many practical critiques of REDD: Many of the REDD projects that have been implemented have not reduced emissions as much as they have claimed they would. Also, they have been under-funded and mismanaged in their administration, and they fail to address the underlying drivers of deforestation (including overconsumption of wood and agricultural products). The WPCCC's critique of REDD is, in these instances, similar to the critique of carbon markets: they facilitate overconsumption and capitalist growth while failing to properly meet their stated goals of climate change mitigation.

The third critique that the WPCCC has to do with the rights of indigenous peoples in relation to forests and forest management. REDD and other forest protection mechanisms ultimately place exclusive control of forests into the hands of national state governments that control the territory where they exist, who in turn deny any social interaction with that land/forest. This process has been controversial as it relates to indigenous peoples that may already reside within the forests. "Cochabamba" argues that indigenous peoples have protected forests for centuries, and yet many REDD mechanisms infringe upon the rights of indigenous groups to live in forests areas and/or maintain their historical or cultural relationship with them.

"Cancún" was noted as being successful in moving climate negotiations forward in the realm of forest management. They agreed to maintain the REDD mechanism, but did so by calling for better administration with respect to addressing the drivers of forest degradation, gender, and the rights of

indigenous peoples. However, the power for deciding exactly how these better forms of administration are put into place, or how these rights were to be protected, are placed almost entirely within the purview of central state governments. "Cancún" calls upon participating governments to put together their own plans for how to implement REDD and other forest management practices. They also fail to address the issue of how forests are defined and the distinction between monoculture plantations and native forests. *The Role of Agriculture Policy in Climate Change Policy*

In addition to forests and forest management, the issue of agriculture is also a major area of difference between the "Cancún" and "Cochabamba":

Note: There is no mention of "agriculture" in the "Cancún Agreements."

The immense challenge humanity faces of stopping global warming and cooling the planet can only be achieved through a profound shift in agricultural practices toward the sustainable model of production used by indigenous and rural farming peoples, as well as other ancestral models and practices that contribute to solving the problem of agriculture and food sovereignty. This is understood as the right of peoples to control their own seeds, lands, water, and food production, thereby guaranteeing, through forms of production that are in harmony with Mother Earth and appropriate to local cultural contexts, access to sufficient, varied and nutritious foods in complementarity with Mother Earth and deepening the autonomous (participatory, communal and shared) production of every nation and people.

-People's Agreement of Cochabamba¹⁰⁷

As noted above, "Cancún" makes no mention of "agriculture" anywhere. This is significant because, according to the IPCC, the agriculture sector (through industrial agriculture, methane gas from livestock, and fossil fuels required to mass-produce agricultural products and transport them internationally) accounted for 10-12% of global GHG emissions in 2005. By contrast "Cochabamba" places a significant emphasis on addressing global agricultural practices. Specifically, they critique industrialized farming as a driver of GHG emissions as well as significantly contributing to food insecurity for various populations around the world (which will only get worse given climatic change). It also contributes significantly to further environmental degradation, especially in critical areas like the rainforests of Latin America where expansion of industrial agriculture has been a driver for massive deforestation. In calling for a "profound shift in agricultural practices toward the sustainable model of production used by indigenous and rural farming people" they emphasize the need for "food sovereignty" in which people have control over their agricultural production processes. Industrial agricultural typically relies heavily

upon GHG producing technologies and places food production into the hands of multinational corporations that promote large monocultures.

Agriculture has historically been significantly intertwined with the very fabric of most societies. Before the dawn of industrial agriculture, peasants and farmers made up a significant proportion of the global population. Switching to industrial agriculture did result in an unprecedented amount of increased food production and reduced many forms of hard and intensive labor practices, yet it also had detrimental effects on the environment and human societies and cultures. It caused significant social dislocation and migration to large urban centers from rural farming communities causing social upheaval and unrest, and large populations of "unemployed" workers left to destitution. It also made most countries in the "Global South" dependent upon imported food, subject to significant price fluctuations. Industrial capitalism dramatically transformed agriculture throughout the world, increasing GHG emissions and disrupting social and cultural norms across societies. "Cochabamba" argues that maintaining small and locally based agricultural systems can serve as an important way of protecting successful existing and/or historical relationships between human societies and nature. Proponents of "Cochabamba" are deeply critical of "Cancún" for not even mentioning the word "agriculture" once throughout the entire agreement and for treating agricultural policy as completely separate from environmental and/or climate policy.

Other Special Legal Considerations for the Climate Regime

Lastly, both agreements have a number of special legal considerations that are noted or incorporated into their proposed climate regimes:

Emphasizes that Parties should, in all climate change-related actions, fully respect human rights... *Taking note* of relevant provisions of the United Nations Declaration on the Rights of Indigenous Peoples.

-Cancún Agreements¹⁰⁹

To guarantee human rights and to restore harmony with nature, it is necessary to effectively recognize and apply the rights of Mother Earth. For this purpose, we propose the attached project for the Universal Declaration on the Rights of Mother Earth...

Establish an International Tribunal of Conscience to denounce, make visible, document, judge and punish violations of the rights of migrants, refugees and displaced persons within countries of origin, transit and destination, clearly identifying the responsibilities of States, companies and other agents...

Considering the lack of political will on the part of developed countries to effectively comply with commitments and obligations assumed under the UNFCCC and the Kyoto Protocol, and given the

lack of legal international organisms to guard against and sanction climate and environmental crimes that violate the Rights of Mother Earth and humanity, we demand the creation of an International Climate and Environmental Justice Tribunal that has the legal capacity to prevent, judge and penalize States, industries and people that by commission or omission contaminate and provoke climate change.

-People's Agreement of Cochabamba¹¹⁰

"Cancún" are again quite vague in this area. They merely call upon parties to the UNFCCC to "fully respect human rights" in climate mitigation and adaptation, and later "take note" of the UN Declaration on the Rights of Indigenous Peoples. Beyond these statements there are no specific definitions of how these human rights explicitly relate to climate change policy nor are there any legal mechanisms established through which these rights can be realized, leaving much open to interpretation and poor administration. Conversely, "Cochabamba" is specific in terms of detailing new "rights" regimes and new legal mechanisms through which these rights can be protected. Namely, they call upon the UNFCCC to 1) pass the "Universal Declaration on the Rights of Mother Earth," 2) establish an International Tribunal of Conscience, and 3) establish an International Climate and Environmental Justice Tribunal.

The "Universal Declaration on the Rights of Mother Earth" is perhaps the most significant contribution put forth by "Cochabamba" and is central to its proposed climate regime. This declaration, which was formally introduced to the United Nations General Assembly, establishes an "environmental rights" regime that parallels the international "human rights" regime. This Declaration is notable in that it is not anthropocentric, but instead establishes rights for "Mother Nature" (i.e. plants, non-human animals, and ecosystems). It is not only relevant to environmental protection as it relates to climate change but also intends to make various forms of environmental degradation (including the emission of GHGs) a violation of international law.

"Cochabamba" also calls for the "International Tribunal of Conscience" which would specifically address the human rights of migrants, refugees, and internally-displaced persons as a result of climate change. Given the dramatic impacts that climate change are projected to have over the coming century, many researchers have began looking at the intersection of climate change and migration. In fact, a landmark study by Oxford University academic Norman Myers estimates there could be as many as 200

million people displaced by the year 2050 as a result of climate change ¹¹¹ To put this in perspective, the UN recently estimated in 2000 that roughly 3% of the world's population (180 million people) was classified as an "international migrant," and in 2006 the UNHCR estimated that there were around 9.9 million refugees around the world. If this estimate turns out to be accurate, that would mean that the number of migrants and refugees would more than double over the next 40 years as a result of climate change. As many legal scholars have pointed out, the current definition of "refugee" is inadequate as it relates to populations subjected to migration due to climate change because it refers solely to someone who crosses international borders and cannot return to their country of origin for fear of political oppression. Under this definition, most of the people forced to migrate as a result of climate change (whether they be migrants, "refugees," or internally-displaced persons) would not be entitled to the legal protections that are currently given to "refugees." In order to address this issue "Cochabamba's" call for an "International Tribunal of Conscience" would provide international legal protections to all humans forced to migrate as a result of climate change.

Lastly, the "People's Agreement of Cochabamba" calls upon the UN to establish an "International Climate and Environmental Justice Tribunal" and for this to be the ultimate authority for enforcing a climate regime overseeing environmental and human rights protections as it relates to climate change and other forms of environmental degradation. In contrast to the reliance of "Cancún" on carbon markets and voluntary participation in a climate regime, the "International Climate and Environmental Justice Tribunal" would have legally-binding authority to oversee and enforce the international climate regime, and bring forth any central state government who violates their responsibilities under the climate treaty. Exactly how this Tribunal would be enforcing the climate regime, especially against any powerful, polluting state government, is unclear. Without major political and economic reforms in the entire UN framework, this Tribunal may be insignificant.

Logical Basis

As the previous section demonstrates, "Cancún" and "Cochabamba" differ dramatically in their approach to climate policy in regards to mitigation, adaptation and climate regime administration.

"Cancún" are largely designed to sustain neoliberal, industrial capitalism, mostly through the voluntary use of commodified carbon pollution and international trade of carbon credits and carbon offsets, and "Cochabamba" is designed to challenge capitalism by significantly reducing the ability of nation states to continue industrial development while putting in place various legal mechanisms for human and environmental rights to be protected. Clearly, the logics underpinning each of the two agreements are remarkably different, with "Cancún" largely reflecting what is known as *market environmentalism* and "Cochabamba" largely reflects *rights-based environmentalism*. This section will conclude the policy analysis of "Cancún" and "Cochabamba" by explaining these logics in greater detail.

Market Environmentalism

As discussed above, "Cancún" is largely seen as the basis for a future climate regime that would utilize market mechanisms to regulate GHG emissions and provide financing for adaptation efforts. The underlying logic behind this perspective lies in what is largely referred to as "market environmentalism" in which market mechanisms are manipulated or regulated in order to provide environmental protection. The core of this logic has to do with a "cost-benefit" analysis through the lens of market economics, assessing the economic damage that climate change would inflict, and then prescribing market-based solutions (such as commodified carbon pollution traded on international carbon markets together with mechanisms for carbon offsets) to compensate or prevent economic losses. There is probably no better articulation of this logic as it relates to climate change than the landmark *Stern Review* published in 2006 (named after the UK market economist Sir Nicholas Stern).

The *Stern Review* is a comprehensive 700-page report commissioned by the British government that seeks to explain the "economics of climate change" as it relates to the projected impact on the global economy and thus prescribe economic solutions to the crisis. The report was heralded as a huge success by many climate change policy advocates, including former U.S. Vice-President Al Gore and economist Joseph Stiglitz, because it offers an economic rationale for addressing climate change as soon as possible. Utilizing a monetized cost-benefit analysis, the report argues that the cost that anthropogenic climate change will have on society will be immense if left unmitigated; however, if mitigation and adaptation

efforts are pursued soon the economic damages can be minimized or avoided. It proposes a neoclassical-framework for understanding climate change in which economists can project how much environmental damage will result because of climate change. Then, a similar analysis can be conducted examining what the economic cost of mitigation and adaptation efforts would be. The *Stern Review* argues that the economic cost of inaction is actually greater than the economic cost of mitigation and adaptation efforts, therefore economically justifying the creation of an international climate regime. Under this approach, GHG emissions are seen as an "externality" that are not figured into market exchanges as a cost of production, thus representing a market failure. The creation of a carbon tax or a global carbon market could address this externality by incorporating the cost of anthropogenic climate change into market transactions by imposing a cost on GHG emissions as part of the cost of production.

The *Stern Review* calculates economic losses using three approaches: 1) estimating the physical impacts on economic activity, on human life and on the environment, 2) comparing macro-economic losses measured in global GDP based on various climate models scenarios, and 3) comparing the marginal costs of mitigation/adaptation with the social cost of carbon emissions. This analysis estimates that the economic losses that would result from unmitigated anthropogenic climate change would be a loss in global Gross Domestic Product (GDP) by at least 5% each year, now and forever, and in some scenarios this could be as high as 20%. The report also recognizes that most of these economic losses will occur in the poorest countries because they are most susceptible to climate change and have the fewest resources to plan for and adapt to them. It also estimates that the cost of intervening to stabilize CO₂ emissions at around 500-550ppm would be roughly 1% of global GDP each year. Stern later increased this estimate to 2% of global GDP to account for recent climate data that demonstrated climate change accelerating beyond originally projected estimates. Here, through the lens of a "cost-benefit analysis," Stern demonstrates that economic losses (mostly measured in reduced global GDP) are greater than the costs of mitigation/adaptation to address the market failure presented by GHG emissions.

The Stern Review was criticized by many market economists, but most of their criticisms fell within the discipline of market economics (William Nordhaus took issue with the discount-rate for

projecting future damage caused by climate change, Robert Mendelsohn objected to the fact that it only compared one policy to no policy at all, rather than evaluating various market-approaches, and Jeffrey Sachs questioned method for calculating economic losses).¹¹⁶

What is perhaps most interesting about the *Stern Review* is that this is precisely the impact that market logic has had on policy making in modern public policy. As discussed in the previous Chapter, public policy debates taking place today are almost entirely within the neoliberal "development discourse" which has become the dominant lens through which all policy-makers now view policy. In order to understand a social problem it must first be given a monetary cost (in this case, the economic cost of anthropogenic climate change on society) and then solutions to the problem must demonstrate that public policy will provide an adequate benefit for the cost of regulation or intervention in the market. For this reason, the "Cancún Agreements" are largely focused on capping GHG emissions at a level that fits within their "cost-benefit" analysis, and it seeks to do so through the use of voluntary market-based mechanisms such as commodifying GHGs, utilizing "carbon offsets," and establishing a carbon market.

There have been a number of critiques of market environmentalism from outside the "development discourse." One is that only assessing the damage caused by climate change through economic valuation (GDP) favors damage caused to wealthier countries, and minimizes (or ignores outright) damage caused to poorer populations, despite the number of people who live there, or the size of the environmental degradation. GDP is distributed remarkably unequally around the world, thus resulting in major economic, moral, and political issues with using GDP as the sole metric for climate policy. It is also problematic because "green capitalism" (or "green accumulation") is paradoxical because it is designed to sustain the very system that causes the problem. Philip McMichael criticizes the market environmentalist approach because it "leads to the commodification of the ecological commons through green market solutions such as carbon trading, emissions offsets and biofuels, to sustain, rather than question, current trajectories of accumulation and consumption." McMichael argues that deploying the market approach to solving climate change would sustain a system of endless consumption that is inherently ecologically unsustainable. Thus, he asserts that this so-called "green-accumulation" is really

an oxymoron because perpetual accumulation (infinite growth) given a finite physical world is inherently unsustainable. Additionally, McMichael critiques the concept of "market environmentalism" as a self-legitimizing project: market logic is used to comprehend an environmental issue (through monetization, which allows quantification through pricing and/or commodification). Once monetized, a market mechanism is deployed to remedy what is perceived to be the problem. But this process, while effective in its own mode of purely quantitative calculation, actually divorces natural processes from human processes and further damages the environment; thus further legitimizing the utilization of "market environmentalism" to understand and fix that problem. This becomes a self-reinforcing cycle that misses the major solution to most environmental problems, including climate change: putting an end to limitless accumulation of capital and endlessly expanding commodification.

Lastly, the market environmentalist approach is problematic because it is largely focused on privatizing nature and altering property relationships. Property can be private, public, or commonly held depending on how who has control and access to the land. Each of these relationships will dramatically alter society-nature relationships, and oftentimes privatization does so in a way that exacerbates inequality. 118 One clear example here for how this directly relates to climate policy can be in the controversy over the Reducing Emissions through Deforestation and forest Degradation (REDD) mechanism supported by "Cancún." "Cochabamba" opposes this mechanism because it provides a way for polluters to continue polluting while pushing responsibility for reducing emissions to countries where it would be "cheaper" to do so. This process hands over property rights for large sections of forests (especially rainforests in Latin America) to local state governments or other private entities. This potentially displaces poorer, mostly indigenous peoples, from their traditional relationship with their land and forests, dispossessing them of control/access to land that they once required for their livelihoods in the interest of commodification and/or capital accumulation (Harvey referred to this process of dispossession as the loss of rights as "accumulation by dispossession"). 119 Market environmentalism is an inadequate and problematic method for addressing environmental policy because it relies on privatization, which alters property relations without any concern for notions of equality.

Rights-Based Environmentalism

The above critiques are shared in the "Cochabamba." It begins by directly criticizing market mechanisms and historical capitalist development as the root cause of anthropogenic climate change and from this critique of neoliberal development they instead argue for a rights-based logic to address the climate crisis. By rejecting the idea that human society has dominion over nature, a balance is sought between human society and the larger environment. Thus, the logic of the People's Agreement becomes a balance between human rights and environmental rights.

This perspective is promoted not only by "Cochabamba" but is also the guiding logic behind most environmental justice activists, such as the NGO *Friends of the Earth International* - the world's largest grassroots environmental network with over one million members in 68 national organizations on every continent. They argue that human rights and environmental rights have been developing normatively and formally since 1972 Stockholm Conference on Human Environment, and serious progress has been made to further their development within the international legal system. Specifically, they report that:

In 1994, the Special Rapporteur on Human Rights and the Environment for the Sub-Commission on the Prevention of Discrimination and Protection of Minorities released a groundbreaking, detailed analysis of the relationship between human rights and the environment, concluding that environmental damage has an adverse affect on the enjoyment of a series of human rights, and that human rights violations in turn damage the environment. In the meantime, a series of UN resolutions, court decisions and international bodies have further shaped and endorsed this general statement. To date, however, there is little binding legislation referring to environmental human rights.

Countless other NGOs, climate justice activists, groups of indigenous people and all of the other signatories of the "Cochabamba" are in support of this perspective. They all believe that having human rights and environmental rights as the basis for a future legally-binding climate regime is the only way to ensure a just solution to the climate crisis.

Vandana Shiva, a supporter of environmental rights and outspoken advocate of the "People's Agreement of Cochabamba" argues that the entire notion of "sustainable development" offered by the neoliberal approach is inadequate. She directly challenges the Stern Review as being limited to "within the global market and commodification paradigm." She frames the climate debate as one of "Eco-

Imperialism vs. Earth Democracy" and sees market-driven climate policies as damaging to truly sustainable development. She writes that "to achieve genuine sustainability, energy systems need to be embedded in society and ecosystems. They can only be considered sustainable socially if they do not enclose and usurp the ecological space of the poor and lead to energy equity. They can only be considered sustainable ecologically if they facilitate the shift to decentralized, low-impact economies and do not introduce risks of atmospheric or nuclear pollution." Here, Shiva is challenging the industrial conception of "sustainable development" which commodifies nature as an input into a larger production process because it leads to widespread social and ecological dislocation. Instead, she offers a solution to climate change rooted in traditional agricultural practices that restore local cultural practices in areas where farmers and peasants have been socially, economically, and politically dislocated, and all with dramatically fewer GHG emissions.

Chapter 2 Conclusion

This Chapter has demonstrated that the "Cancún" and "Cochabamba" represent remarkably different approaches to climate policy. "Cancún" embodies a market environmentalist approach seeking to commodify pollution and establish voluntary global carbon markets to address climate change, in effect utilizing neoliberal mechanisms to sustain industrial capitalism. Alternatively, the "Cochabamba" embodies many of the critiques of development and sustainable development by directly challenging the market environmentalist approach and advocating for a climate regime that would be centered on reducing industrial production by pushing a regime designed to protect human and environmental rights. This would severely reduce GHG emissions and mobilize a much greater redistribution of wealth from polluting states, with special considerations put in place to protect the environment and various vulnerable groups such as indigenous peoples, climate migrants, and the global poor.

It is significant to note that the state of Bolivia's endorsement of this perspective is quite remarkable in the history of the politics of development. When Bolivia formally introduced the "Cochabamba" for consideration at the United Nations Framework Convention on Climate Change (UNFCCC) it marked the first time in history when a state government formally endorsed this perspective

in international treaty negotiations. The next Chapter will focus on how this played out on the international stage, and how the political and economic powers that built, promoted, and now benefit from the neoliberal model of capitalist development quickly silenced the Bolivian proposals. Doing so will further demonstrate that the "development discourse" that Arturo Escobar talks about, and how political and economic powers that dominate the international scene today have disciplined the climate debate.

Chapter 3: How Political and Economic Power Shapes the Climate Policy Debate

The state of Bolivia was the only government in the world to reject "Cancún," and despite the need for unanimous consent the UNFCCC procedurally routed the Bolivian government and formally adopted it. They were essentially the same set of policies that had been widely rejected just one year earlier in Copenhagen. What changed? Why had the stricter, rights-based approaches of the "Cochabamba" been shelved so quickly, and why did the rest of the world begin pursuing the voluntary, market-based climate regime they once soundly rejected and adopt "Cancún" instead? In the chapter that follows I will seek to answer this question by closely examining how political power and economic interests shape and discipline the climate policy debate. This analysis will focus on three main sectors of political and economic power and interests, including: 1) state politics, 2) political economy of the energy industry, and 3) global civil society. As I demonstrated in Chapter 2, "Cancún" was designed to sustain industrial capitalism in the face of anthropogenic climate change while the "Cochabamba" challenges that model of economic development as the cause of, not the solution to, climate change. In this Chapter, I will demonstrate that the political and economic forces that have perpetuated the neoliberal model of economic development over the past few decades are the same forces that have disciplined the climate policy community into adopting the model proposed by "Cancún" while quickly dismissing the alternative approaches embodied in the "Cochabamba." These complex political and economic processes are often driven by the ideological disposition towards support for neoliberal policies, but largely comprised of private industry's pursuit of economic profit, or political co-optation and coercion of forces opposed to the neoliberal project.

State Politics and Climate Policy

The UNFCCC is made up of representatives from all UN-recognized state governments around the world. Thus, one must first understand the political dynamics of the climate policy debate in light of

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^G Bolivia continued to object to passage of "Cancún", and the proceedings continued late into the night. Eventually, Mexico, who was hosting the conference and responsible for overseeing proceedings, moved forward with passing the "Cancún Agreements" with "unanimous consent" by merely noting that objections from Bolivia would be submitted formally at a later time.

state politics. Piet Buys and colleagues propose a useful method for analyzing state politics in light of the climate policy debate. They argue that state governments formulate their positions on climate policy in these negotiations through an analysis of two forms of vulnerability: 1) Source Vulnerability – a country's vulnerability to mandated GHG emissions reductions, and 2) Impact Vulnerability – the direct impact of climate change on countries. 123 This two-pronged analysis provides insight into the rationale for why governments take their respective approaches to climate policy in these negotiations: if a country perceives that it has a high Source Vulnerability (i.e. they would be economically disadvantaged by increasing the cost of, or mandated reduction in, GHG emissions) but has low Impact Vulnerability (i.e. the impact of climate change on their country is perceived as not that big of a threat), they are likely to reject any strict climate regime mandating GHG emissions reductions. However, if the ruling government of a country has low perceived Source Vulnerability (i.e. would not be greatly economically disadvantaged by a mandated reduction in GHG emissions) but has high Impact Vulnerability (i.e. the impact of climate change on their country is perceived as a significant threat) then they will likely be more inclined to push for a strict climate regime. Below I will use this analysis to discuss the complex motivations of two important political dynamics in state politics: the relationship between China, the EU, and the US, and the relationship between wealthy countries and resource poor countries.

China, the EU and the US

The analysis mentioned above by Piet Buys and colleagues looked more closely at specific countries and their Source and Impact vulnerabilities as perceived by policy makers in each state. When looking at Source vulnerabilities they examined available fossil fuel resources, renewable energy potential, and carbon sequestration strategies (such as REDD carbon offsets, or underground sequestration potential). When looking at Impact vulnerabilities they examined agricultural impacts, sea level rise, and natural climatic hazard risks. This analysis reveals that of the 20 largest GHG emitting states, 12 of them have a "low" stake in advancing a strict climate regime, 6 have a "medium" stake, and only 2 have a "high" stake (Mexico and the Philippians). Most discouraging is the that those with a "low" stake a creating a climate regime were some of the largest emitters such as China, India, the US, and many of the

large economies within the EU (such as the UK and Germany). These, coincidentally, are the same proponents of "Cancún." Alternatively, Bolivia is seen as having "low" Source vulnerability and "high" Impact vulnerability, thus inclining them to have a "high" stake in a strict climate regime. 125

In looking solely at these data it becomes a bit more clear why each government advocates for their respective position: the governments of industrialized countries that are dependent upon fossil fuels and believe they have a low vulnerability to the impact of climate change would advocate for a weaker, voluntary climate regime similar to the one put forth in the "Cancún." Alternatively, the governments of less-industrialized countries that are less-dependent upon fossil fuels with a perceived vulnerability to the impacts of climate change are more likely to advocate for a stricter climate regime, perhaps one similar to "Cochabamba." Of course, this analysis is somewhat simplistic and ignores other geopolitical factors that ought to be taken into account (such as energy and environmental politics, or the role of civil society).

First, one can look at the EU as perhaps the strongest advocate of climate policy, and they have arguably been the nations who have put in place the strongest climate regime policies, and have together negotiated within the UNFCCC for a stricter climate regime in comparison to other industrialized nations. Given the analysis of Buys and colleagues, this would not make sense, given that they are not the countries in the world with the "highest" stake in negotiating for strict climate policy based off of their analysis. However, data suggest that they are among the most progressive in this field. A study conducted at Yale and Columbia Universities looked at a wide array of climate-related indices and determined that the five countries in the world that have the strongest climate regimes are in fact Sweden, Norway, Finland, Switzerland, and the non-European middle-income country of Costa Rica. Anthony Giddens looked further into what these countries, and others who have been somewhat successful in advancing national and/or European climate policy (such as the UK and Germany), to see what characteristics these governments had in common. First, all five of these countries are democracies, in stark contrast to other totalitarian or authoritarian regimes who tend to advance technology and investments in their military rather than the environmental sphere. Second, with a few exceptions, most countries with stronger climate protections advance these policies more out of a desire for energy

independence and the economic benefits of energy efficiency rather than concern for climate change. The fact that climate-related policies often reinforce or complement these other state policies has helped move them forward. Third, these countries have also seen their GHG-intensive industries (such as manufacturing) decline nationally and move production to other "developing" countries, such as China or India. Thus, the levels of GHG emissions in these countries would likely be higher if more goods were produced nationally, and the process of moving production elsewhere has contributed significantly to increased emissions elsewhere.

However, this is not to say that EU governments advocate for as strict a climate regime as the one found in the "People's Agreement of Cochabamba." Instead, they formally support a regime similar to the Kyoto Protocol, but with calls for increased participation from other industrialized countries (namely the US and China) and with slightly stricter emissions reductions targets. The EU has formally called for industrialized countries to reduce their emissions from 1990 to 2020 by 30%, and pledged to reduce their own emissions by 20% in this time with another pledge to increase this to 30% if other industrialized nations reduce their own. The EU has chosen to do this through the utilization of a market-based approach and has established the European Emissions Trading Scheme (ETS) in 2007. Unfortunately, this was a relatively weak carbon market that included numerous giveaways and exemptions to the biggest polluters and has so far failed to significantly reduce emissions. Thus, Anthony Giddens has summarized the EU's climate policy as "too much talk, too little action". ¹²⁸

Thus, the EU governments remain a proponent of a stronger climate regime than currently exists within the Kyoto Protocol; however they do not go as far as the Bolivians and instead merely advocate for market-based approaches, albeit with mandatory participation. This sets them apart from the United States government, which has refused to sign onto the Kyoto Protocol. The US is arguably the main force behind the "Copenhagen Accord" and "Cancún." Additionally, the US Special Envoy for Climate Change Todd Stern argued that "Cancún" was "fundamentally consistent with US objectives" in climate negotiations. But what are the US objectives in climate negotiations? Bill Clinton, US president during the Kyoto Protocol negotiations, was originally reluctant to agree to any mandatory emissions reductions,

however he did come around to this and supported the Kyoto Protocol. Unfortunately, the US Congress voted unanimously against any agreement that did not mandate emissions reductions for other countries as well, which the Kyoto Protocol did not. Later, US president George W. Bush, already a climate skeptic with close ties to the fossil fuel industry, argued that China might gain competitive advantage over the US. ¹³⁰ Aside from international geopolitical concerns, the US also has significant domestic opposition to a strict climate regime. Most popular among them is the fossil fuel industry, which has strong influence in the US political system. Left-leaning organizations, such as organized labor within the US, have also historically been opposed to a strict climate regime for fears that it would exacerbate the US unemployment issues. Both of these issues will be further unpacked later in this paper.

For the reasons discussed above, much of the world has begun to regard the US as the primary obstacle to achieving a mandatory post-Kyoto Protocol climate regime. However, the US is no longer the world's largest emitter of GHGs. It is second to China, and many climate negotiators thus believe that the US-China relationship in climate negotiations will ultimately drive international climate policy. And so far, it largely has - "Cancun" was originally developed between the US and China. Obviously, the nondemocratic Chinese government does not have the same pressures from civil society as the US and EU governments do. But they are not ignorant to the fact that climate change will have a profoundly negative impact on many Chinese people, and this has been accepted by Chinese government officials. Specifically, millions of Chinese people depend on China's river network for survival, but melting glaciers that are the source of these rivers are expected to become a major problem in the near future. This would also negatively impact the Chinese energy sector, which is highly dependent upon hydroelectricity. 131 Despite these acknowledgements, Chinese President Hu Jintau recently said that China would not accept any mandatory emissions reductions of any kind because Chinese per capita emissions are relatively low, and they have historically not emitted as much as other Western industrialized countries that were able to develop their industrial economies freely emitting GHGs. He also argued that "China's central task now is to develop the economy and make life better for the people," and mandatory emissions reductions would hinder their ability to do so. 132 For this reason, the Chinese

government has put forth their own Climate Change Plan in 2006 which does agree to move in the right direction, albeit not nearly far enough to meet GHG emissions reductions recommended by the IPCC. For example, it pledges to produce 16% of Chinese electricity from renewable sources by 2020, but doesn't anticipate a peak in GHG emissions anytime soon.¹³³

Therefore, in merely looking at China, the EU, and the US, one can see that the political priorities of the political classes and national policy makers in each country are not advancing any kind of strict climate regime similar one advocated for by the "Cochabamba." Instead, there is agreement on the need to act to do something about climate change and there is support for market-based policies; however only the EU right now will commit to mandatory reductions. Thus, the best deal that can be struck between them is, in effect, "Cancún."

"Wealthy Countries" v. "Resource Poor Countries"

A point that has been emphasized in this paper repeatedly is that while most of the GHG emissions that have caused anthropogenic climate change have come from industrialized countries, the bulk of the negative impacts from climate change will be felt by the poorest, least-industrialized countries. This simple example of dramatic inequality should compel policy makers to do something to provide the massive level of assistance that resource poor countries require. However, there are less-altruistic reasons that wealthy countries like the US should be concerned about the negative impacts of climate change on resource poor countries, and chief among them tends to be stability and security concerns. ¹³⁴ Regardless, a simple analysis of the vulnerabilities that resource poor countries have to impacts of climatic change would lead many of them to take a stake in climate negotiations that would require mandatory emissions reductions and significant assistance to poorer nations, and also include various human rights protections. For this reason, one would think that many of the poorest countries would advocate for a policy proposal along the lines of the "Cochabamba." On the climate finance issue alone, the amount of financial assistance to poor countries called for in the "Cochabamba" (6% of global GDP by 2020) is remarkably higher than what is called for in "Cancún" (.5% of global GDP by 2020).

increasingly skeptical and critical of allowing transnational institutions controlled by wealthy countries to be responsible for administering the climate regime, which is why there was significant resistance to allowing the World Bank administer the Green Climate Fund (GCF), even though some safeguards were put in place to make it more transparent and accountable to resource poor countries vulnerable to climate change. Given these inclinations, why is Bolivia the only country to reject "Cancún," while every other country that originally rejected it signed on just one year later?

There are a few explanations to this question. The most commonly held position was that negotiators for developing countries realized after Copenhagen that they were somewhat powerless in pushing for a stricter climate regime when ultimately any deal that does not have participation from the world's largest polluters (most notably the US and China) will be futile. Therefore, they felt compelled to sign on to anything that could potentially move in the direction of any post-Kyoto climate regime. However, there is also evidence that demonstrates that many poor countries were co-opted and/or coerced (namely by the US and EU governments) into accepting "Cancún."

Many of recently leaked diplomatic cables from the whistleblower website "Wikileaks" demonstrate how the US and EU governments co-opted and/or coerced opponents of the "Copenhagen Accord." One cable from US Deputy National Security Advisor Michael Froman described US frustrations with the BASIC (Brazil, South Africa, India, and China) countries' negotiating. He writes:

It is remarkable how closely co-ordinated the Basic group has become in international fora, taking turns to impede US/EU initiatives and playing the US and EU off against each other. Basic countries have widely differing interests, but have subordinated these to their common short-term goals. The US and EU need to learn from this co-ordination and work much more closely and effectively together ourselves, to better handle third country obstructionism and avoid future train wrecks on climate, Doha or financial regulatory reform. ¹³⁵

This cable clearly demonstrates that the US recognizes it must take a strong negotiating stance in collaboration with the EU, and diplomatically pressure many key players within the UNFCCC into accepting their position.

Another cable specifically mentions how the US planned to engage one of the biggest and most reluctant climate skeptics, Saudi Arabia. In a cable with the subject line "Two faces of Saudi Arabia's

climate negotiating position" the US Ambassador James Smith says:

Saudi officials have suggested that they need to find a way to climb down gracefully from the country's tough negotiating position. More sustained engagement in co-ordination with other governments, particularly if pitched as an effort to develop partnership, may help them do so... Saudi officials are very eager to obtain investment credits for carbon capture and storage (CCS) and other technology transfer projects. ¹³⁶

This cable demonstrates that the Obama Administration believes that some countries, in this case Saudi Arabia, can be co-opted into accepting a deal if certain investments/aid can be promised.

Two other cables demonstrate a similar admission of US manipulation of climate-related aid to gain support. In a cable dated just two weeks after the "Copenhagen Accord" was put forth in December 2009, the Maldives' Ambassador to the US, Abdul Ghafoor Mohamed wrote to US Secretary of State Hillary Clinton expressing eagerness to back the deal. This is remarkable because, as a small island nation whose existence is greatly threatened by potential sea level rise, the Maldives has historically been a strong and vocal advocate for a very strict climate regime. However, in another cable Ghafoor told US Deputy Climate Change Envoy, Jonathan Pershing, that the Maldives wanted "tangible assistance" and argued that other reluctant countries would then realize "the advantages to be gained by compliance with the accord." Cables then went back and forth and Pershing encouraged Ghafoor to "provide concrete examples and costs in order to increase the likelihood of bilateral assistance." He did so and detailed specific climate-related projects totaling \$50 million. Following this exchange, Connie Hedegaard, the EU Climate Action Commissioner, told Pershing "the Aosis [Alliance of Small Island States] countries could be our best allies given their need for financing." Here, the EU and US climate negotiators clearly realize that manipulation of and/or promises of climate-related aid could result in increase support from resource poor countries.

Another cable reveals a similar interaction between the US and the African Union (AU). The cable summarizes a meeting between US Undersecretary of State Maria Otero and Ethiopian Prime Minister Meles Zenawi, who also leads the AU's climate negotiations. In the cable, "Otero urged Meles to sign the Copenhagen accord on climate change and explained that it is a point of departure for further discussion and movement toward the topic." In essence, she refused to continue foreign aid related

discussions until he agreed to support the Copenhagen Accord. He then did so, but voiced concern that the US would not follow through on its pledges of climate aid. Again, these demonstrate that the US sees resource poor countries as vulnerable to climate change and in desperate need for aid. This can be used as a way to co-opt them into signing on to a climate deal that may not be as strong as they would require or demand.

One last cable demonstrates outright coercion on behalf of the US and EU climate negotiators, specifically towards the more reluctant Latin American countries, including Bolivia. In a cable between EU Climate Action Commissioner Connie Hedegaard and US Deputy National Security Advisor Michael Froman, Hedegaard reassured the US of their support despite the fact that they publically condemned the accord for not going far enough. According to Hedegaard, this was merely political positioning, and she claimed that the US and EU needed to work together to "neutralize, co-opt or marginalize unhelpful countries including Venezuela and Bolivia." She then went on to note "the irony that the EU is a big donor to these countries." This threat was followed up months later in April 2010 when the US cut off millions of US dollars in aid to Bolivia and Ecuador, citing their opposition to the Copenhagen Accord.

These leaked diplomatic cables and the ensuing manipulation of climate-related aid reveal that there was a coordinated effort on behalf of the US and EU governments to co-opt and/or coerce resource poor countries and others who are reluctant to sign onto a weak climate regime. It is therefore no mystery why Bolivia remained the only country in the world to oppose "Cancún," and for doing so it lost a significant amount of US foreign aid. This strategy of co-optation and coercion by wealthy Western governments in order to further neoliberal global governance is similar to many of the tactics utilized by the same governments, sometimes through institutions such as the IMF and World Bank, to spread neoliberal policies in the past. 141

The Political Economy of the Energy Industry and Climate Policy

The issue of anthropogenic climate change is intrinsically interwoven with energy policy. The emission of GHGs that has caused climate change has come from the extraction and burning of fossil fuels, and the dominance that this energy form has over the global economy is apparent. As noted above,

Anthony Giddens' analysis of the countries with the strictest climate policies reveals that concerns about energy security tends to trump concerns about climate change in terms of national political priorities of Western governments. There is a whole host of geo-political reasons for why countries would want to abandon fossil fuels aside from concerns for climate change, such as energy security and independence, the volatile price of oil, political and military conflict with, between and among oil-producing states, etc. And the alternative and renewable energy sectors have grown significantly in recent decades and continue to play an important role in shaping both international energy policy as well as climate policy. I will not delve into the complexities of these political realities and their role in geopolitics here, but rather focus on the role that energy industries have played in shaping climate policy given the significant, widespread influence they have in influencing government representatives responsible for framing and implementing these climate policies.

Fossil Fuel Industry

The fossil fuel industry is often blamed for being one of the biggest political obstacles to advancing climate policy around the world (specifically in the US), and in many ways this is arguably true. Any effort to make mandatory reductions in GHG emissions will ultimately lead to reduced production and consumption of fossil fuels, and thus lead to reductions in revenues and profits for the industry as a whole. For this reason, the fossil fuel industry is blamed for obstructing climate policy in two major ways: 1) actively lobbying and influencing electoral politics (especially in the US) against advancing climate policy nationally and internationally and 2) muddling the scientific debate around climate science to manipulate public opinion. And the fact that the fossil fuel industry is among the most profitable industries on the planet ensures that they have considerable capital and resources at their disposal to accomplish both of these goals.

First, the fossil fuel industry is among the largest industries that lobby and influence electoral politics in the US. According to the Center for Responsive Politics, in 2008 the oil and gas industry was the 9th largest contributing industry to US Federal elections, giving over \$6.2 million to candidates, 86% of whom where Republicans opposed to any climate policy.¹⁴³ Just one year later, when the Congress that

was put into power by that election voted on a very modest domestic market-based climate bill (the American Clean Energy and Security Act, or "ACES Act"), it barely passed the US House of Representatives and only gained support of 8 of the 179 Republicans there. Soon after, the bill failed to become law because it was never voted on in the US Senate due to a Republican filibuster. This is but one example of the influence that the fossil fuel industry has had on domestic climate policy in the US. Given the influence that it has over domestic politics within the US it is clear why the US never signed onto the Kyoto Protocol and has been reluctant to accept any mandatory emissions reductions.

The direct influence of the fossil fuel industry on US electoral politics is just one way in which they have influenced climate policy. The second, and perhaps more impactful, method for obstructing climate policy has come through the funding of public relations campaigns and opposition research to obstruct the complexities of climate science, especially among the US public. The book "Merchants of Doubt" by science historians Naomi Oreskes and Erik Conway describes in detail how various industries fund research to obscure data and confuse the public on important complex scientific issues, from tobacco use to acid rain to ozone depletion to climate change science. Specifically, they note how the fossil fuel industry is responsible for funding scientists specifically for the purpose of obscuring climate science and confusing the public into thinking that there is still considerable scientific uncertainty about whether or not human activity is responsible for climate change, or if the climate is in fact really changing. At every step in the process (funding of climate-related science, publishing scientific data, communicating scientific findings to the public, etc.) the fossil fuel industry has obscured the debate and influenced public opinion, and this has been largely successful in reducing support for climate policy within the US.

Perhaps the most damaging public relations fiasco for climate science came just before the UNFCCC summit in Copenhagen in December 2009, which became known as "Climategate." The supposed scandal involved the release of hacked e-mail correspondences between top climate scientists discussing how to communicate their scientific findings to the public. Many climate skeptic groups seized on these correspondences as "evidence" that climate scientists were coordinating a conspiracy and manipulating their data to mislead the public. The news media quickly picked up on this story and it

became the topic of discussion in many news reports covering the climate negotiations taking place in Copenhagen. The impact that "Climategate" had on US public opinion was palpable, especially just prior to what was considered the most important climate summit in history. A Yale and George Mason University poll found that in November 2008, 71% of Americans agreed that the earth's climate was warming. Just five weeks after "Climategate" broke, that number had dropped to 57%. These researchers concluded that "Climategate had a significant negative effect on public beliefs in global warming and trust in scientists." And a separate poll conducted by the polling firm Gallup found that in 2010, following "Climategate," 46% of Americans believed that the threat of climate change was "greatly exaggerated," up from just 30% in 2007. 146

One of the leading scientists at the center of the controversy was climatologist Michael Mann. He commented on the supposed scandal by saying, "Climate science has basically been at the receiving end of the best-funded, best-organized smear campaign by the wealthiest industry that the Earth has ever known—that's the bottom line." ¹⁴⁷ And that industry is the fossil fuel industry, which has stood against climate policies not only in the US but also around the world, fighting with policy makers and climate scientists and the public to delay, weaken, or destroy any form of climate policy from becoming law.

Until this point I have talked about the "fossil fuel industry" as a singular, homogenous entity. However, this does not accurately reflect the complexities and differences among companies within the fossil fuel industry. A significant amount of research has been conducted on the various positions that oil companies have taken with regards to climate policy, and not all of them are openly hostile or opposed to climate policy that calls for mandatory reductions in GHG emissions. Sybille van den Hove and colleagues published a study in 2002 looking at the climate change strategy of three different oil companies: ExxonMobil, TotalFinalElf, and BP Amoco, and generally broke them up into three categories: "fight against emissions constraints," "wait and see," and "proactive" strategies, respectively. The first company, ExxonMobil, places their focus on maximizing business profits while publically downplaying any connection between anthropogenic climate change and GHG emissions.

TotalFinalElf, alternatively, simply avoids responsibility for climate change by focusing on maintaining

business as usual without actively engaging in any public campaigns or actively putting in place any business strategy having to deal with climate change. The last example of BP Amoco was an example of a large oil company that publicly recognizes the legitimacy of anthropogenic climate change and is actively involved in modifying their business practices to address it, however they will only do so as far as this is profitable. BP, formerly "Beyond Petroleum," has rebranded itself to be "Beyond Petroleum" and has engaged in a public branding campaign to pitch itself as the energy company of the future, making significant investments in alternative energy technology, and has publicly lobbied in favor of climate policy. However, BP is not acting altruistically here; they are making a calculated business decision. In looking at the future of the energy sector in the world, they have decided to move their investments in alternative energy and actively lobby in favor of market-driven policies requiring mandatory reductions in GHG emissions, albeit weaker reductions than most climate scientists recommend are required, because these policies often come with subsidies for the investments they are making in renewable energy, thus boosting their profits. This demonstrates that there is a split in opinion between oil companies regarding what climate policy to pursue, how to best position themselves for future profit making, and how to best utilize their influence in their respective political systems.

A later study by Ingvild Andreassen Saeverund and Jon Birger Skjaerseth confirms a similar trend in the development of climate strategies among oil companies. Looking at some of the same companies, they find that ExxonMobil actively lobbies the US government against any climate policy requiring mandatory emissions reductions and argues that this company was "instrumental" in the US decision to reject the Kyoto Protocol. In contrast, the oil companies Royal Dutch Shell and BP actively pursue the possibility of new market opportunities within climate policy, and have set an example among oil companies in terms of reporting and verifying their own GHG emissions as well as developing emissions trading schemes similar to the European ETS created in 2007. However, Saeverund and Skjaerseth found that while there were large differences in the *strategy formulation* between these companies, their actual differences in *implementation* of these strategies was much more similar.

In looking at actual spending of the largest fossil fuel companies, many of these themes become

apparent. Figure 6 (below) gives a snapshot of the "Big 5" oil and gas producing companies' profits and investments in 2008 (in millions USD). These data demonstrate the priorities of the largest oil companies in the world. ExxonMobil, the by far the largest and most profitable company, made roughly \$45 billion in profit in 2008 (which was among the top world records for annual profits by a corporation in world history). A vast majority of this profit went back to investors and executives, and only .02% of it went towards investments in renewable energy, while more than three times that amount (over \$30 million) went towards influencing the 2008 US federal elections with the goal of preventing any climate policy from emerging. Alternatively, BP, which made much less in profit, made significantly greater investments in renewable energy (150 times more than that of ExxonMobil).

Oil Company Data (2008)	Exxon	Shell	BP	Chevron	Conoco
	Mobil				Philips
Profits (millions)	\$45,220	\$26,288	\$21,157	\$23,940	\$16,830
Amount invested in stock buybacks and dividends	\$40,100	\$13,307	\$11,644	\$8,000	\$11,029
Amount invested in renewable energy	\$10	\$500	\$1,500	\$1,250	\$650
Political contributions to 2008 US federal elections	\$1.2	\$0.3	\$0.5	\$1.0	\$0.7
Lobbying in 2008	\$29.00	\$3.3	\$10.5	\$14.5	\$8.5

Figure 6 – Profits and Investments of the "Big 5" Oil Companies for 2008 (in millions USD) 150

Research by David Levy and Ans Kolk examined why these oil companies take different strategies in their approach to climate policy and found that it had to do with a number of institutional factors, mainly 1) regulatory expectations, 2) norms concerning the conduct of business-government relations, and 3) cognitive assumptions of executives within each company regarding the future of fossil fuels and substitute technologies. Levy and Kolk attributed these institutional factors to the political context of the home-country for these oil companies, with US-based oil companies (like ExxonMobil) taking a more hostile stance towards climate policy and European-based oil companies (like Royal Dutch Shell and BP) taking a more accommodating stance towards climate change policy.

"Alternative Energy" and "Renewable Energy"

As discussed above, fossil fuel companies play an active and significant role in the creation of national and international climate policy making, especially in the US and EU countries. And, in the case of companies like BP, some oil and gas companies have begun actively diversifying their investment

portfolios to include alterative and renewable forms of energy. However, recent decades have also seen a rise in independent alternative energy and renewable energy companies. But not all forms of "alternative energy" are necessarily "renewable" and there is considerable debate within scientific circles about the ecological impact of various energy sources, and political and economic circumstances that continue to shape which technologies receive investments and which do not.

In his book "Global Energy Shifts: Fostering Sustainability in a Turbulent Age," Bruce Podobnik examines historical energy shifts (first from coal, then to oil) and discusses the current state of alternative and renewable energy politics. He begins with a discussion about why a global energy shift is currently underway, with political considerations about energy independence, concerns about "peak oil," market competition for finite energy sources, and climate change all converging to encourage global leaders to encourage energy alternatives to oil. The alternatives he primarily focuses on are 1) natural gas, 2) nuclear power, and 3) "renewables" (including hydroelectric, biofuel/biomass, wind, solar, geothermal, and tidal).

Natural gas is perhaps the number one alternative fuel promoted by the governments of industrial countries and alternative energy companies. Podobnik points out that natural gas is still a fossil fuel, however it is "the least environmentally harmful of all hydrocarbons," and it "generates 40% less carbon dioxide than oil and 75% less than coal." It is currently heavily pursued in many industrial, urban centers (Podobnik cites Shanghai and Los Angeles as two primary examples). However, there is considerable controversy over the method for extracting natural gas, called hydraulic fracturing (or "fracking") which research has shown can be highly dangerous to human health, local water supplies, and natural ecosystems. Additionally, while the burning of natural gas does emit less carbon than oil and coal, when the process of "fracking" is taken into account some experts believe it releases the same amount, if not more, of carbon than oil. Still, Podobnik believes that given the large resources of natural gas deposits recently discovered coupled with the need for governments to diversify their energy supplies, natural gas is likely to play a significant role in alternative energy of the future. However, it is unclear what role natural gas will play in climate policy given that it still emits GHGs, with energy

companies arguing for subsidies and increased access to natural gas as an alternative to coal and oil, while environmentalist groups continue to attack it as an inappropriate form of alterative energy.

Nuclear power is another controversial form of alternative energy. As Podobnik points out,

Nuclear power generates a lot of electricity while resulting in little to no GHG emissions. However,
while nuclear waste does not directly contribute to climate change, there is still no proven safe and
effective way of disposing it. And there is question about GHG emissions emitted during the construction
of nuclear power. Economically, nuclear power is not feasible without significant assistance from
governments, primarily through the use of subsidies, so there is intense lobbying on behalf of nuclear
power companies to continue and even enhance these subsidies in various climate-related policies.

However, as Podobnik points out, there is also geopolitical concerns about the ability of nuclear power to
be an important alternative energy source for the world given that with nuclear power often comes
geopolitical security concerns and the proliferation of nuclear weapons. For this reason, Podobnik does
not believe that nuclear power will be the focus of the next energy shift.

There are many energy sources that are included in Podobnik's "renewables" category, which currently produces about 3% of the global energy supply. Most prominent among these are hydroelectric dams, which accounted for roughly 2.7% of commercially produced energy in 2000. However, hydroelectric dams have been highly politicized for their devastating human-ecological impacts across the world, including but not limited to countries like India and China. The World Commission on Dams estimates that "somewhere between forty and eighty million people have been displaced by dams, while many ecosystems and culturally valued sites have been inundated." And the people who are most impacted and displaced by dams tend to be indigenous peoples, peasants, and poor rural farmers.

Another form of "renewable" energy that Podobnik discusses is the use of biofuels/biomass. This makes up most of the renewable energy portfolio for industrial countries (roughly 89% of the OECD countries' "renewable" energy portfolios). However, there is controversy around how "renewable" these fuels are, given that they are at best carbon-neutral, but often require the use of fossil fuels to produce and transport. They also place considerable strain on global food resources and have been accused of

contributing to recent global food crises that have primarily affected the poor. ¹⁵⁸ Despite these concerns, biofuels remain a major part of industrialized countries' energy portfolios, especially given that many of their agricultural systems are heavily subsidized. Therefore, biofuels will continue to be debated.

Because of these impacts and the ensuing political opposition, Podobnik believes other forms of renewable energy hold more promise, but still remain far off. These include wind power, solar power, geothermal and others. These technologies are for the most part zero-emissions technologies (except for in their construction), but remain costly. They currently make up about 5% of industrialized countries' renewable energy portfolios, and less than 1% of energy production worldwide. 159

In each of the alternative energy technologies mentioned above a number of obstacles stand in their way of widespread use to replace oil and coal. First and foremost, they all compete with oil and coal in terms of cost, and these dirty sources of energy have a vast global infrastructure in place making them often the cheaper option. Without government assistance, they are not likely to be competitive with fossil fuels. Geopolitical concerns prevent states from advocating for technologies like nuclear power. And political and social groups have organized against the use of controversial technologies like natural gas and biofuels. And there are environmental concerns around nearly all of these options, with many environmentalists advocating for wind and solar as the least-ecologically damaging options.

As with the fossil fuel industry, alternative and renewable energy companies are profit-seeking, and therefore they all lobby policy makers to be included in climate policy. However, these companies all lobby for market-driven solutions similar to those found in "Cancún" because they will benefit from carbon markets, subsidies, and technology transfer mechanisms that are likely to result. Thus, they all stand opposed to strict, anti-market-driven and rights-based climate policies like the "People's Agreement of Cochabamba." It is clear that energy industries, both fossil fuels and alternatives, play a significant role in shaping climate policies, but do so almost exclusively for market-based solutions.

Global Civil Society and Climate Policy

So far, I have explored how state politics and the political economy of various energy industries have shaped and disciplined the climate policy debate. While these factors have largely been responsible

for explaining what happened at the UNFCCC, one must also look into the effect that global civil society has had on these debates, especially those in the US and Europe who have so far been largely responsible for shaping the debate and advancing the neoliberal solutions of "Cancún." Here, I will look primarily at the role of 1) Environmentalist Organizations, 2) Organized Labor, and 3) the role of organizations and social movements in the "Global South" (e.g. peasants, farmers, and indigenous peoples).

Environmentalists Organizations

While the official negotiators within the UNFCCC are representatives of state governments, environmentalist organizations play a rather significant role in the process. They mobilize support from the public, lobby governments and UNFCCC delegates, and attempt to advocate for strong climate policies to protect the environment. However, like with the energy industry, there is a diversity of opinions among environmentalist organizations about their approach to climate policy.

At the conclusion of the UNFCCC summit in Cancún, it was praised by many large international environmental organizations. Greenpeace International proclaimed, "governments in Cancún, Mexico, have chosen hope over fear and put the building blocks back in place for a global deal to combat climate change." Oxfam International celebrated the "Cancún Agreements" in a press release titled "Cancún: The Building Blocks Have Been Laid." The Natural Resources Defense Council (NRDC) called the "Cancún Agreements" a "foundation from which to build greater international action on global warming." The World Wildlife Fund (WWF) greeting the deal as positive news with their press release titled "Cancún Gives Climate Talks New Life." And the conservation group Conservation International claim the "Cancún Agreements set forth a balanced package of decisions" that "represent a critical step for reinvigorating the international climate change policy process." Many of these organizations pointed to the creation of the Green Climate Fund, the agreements on carbon offsets like the Reducing Emissions through Deforestation and forest Degradation (REDD), and the commitments by governments around the world to voluntary GHG emissions reductions as positive signs of moving the climate regime agreement forward while also recognizing that there is still much more work to be done.

However, not all organizations felt that the deal was good for the environment, or that it was an

encouraging step in the right direction. The Indigenous Environmental Network released a statement where they "express their outrage and disgust at the [Cancún Agreements] that have emerged from the COP16 talks," and claimed that what happened in Cancún was a "betrayal" calling the UNFCCC the "WTO of the Sky" (in reference to the neoliberal trade organization the World Trade Organization). 164 Friends of the Earth US released a statement of mixed reactions to the "Cancún Agreements" calling them a "wholly inadequate response" because of the "embrace of the 'pledge-based' paradigm, with rich countries polluting however much they like." They do, however, point to the creation of the Green Climate Fund as a positive development, while criticizing it for coming "nowhere close to providing sufficient funding to developing countries," and for inviting the World Bank to be trustee of the fund (another neoliberal institution). The ETC Group, an international organization dedicated to the conservation and sustainable advancement of cultural and ecological diversity and human rights, released a report claiming "the failure of Copenhagen was evident, as was the coup-like attempt of the most polluting countries to impose their will and free themselves from any responsibility. Cancún saw the imposition of an expanded version of the failed Copenhagen text, but this time with the participation of almost all governments except Bolivia."166 These organizations all criticize "Cancún" as a bad deal and a step in the wrong direction. They cite the modest and non-mandatory GHG emissions reductions, the lack of climate funding provided, and the imposition of neoliberal policies by wealthy, polluting countries on poorer nations of the "Global South" as their primary areas of concern.

What accounts for the differences in positions between these environmental organizations? The answer to that question is similar to the reason for diversity among corporations in the energy industry: understand the context within which these organizations operate, and follow the money. The environmental organizations that are mostly based in the "Global North," or primarily in the US and/or EU, have their views shaped largely by the political and economic contexts within which their climate policies are formed, and thus many of them supported "Cancún." The organizations that most heavily criticized the agreements come primarily from the "Global South," and represent indigenous peoples, peasants, and resource poor countries that are most vulnerable to climate changes (with the exception of

Friends of the Earth US, who criticized the agreements while acknowledging some modest successes).

Another important element operating behind the scenes has to do with where these environmentalist organizations are funded. Journalist Johann Hari looked at the issue of financial ties between environmental organizations and polluting industries, and how this affects their climate advocacy work. He begins by asking why did US-based environmentalists go to Copenhagen to "lobby for policies that will lead to... runaway global warming? Why are their lobbyists dismissing the only real solutions to climate change as 'unworkable' and 'unrealistic,' as though they were just another sooty tentacle of Big Coal?" He argues that many of the environmental organizations that ended up lobbying on behalf of the "Copenhagen Accord" were organizations that have accepted significant financial contributions from GHG polluting industries. He singles out the organization Conservation International for accepting large sums of money from BP as an example of a shift from a previous trend when environmental organizations used to be funded by individual members, holding big polluting companies accountable. However, Hari notes that this began to change in the 1990s when they began making partnerships with polluting industries, which influenced their advocacy actions to be more conducive to the interests of polluters. ¹⁶⁸

Environmentalist organizations, while perhaps not as powerful as state governments and with fewer resources at their disposal than most corporations in the energy industry, do still play a role in advocating for climate policy. As demonstrated above, many of the largest environmental NGOs from the "Global North," dependent upon wealthy donors or corporate contributions to stay alive, have leant their support to "Cancún" and the market-driven solutions to climate change because they are consistent with the political and economic contexts within which they exist. Alternatively, smaller environmental organizations from the "Global South" have generally remained critical and outspoken in their opposition to the agreements as being too weak, too inadequate, or too neoliberal in orientation.

Organized Labor

Another important sector of civil society that does have influence over policy-making, especially in the US and EU countries, is organized labor. While on the surface climate change may appear to be a separate issue from employment, the impacts of climate change and climate change policy on

employment will be substantial. For this reason, unions have been actively engaged in climate and energy policies. However, different unions have different approaches to climate policy depending on where the union is from, or what industry they are in. Sometimes the issue can pit one union against another, or unions against environmentalist organizations. For example, the American Federation of Labor – Congress of Industrial Organizations (AFL-CIO), a federation of 57 unions in the US representing over 12.2 million workers, was outspokenly opposed to the Kyoto Protocol. In the late 1990s, AFL-CIO lobbied then US President Bill Clinton to oppose the Kyoto Protocol, saying that if the treaty were ratified it would give incentives to US businesses to move offshore in search of cheaper labor and fewer environmental regulations, which they claim will ultimately cause the loss of 900,000-1.5 million US jobs. They also cite any form of carbon tax or carbon trading scheme that would increase the cost of electricity as reasons for opposing any climate policy because it will drive up the cost of living for middle class workers. Many other unions have shared these anti-climate policy concerns, most notably unions representing workers in the coal and oil industries. In 1999, the President of the United Mine Workers of America (UMWA) testified before the US Congress and said this of the Kyoto Protocol:

We believe that proposed greenhouse gas reduction policies will result in lost jobs, lost economic output, lower wages, higher energy prices and higher trade deficits for America. The effects will be particularly harsh on low-income workers and seniors living on fixed incomes. And we will have created a perverse economic incentive for American companies to relocate operations abroad. ¹⁷⁰

Many unions have historically had issues with strict climate policies for fears that they would have a negative economic impact and ultimately hurt workers in Western countries.

However, there has been a notable shift in the attitudes of organized labor in many Western countries in the past decade. Anthony Giddens writes of the recent trend referred to as a "Climate Change New Deal" in which the focus is not so much on lost jobs from GHG emitting industries, but instead on job creation in renewable energy and other "green" technologies.¹⁷¹ Many countries in Europe, particularly Germany, tout job creation in sectors like wind energy as examples of this; however, as Giddens points out, most new technologies reduce the need for labor. For instance, wind and wave energy technologies typically require fewer jobs per unit of electricity when compared to coal-mining.¹⁷²

Additionally, the UN Environment Program (UNEP) recently published a report on the employment impacts of environmentally-friendly jobs and climate policies. The report recognizes that some jobs will be created, some jobs will be destroyed, and others will be transformed to adapt to changes in industry. This process of "creative destruction" will pose a challenge to workers in many industries, which is why the UNEP recommends policy makers consider employment issues when crafting climate policy. 173

Similarly in the US, the former chief advisor on "Green Jobs" to President Barack Obama, Van Jones, wrote a book called the "Green Collar Economy: How One Solution Can Fix Our Two Biggest Problems" in which he argues that the key to economic recovery and creating lasting jobs within the US will come through a market-driven climate based policy. ¹⁷⁴ He argues that jobs in renewable energy and "green" technology, including jobs like weatherizing buildings, are jobs that cannot be outsorced. He argues that the US government should take an active role in combining strong employment protections to help manage the "creative destruction" from old, "dirty" energy jobs as they transition to new, "green" jobs. A lot of these jobs will be created through new investments in infrastructure and weatherization programs in the US, financed through carbon-trading or a carbon-tax, and would need to be combined with job training programs to prepare workers who would otherwise be left out of this transition.

Namely, Jones singles out people of color, who have higher rates of unemployment in the US, as important groups to target with these policies to ensure economic and environmental justice.

Given the diversity of opinion among various groups of organized labor, and the varying impacts that both climate change and climate change policy will have on employment, organized labor will continue to play a role in shaping the climate policy debate. But again, as with the trend in the energy industries and environmental organizations, most factions of organized labor in favor of mandatory GHG emissions reductions advocate for market-driven climate policies that would stimulate economic growth and create new jobs in various "green" technologies.

The "Global South": Peasants, Farmers, and Indigenous Peoples

Thus far in this chapter, most of the political economic forces that have shaped the climate policy debate have been from within the "development discourse." They have largely been the actors,

institutions, and incentives that have promoted neoliberal policies around the world for decades: national governments of wealthy Western states, large private corporations, and big environmental NGOs and federations of organized labor. Their interests are not exactly the same, however they do overlap in this instance and form a coalition of sorts. They operate within mostly Western-dominated institutions and environments, and are accountable to political and economic power rooted in industrial capitalism. Thus, most of the support from these organizations tends to promote weak, market-driven climate proposals similar to "Cancún." While only one state, Bolivia, refused to sign onto these agreements, and instead put forth the "Cochabamba," a number of civil society organizations from the "Global South" have supported them while refusing to support "Cancún." These groups are primarily representatives of various peasants, farmers, and indigenous peoples, and they largely embody the poststructural critique of development and sustainable development discussed in Chapter 1.

Perhaps the largest and most actively vocal groups leading this movement is La Via Campesina, a network of 150 organizations in 70 countries with more than 200 million members. They refer to themselves as "the largest movement of peasant farmers and artisanal food producers in the world." In their official statement on their opposition to "Cancún" they argue that "no agreement is better than a bad agreement," citing opposition to the basic tenants of the "neoliberal" climate deal: weak and non-binding GHG emissions reductions, REDD carbon offsets, CDM carbon credits, the imposition of industrial agriculture, and the involvement of neoliberal institutions such as the World Bank. ¹⁷⁶ Instead, La Via Campesina has called for passage of the "Declaration of the Rights of Mother Earth" and voiced their support for the rights-based "Cochabamba" as an alternative set of proposals.

Other organizations from the "Global South" have voiced similar condemnation of "Cancún." The Hemispheric Social Alliance, a movement comprised of social organizations and networks throughout the Americas, argued that the "[Cancún] do[es] not constitute a step forward. On the contrary, it entails the formal adoption of the so-called "Copenhagen Accord," completely avoiding the search for real solutions to the climate crisis." Later, they accuse the UNFCCC process of being anti-democratic, and characterizing Cancún as "a repeat of the World Trade Organization (WTO) negotiations, in which

the will of a few was imposed on the world's population."¹⁷⁷ And the Transnational Institute (TNI) claims that "Cancún sets us on a dangerous path to runaway climate change."¹⁷⁸ These networks and organizations from the "Global South" remain deeply critical of the neoliberal project, accuse it of being anti-democratic, and critique "Cancún" for being a mere expansion of neoliberalism in the name of a falsely conceived, and strictly Western notion of sustainable development.

All of the climate policies put forth by "Cancún" advocates are focused on sustaining an economic system rooted in endless growth and consumption, and trying to meet an ever-growing demand for energy in a globalized economy. However, many of these peasants, farmers, and indigenous groups from the "Global South" call this into approach question. Vandana Shiva, discussed earlier in Chapter 1 as a "Deep Ecologist" argues for a very a similar climate policy as she critiques of capitalist forms of "sustainable development." Rather than focus on sustaining the industrial, capitalist system (which she accuses climate policies inclusive of commodification of pollution, imposition of carbon markets, utilization of carbon offsets, and other various market-driven solutions) she instead calls for a decentralized economic system and energy systems embedded within society and ecosystems. Shiva criticizes climate policies aimed at continuing an economic system predicated upon endless consumption and shifting over to newer forms of energy technology. Instead, she advocates for changing labor and property relationships by creating a de-centralized network of small, locally-owned farms. She argues that human beings should provide the energy needed by working on these farms (instead of fossil fuels), which would simultaneously fix the problems of both the global food crisis and unemployment. However, she recognizes that this would mean a return to (or sustaining of) lifestyles and society-nature relationships that challenge neoliberal, industrial capitalism. Unfortunately, these groups in the "Global South" lack significant political and economic power, and when international climate policy is being formulated they are often ignored in the way that Bolivia was cast aside so quickly in Cancún.

Chapter 3 Conclusion

This Chapter attempted to answer the question of why "Cancún" emerged from the UNFCCC negotiations despite the widespread rejection of the almost identical "Copenhagen Accord" just one year

earlier. Through an in-depth analysis of geopolitical state politics I demonstrated the important role that the US and other EU governments played in the negotiations, both in terms of originally crafting the market-driven policies and in actively co-opting and/or coercing other governments into supporting them. I then demonstrated the role that various energy industries have played in manipulating public opinion around climate policy, crafting market-driven climate policy that favors their economic self-interest, and lobbying Western governments in support of them. Analyzing the role of various civil society actors such as environmentalist organizations and organized labor further demonstrated how purely economic calculations and segmented interests has shaped environmental and labor constituencies to support market-driven climate policy. The only group in global civil society that seems to remain an outspoken critic of "Cancún" and similarly market-based climate policies seems to be organizations that represent various subaltern populations in various parts of the "Global South," such as peasants, farmers and indigenous peoples. These organizations, and the state of Bolivia, continue to advocate for "Cochabamba" as an alternative set of policy proposals because it embodies an alternative approach to sustainable development than their neoliberal, industrial capitalist counterparts. They support a form of sustainable development that embeds energy production into traditional or existing societies and ecosystems, sustaining traditional relationships between society and nature, and providing for the wellbeing of everyone in society (not just a small but powerful political or economic elite). Political and economic power continue to shape the international development debate, and this is clearly evident as "Cancún" has emerged as the UNFCCC's framework for future climate policy, further embedding neoliberal institutions and relationships into a post-Kyoto Protocol climate regime.

Conclusion

In this project I set out to explain how sustainable development is understood in the international climate policy debate by comparing and contrasting the "Cancún Agreements" from the United Nations Framework Convention on Climate Change (UNFCCC) and the "People's Agreement of Cochabamba" from the World People's Conference on Climate Change (WPCCC). I demonstrated that the two different conferences each conceptualize "sustainable development" in dramatically different ways: "Cancún" is designed to sustain neoliberal, industrial capitalism through the proposed market-based climate regime, while "Cochabamba" is designed to challenge industrial capitalism through an embrace of a rights-based climate regime. I also sought to explain how and why the debate played out as it did at the UNFCCC, and why Bolivia stood alone in defense of "Cochabamba" while the rest of the world, even countries that would have benefited more from the latter proposals, stood with the most powerful countries (the US and China) in defense of a weak climate regime. The Bolivian government embraced a critique of capitalist development and any "sustainable development" policy focused on sustaining industrial capitalism geared toward a society of mass consumption (a perspective that is rarely, if ever, fully embraced by politicians of any state government). Because the policy community has been so inundated within the "development discourse" that fails to recognize the legitimacy of any perspective other than neoliberalism, Bolivia's proposals fell on deaf ears. In summary, "Cancún" is an attempt to utilize neoliberal mechanisms to sustain industrial capitalism, while "Cochabamba" is an attempt to sustain local social-nature relationships and cultures by attempting to form a countermovement to market expansion in climate policy.

"Sustainable Development" in the Modern Climate Policy Debate

In essence, juxtaposing these two conferences has demonstrated that these two different policy proposals are being put forth by opposing sets of political actors who each define "sustainable development" differently, based off of their own perceived self-interests and conceptualizations of human "need" and "nature." "Cancún" embraces a market environmentalist approach in addressing the threat of climate change in order to sustain the industrial capitalist system. Neoliberal, industrial capitalism frames human "need" entirely through the lens of market-economics and measured by income and perpetual

GDP growth. "Nature" is seen merely as an input into the production process, and "sustainable development" is an attempt to preserve "nature" so that the production and consumption processes can continue growing at a compound rate.

Proponents of "Cancún" recognize that the industrial capitalist system will be damaged if climate change goes unabated: rising sea levels, increasing instances of drought and flood, and more frequent extreme weather events will significantly inhibit the ability of the economic system to expand, and likely result in political instability in many regions. UK market economist Nicholas Stern famously calculated that climate change will likely be responsible for an annual loss of 2% of global GDP, which will likely increase later in the century if no climate regime is put into place. Because of the projected economic losses as a result of climate change, "Cancún" attempts to slow GHG emissions and facilitate a transition to renewable forms of energy through various voluntary market-driven mechanisms: the commodification of carbon pollution, the establishment of a carbon market, the use of carbon offsets, and the administration of climate-related aid to poorer countries most at risk (through the World Bank).

Alternatively, "Cochabamba" can be adequately understood through Karl Polanyi's theory "Double Movement" in that it is an attempt to form a counter movement to the expansion of marketization found in "Cancún." "Cochabamba" offers a critique of "sustainable development" which argues that it is commonly conceived as really another continuation of a purely self-regulated capitalist expansion, and part of a neo-imperialist project that subjugates the rights and livelihoods of people from the "Global South" and the global environment to industrial capitalism. They believe that the capitalist system itself is the cause of climate change and seek to limit any economic model predicated upon endless growth and consumption and instead move to embed market activity within a wider set of social concerns, in this case a strict climate regime with strong human and environmental rights protections. Proponents of this perspective call into question the use of income and GDP as a proper measure for "human need," instead arguing that each group defines "need" in different ways, and that if the proper social relationships are institutionalized (for instance, through the use of "common" land) these needs can be met without adherence to a marketized model. They also critique the marketized understanding of

"nature" inherent in industrial capitalism, instead focusing on sustaining local and indigenous cultures' relationships with nature. Lastly, they reject an anthropocentric vision of environmentalism and promote "environmental rights" as the central aspect of any climate regime.

Neoliberal political and economic power has dramatically shaped the climate policy debate. Many of the most powerful political actors in the wealthiest governments on earth actively work to promote the market-driven approaches to climate change. The two largest emitting countries on earth, the US and China, both resist any climate regime that would require mandatory GHG emissions reductions. Other, more progressive governments promote mandatory emissions reductions but only through a market-driven regime like the one proposed in the "Kyoto Protocol" or in "Cancún." Many within the energy industry (such as US-based fossil fuel companies), actively lobby against any attempt to build a climate regime that would reduce GHG emissions. Others (such as EU-based fossil fuel companies, or alternative and/or renewable energy companies) embrace market-based climate regimes because they can help facilitate a profitable long-term energy strategy where investments in alternative forms of energy are subsidized. Many other groups, such as labor organizations in the "Global North" are dependent upon an ever-expanding global economy for employment. For this reason they have historically stood against any kind of mandatory climate regime, but have since began advocating for market-driven approaches to climate change that would help facilitate increased economic growth, albeit with fewer controls on GHG emissions. And large environmentalist organizations, many of whom are dependent upon donations from industries and individuals profiting from industrial capitalism, end up advocating for market-driven policies because they believe they are the most politically feasible solutions they can achieve.

Alternatively, proponents of "Cochabamba" tend to be indigenous peoples, peasants, and individuals or organizations that are part of social movements from the "Global South" and who are deeply critical of industrial capitalism and neoliberalism. They believe that their local ways of life, cultures, and ecosystems are subjugated by weak, market-driven climate policies, and the global environment continues to suffer. These groups, although representing large sectors of global civil society, unfortunately wield little political and economic power on the international stage. Policy makers from

large states, such as the US and EU governments, have actively worked to neutralize, co-opt, or coerce any government wishing to challenge the market-driven approach of "Cancún." Various Wikileaks documents reveal how the US and EU governments manipulated promises of climate-related aid to countries in Africa, Latin America, and Southeast Asia in return for their support within the UNFCCC. The same powers that built and spread the global neoliberal system (powerful Western governments, multinational corporations, various development-related NGOs, and international financial institutions such as the World Bank) have all actively promoted "Cancún" through the same strategies of cooptation and coercion in an effort to sustain that same system.

The Way Forward: Climate Change and the Politics of Capitalism

What does this analysis mean for the future of the climate policy debate? Is the debate likely to change any time soon? Are there alternative approaches that ought to be pursued? Many academics, authors, and other political actors have asked these questions as the climate debate drags on. Perhaps the most pressing implication has to do with whether or not the final climate regime will be successful in addressing the threat of climate change (i.e. halting GHG emissions and minimizing the negative impacts on human societies and ecosystems across the world). Weak climate regimes, such as "Cancún" show little sign of significantly reducing GHG emissions to a level that the IPCC suggests would minimize the negative impacts of climate change (or even meet "Cancún's" own stated goal of increasing global temperatures no more than 2°C above pre-industrial levels). However, another important implication has to do with the politics of climate change and capitalism. I believe that climate change has the potential to mobilize global civil society in a way that no other global issue can. Because it is so inherently intertwined with the international political and economic system, and because the stakes are so high given the extreme threat it poses, climate change has the potential to significantly challenge to the neoliberal, industrial capitalist system.

Geographers James McCarthy and Scott Prudham argue a similar point about neoliberalism and the environment generally, and it fits precisely within Polanyi's "Double Movement." They claim that:

(i) neoliberalism... tends not only to generate serious environmental consequences but... is

significantly constituted by changing social relations with biophysical nature, (ii) neoliberalism and modern environmentalism have together emerged as the most serious political and ideological foundations of post-Fordist social regulation, and (iii) environmental concerns also represent the most powerful source of political opposition to neoliberalism. ¹⁸⁰

Here, they argue that neoliberalism has a profound impact on the environment, which is why the sector that has perhaps the greatest level of regulation in the neoliberal system is typically where environmental issues are concerned. While understanding that market environmentalism is now the dominant form of environmental regulation, they also recognize that the single greatest *political* threat to neoliberalism comes from environmental concerns. Given the scope of the climate crisis the dramatic overhaul of the global economic system that is required to seriously address it, climate change could be the environmental issue that mobilizes various political actors opposed to neoliberalism and give a platform from which to challenge the system.

Journalist Naomi Klein recently put forth a very similar argument in her article "Climate Change vs. Capitalism." She takes a closer look at the polls that I cited in Chapter 3 about the declining belief in the US that climate change is a real threat. A closer examination of these statistics show something alarming: that most of this drop has come from individuals who identify themselves as ideologically to economic right (i.e. a strong proponent of the neoliberal system and for de-regulated "free-market" capitalism). Klein argues that the reason that most of the climate skeptics come from proponents of capitalism is because if the climate science is in fact accurate, the basic tenants of the capitalist project must be called into question. She explains:

The deniers did not decide that climate change is a left-wing conspiracy by uncovering some covert socialist plot. They arrived at this analysis by taking a hard look at what it would take to lower global emissions as drastically and as rapidly as climate science demands. They have concluded that this can be done only by radically reordering our economic and political systems in ways antithetical to their "free market" belief system. As British blogger and [right-wing climate skeptic] James Delingpole has pointed out, "Modern environmentalism successfully advances many of the causes dear to the left: redistribution of wealth, higher taxes, greater government intervention, regulation." [Another right-wing climate skeptic] puts it even more bluntly: For the left, "Climate change is the perfect thing.... It's the reason why we should do everything [the left] wanted to do anyway."

Klein demonstrates that these skeptics understand that truly addressing climate change means seriously challenging capitalism, which is why they work so strongly to cast doubt on climate science.

Klein goes on to detail exactly why this is the case. She focuses on 5 policy areas that would require significant reform away from the neoliberal model: 1) reinvesting in the public sphere, 2) increasing social planning at local, domestic, regional, and international levels, 3) reining in the power of large, multinational corporations, 4) re-localizing production and building locally-based economies, and 5) challenging an economic model that requires perpetual economic growth. These fundamental questions directly question basic assumptions of neoliberalism, and industrial capitalism more broadly.

In light of Klein's assertion, it is interesting to point out that the only decrease in global GHG emissions in recent history came in 2009 when global emissions reduced 1.4%. It is widely accepted that the reason for this is because of the drop in global consumption that followed the 2008 financial crisis. However, as policy makers around the world worked to stimulate the global economy back into expansion, global GHG emissions rose by an unprecedented 5.9% in 2010, surpassing even the IPCC's "worst-case scenario" for global emissions. Seriously addressing climate change is going to force policy makers to fundamentally question an economic model that cannot survive without the promotion of endless production, consumption, and growth. This will pose a direct challenge not only to neoliberalism, but to capitalism itself.

However, this is a very tall order. Given how quickly world leaders buckled under pressure from the US government and shifted from rejecting the "Copenhagen Accord" to accepting it just one year later, and the significant political and economic power behind the promotion of various market-driven climate policies, launching a serious challenge to neoliberal, industrial capitalism seems unlikely any time soon. But there are signs that this could change. While the specific climate policies of "Cochabamba" may not be adopted anytime soon, the government of Bolivia was successful in challenging the "development" and "sustainable development" discourses as they relate to the climate policy debate. Bolivia's proponents have galvanized sectors of civil society and mobilized them behind this critique.

Only time will tell, but one thing is certain: climate change will continue to be a threat for the foreseeable future, and it will only get dramatically worse without significant action. Addressing this will require policy makers around the world to truly question some of the most fundamental assumptions of

neoliberal, industrial capitalism. As debates about "sustainable development" continue civil society and policy makers will be forced to consider alternatives to the neoliberal model. And as long as human and environmental rights, however articulated, are subjugated to the profit-seeking interests of an endlessly expanding economic system there is little hope that climate change will be adequately addressed, or that climate justice will be actualized.

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