



# **A HIGH-CARBON PARTNERSHIP?**

## CHINESE-LATIN AMERICAN RELATIONS IN A CARBON-CONSTRAINED WORLD

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*Acknowledgements:*

An earlier, unpublished version of this paper was written by Guy Edwards, J. Timmons Roberts and Linlang He and was funded by Friedrich Ebert Stiftung in December 2012. It has subsequently been greatly altered and updated. We would like to thank a number of people for their comments on earlier drafts of this paper including Claire Langley, Erica Downs, Harold Trinkunas, Nathan Hultman, Eduardo Viola, Jiang Shixue, Kathryn Hochstetler, Kevin P. Gallagher, Gabriela Perez, Jose Luis Samaniego, Mauricio Moreira Mesquita and members of Brown University's Climate and Development Lab. Our thanks go to Linlang He, who conducted research and interviews in Mandarin and assisted in the organization of the Brown University/Watson Institute conference on China and Latin America. Jeanne Lowenstein and Susan Hirsch provided substantial assistance for that event. We thank the Center for Environmental Studies, the Watson Institute, and the President's Office at Brown University for assistance and support. All errors and omissions remain the sole responsibility of the authors.

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## EXECUTIVE SUMMARY

China's rapidly increasing investment, trade and loans in Latin America may be entrenching high-carbon development pathways in the region, a trend scarcely mentioned in policy circles. High-carbon activities include the extraction of fossil fuels and other natural resources, expansion of large-scale agriculture and the energy-intensive stages of processing natural resources into intermediate goods. This paper addresses three examples, including Chinese investments in Venezuela's oil sector and a Costa Rican oil refinery, and Chinese investment in and purchases of Brazilian soybeans. We pose the question of whether there is a tie between China's role in opening up vast resources in Latin America and the way those nations make national climate policy and how they behave at the United Nations Framework Convention on Climate Change (UNFCCC) negotiations. We focus on the period between the 2009 Copenhagen round of negotiations and the run-up to the Paris negotiations scheduled for 2015, when the UNFCCC will attempt to finalize a successor agreement to the Kyoto Protocol.

China and Latin America have a critical role to play to ensure progress is made before the 2015 deadline, since they together account for approximately 40 percent of total global greenhouse gas emissions. Several Latin American nations are world leaders in having reached high levels of human development while emitting very low levels of greenhouse gases. Several have publically committed to ambitious greenhouse gas emission reduction goals. Staying on or moving to low-carbon pathways is critical for these countries, but substantial Chinese investments in natural resources and commodities—when combined with those of other nations and firms—run the risk of taking the region in an unsustainable direction.

Chinese investments and imports of Latin American commodities may be strengthening the relative power of political and commercial domestic constituencies and of "dirty" ministries (e.g. ministries of mining, agriculture or energy) vis-à-vis environmental and climate change ministries and departments. These

“cleaner” ministries are traditionally weak and marginalized actors in the region. China may thus be inadvertently undermining Latin American countries’ attempts to promote climate change policies by reinforcing and strengthening actors within those countries and governments that do not prioritize climate change and who have often seen environmental efforts as an impediment to economic growth.

China has stated that it is interested in cooperating with Latin America on combating climate change, but official bilateral or multilateral exchanges on the issue outside of the UNFCCC negotiations have been limited. Both China and Latin America could benefit substantially by refocusing on opportunities for low-carbon growth such as renewable energy. China’s

growing influence in global renewable energy markets presents excellent opportunities to invest in clean energy in Latin America.

China and Latin American countries could launch a climate change initiative through the newly created China-CELAC (Community of Latin American and Caribbean States) Forum, focused on financing the reduction of greenhouse gas emissions from agriculture, forestry, energy and transport, as well as sharing technology and strategies for adapting to climate impacts. Chinese-Latin American relations should also mainstream environmental protection and low-carbon sustainable growth into their partnership, to avoid pushing countries in the region towards high-carbon pathways.

## CHINA-LATIN AMERICA RELATIONS AND THE IMPERATIVE OF CLIMATE CHANGE

Within climate change policy circles much is made of the potential of “low-carbon partnerships.” In low-carbon partnerships, one country or agency joins with another in an effort to shift economic development from high levels of fossil fuel consumption to new “low-carbon pathways” that utilize renewable energy and are highly energy efficient. In the effort to present success stories, very little is mentioned of the persistence and expansion of the old dominant ways of doing business. These less-mentioned yet dominant ways of doing business are high-carbon pathways that include the extraction of fossil fuels and other natural resources, and the energy-intensive stages of processing resources into intermediate goods. Given the selective nature of case studies to date, we lack a picture of whether developing countries are increasingly taking low or high-carbon pathways of development, and what forces are driving them in either direction.

China’s growing presence and influence in Latin America is being reported more frequently by academics and analysts, but there is still virtually no treatment of climate change within discussions on China-Latin American relations.<sup>1</sup> This paper is based upon two conferences organized by the authors, a series of interviews with key informants and two years of research. It focuses on the impact of China’s growing presence in Latin America, and on the environmental performances of some Latin American countries (in being low or high-carbon relative to their economies) and their levels of social development. We pose the question of whether there might be a tie between China’s role in opening up vast resources in Latin America and its influence in how nations of the region behave in the United Nations Framework Convention on Climate Change (UNFCCC) negotiations. We focus

on the period between the 2009 Copenhagen round of negotiations and the run-up to the Paris negotiations scheduled for 2015, when the UNFCCC will attempt to finalize a successor agreement to the Kyoto Protocol.

China and Latin America are critical to the success of any effort to address climate change. Together, China and Latin America and the Caribbean accounted for approximately 19 percent of global gross domestic product (GDP) in 2012 and roughly 40 percent of total global greenhouse gas emissions.<sup>2</sup> The rapidly expanding political, economic and commercial ties between China and Latin America have far reaching implications for the 2015 Paris outcome. Progress at the UNFCCC negotiations will in part be contingent upon whether China and Latin American countries can effectively reduce the environmental impact of their relations. Further, it will be necessary to build common initiatives to reduce greenhouse gas emissions, adapt to climate impacts and prioritize low-carbon development into their relations and economies. Staying on or moving to low-carbon pathways is critical for those Latin American countries that regard climate change as a serious threat to their prosperity and security this century.

While increasing trade with China has a strong appeal as a way to foster economic growth and build diversified “south to south” partnerships, in the long run, building a high-carbon partnership could be disastrous for both Latin America and the world.

In this paper we argue that China’s investments in natural resources and energy reserves in Latin America run the risk of pushing commodities producers in the

region onto high-carbon pathways. We suggest that China may not be actively influencing the policies of our Latin American case study nations, but surging primary product trade and commercial ties with China are strengthening the relative power of “dirty” ministries such as Mining, Energy and Agriculture (which traditionally have been skeptical of committing to the environment or climate change out of fear of weakening economic growth) or domestic constituents (such as agribusinesses in Brazil) vis-à-vis environmental and climate change ministries and departments, which in the region are traditionally weak and marginalized.

China’s 2008 Policy Paper on Latin America and the Caribbean remarks that the Chinese government values cooperation with the region in combating climate change, but references to the issue appear largely symbolic. Outside of the UNFCCC negotiations, there are few if any official bilateral or multilateral exchanges on climate change between Latin America and China.<sup>3</sup> China is signing agreements with countries across the region, with some focus on agricultural research and university exchanges, but these have been insignificant in scale compared to fossil fuel and other natural resources deals.

The paper seeks to offer a better understanding of the implications of China’s rapidly growing presence in Latin America in three steps. First, we review the rapid increase in Chinese trade, loans and investments in the region. We then review interactions at the UNFCCC negotiations and official bilateral agreements. Lastly, we look more closely at China’s interactions with three Latin American countries: Costa Rica, Venezuela, and Brazil. We choose these countries since all three are members of the G77 + China Group (G77), yet they also participate in different negotiating blocs at the UNFCCC negotiations and have vastly

different histories and starkly different development pathways. For each of the three countries, their trade, commercial and political ties with China have increased considerably in just the last 10 years. We assess to what extent this growing cooperation has impacted their positions on climate change at the domestic level and at the UNFCCC negotiations.

Costa Rica’s recent development has been based on ecotourism and vast hydroelectric energy production, making the country a global model of “green growth” that has achieved high life expectancy for its citizens and social development while maintaining very low levels of greenhouse gas emissions. It is also a member of the AILAC (Independent Alliance of Latin American and Caribbean countries) negotiating group at the UNFCCC, which is proposing ambitious action to address climate change, regardless of a country’s wealth or size. Venezuela has been a leader in the Bolivarian Alliance for the Peoples of Our Americas (ALBA) negotiating group, and now participates with China in the new “Like-Minded Group” in the UNFCCC negotiations, seeking to prevent the imposition of binding emissions reduction targets on developing nations. With the world’s largest proven oil reserves, Venezuela has an economy strongly dependent upon the export of vast quantities of oil. By signing new deals with China to supply decades of oil, Venezuela is locking itself into an even higher-carbon pathway of development.

Brazil has a much larger economy than Costa Rica or Venezuela and its emissions have largely been due to deforestation in the Amazon. Brazil negotiates with the major developing nations of India, South Africa and China in what is called the BASIC group. Most notably, soaring Brazilian soybean production for export to China (and other countries) may be threatening the country’s recent improvements in reducing deforesta-



tion and associated greenhouse gas emissions, and also coincides with moves by domestic constituents in Brazil to weaken its Forest Code and a hardening of the Brazilian government's position at the UNFCCC negotiations.

Finally, we offer policy recommendations based on our research, focusing especially on areas of opportunity for China and Latin America. Throughout the study we have attempted to distinguish between the actions of the Chinese government and those of pri-

vate Chinese companies, although the line between public and private is not always distinct. In Latin America, most Chinese investments come from state-owned companies. There are also large numbers of private Chinese companies operating in the region, but many of these receive substantial funding from the China Development Bank and the Export-Import Bank of China.<sup>4</sup> Thus, while the role of the Chinese state is complex, it would be unfair to hold China responsible for every action of each of its private firms.

## THE SEVERITY OF CLIMATE CHANGE IMPACTS IN LATIN AMERICA

Latin America is particularly vulnerable to climate change impacts, including: potential collapse of the Caribbean coral biome, intensification of weather patterns and storms, rising sea level, increased flooding and droughts, warming of high Andean ecosystems, increased exposure to tropical diseases and risk of dieback of the Amazon rainforest ecosystem.<sup>5</sup> These scenarios would be the direct and indirect outcomes of a projected mean warming for the region between 1 and 6 degrees Celsius by 2100,<sup>6</sup> a swing from 2 to 11 degrees Fahrenheit in a region whose ecosystems are finely spaced by temperature and rainfall amounts.

Back in 1992, nearly all governments in the world agreed to work together to “avoid dangerous climate change.” Scientific analyses developed a guideline suggesting no more than 2 degrees Celsius of warming above pre-industrial levels be allowed, and in Cancun in 2010 political leaders agreed to avoid exceeding this level. Then, in Durban in 2011, the international community set a 2015 deadline to create a new agreement applicable to all parties to the UNFCCC to stay under those levels—an agreement that would enter into force by 2020. China and other countries’ interest in natural resources and energy reserves in Latin America and across the globe comes at a time, then, when some observers are claiming that four-fifths of all fossil fuel reserves of publicly listed companies ought to be classified “unburnable” if we still seek to remain below that global warming of 2 degrees Celsius.<sup>7</sup> Of particular focus has been Venezuela’s Orinoco Belt tar sands reserves and Brazil’s “pré-sal” offshore oil deposits.

Latin America’s vast natural resources are simultaneously a major asset and an Achilles’ heel. The region is extremely vulnerable to ecosystem transformations

resulting from climate change, as its economies are dependent on raw materials and natural resources.<sup>8</sup> Climate change is likely to cause severe negative impacts on key economic sectors such as agriculture. Agricultural losses will be one of the most notable effects with estimates that the Brazilian sector will lose around \$3.1 billion a year after 2020.<sup>9</sup> Major droughts in Brazil’s Amazon region in the last six years, for example, threaten to undermine its role as the planet’s most important carbon sink.<sup>10</sup>

Glacial melt throughout the Andes is likely to affect water supplies in Colombia, Bolivia, Peru and Ecuador, in addition to threatening production from hydroelectric facilities with serious consequences for millions of people. Overall, glaciers in the tropical Andes have shrunk by 30 to 50 percent since the 1970s.<sup>11</sup> In Peru, the retreat of glaciers is likely to affect the availability of water for urban areas and the power sector. This is a very serious challenge facing Peru’s energy generation needs, of which the estimated annual incremental cost ranges from \$212 million to \$1.5 billion.<sup>12</sup> Latin America is also extremely vulnerable to extreme climatic events. Available data show that such disasters are increasingly frequent throughout the region: a total of 2,555 extreme climactic events occurred throughout the past 40 years, causing 512,481 fatalities and affecting more than 232 million people. Natural disasters in the Americas in the past decade are estimated to have cost more than \$446 billion.<sup>13</sup>

The Inter-American Development Bank (IDB) reports that estimated damages in Latin America and the Caribbean caused by the impacts of a more than 2 degree rise in temperature over pre-industrial lev-

els would be approximately \$100 billion annually by 2050.<sup>14</sup> Another agency recognizing the threat that climate change poses to hard-won development gains is the United Nations Development Programme, which argues that climate change is likely to deepen the divide between the rich and poor by halting and then reversing advances in health and education for the most vulnerable.<sup>15</sup>

The sustainable use of natural resources and the protection of ecosystems remains a major challenge in Latin America; countries have many environmental laws, but often they are not properly implemented.<sup>16</sup> Several Latin American countries have developed national climate change plans and policies, but the lack of implementation of these plans and policies and their marginal role compared with other issues within government remains a concern.<sup>17</sup>

## CHINA AT THE UNFCCC NEGOTIATIONS AS THE WORLD'S LARGEST EMITTER

China holds a pivotal position in the UNFCCC negotiations. China surpassed the United States around 2007 to become the world's largest emitter of greenhouse gases, and is now emitting nearly twice as much as the United States.<sup>18</sup> In 2011, China was responsible for 29 percent of global greenhouse gas emissions and was on a per capita basis releasing nearly the same as the average of the European Union.<sup>19</sup> China therefore is facing increasing pressure to reduce its emissions, but it is reluctant to agree to binding commitments. China argues that developed countries should take the most responsibility for reducing emissions given their historic responsibilities, and that China is a developing country with millions struggling in poverty.<sup>20</sup> Chinese negotiators argue that it is only fair for developed countries to provide developing countries with considerable amounts of financial and technical assistance if they want to see concerted effort.<sup>21</sup>

In the UNFCCC negotiations, China has sought allies to protect its "development space" in order to ensure economic growth and avoid binding emissions limits. Since 2009, China has played a dominant role in the BASIC group, alongside South Africa, India and Brazil.<sup>22</sup> Together with the United States, the group succeeded in changing the course of the UNFCCC negotiations in Copenhagen in 2009 away from a binding target system to a non-binding "pledge and review" system. China is also attempting to maintain solidarity in the G77 bloc of developing nations. That position is based on attempting to protect the UNFCCC principle that parties should act on the issue "according to their common but differentiated responsibilities and respective capabilities" (CBDR+RC). In

essence, this suggests that wealthy nations need to act first due to the lingering impacts of their centuries of high emissions.

In part a response to strong criticism of its stance in Copenhagen, China reversed its opposition to legally binding commitments in 2011, when it agreed to a road map that aims to complete negotiations on a successor to Kyoto by 2015.<sup>23</sup> But China has repeatedly pushed to maintain a "firewall" between developed and developing countries. This stance calls for developed countries to drastically reduce emissions while promoting proposals that put off targets for developing countries.

Chinese leaders are aware of the country's vulnerability to climate impacts, but they deem economic growth a priority. China's strategy at the UNFCCC negotiations has been to frame climate change as a north-south issue, primarily through the promotion of the principle of CBDR. This strategy has helped to keep the principle of CBDR, which resonates deeply with many developing countries, at the forefront of the climate change debates. In this way Beijing maintains solidarity with developing countries, keeps up the pressure on industrialized nations and legitimizes its opposition to binding reduction limits. China's promotion of the CBDR norm is not entirely instrumental but its leaders believe in the equity concerns the norm embodies.<sup>24</sup> Latin American nations have taken sharply different positions on these issues, and thus the region is a key territory in which China can seek support for its position and weaken opposing viewpoints.

## CONTINENTAL DRIFT: GEOPOLITICS AND TRADE BRING TWO REGIONS CLOSER

Latin American countries are demonstrating a more independent and assertive foreign policy, increasingly willing to step out from the historic U.S. shadow over the region.<sup>25</sup> The sharp increase in trade, investment and diplomatic visits and agreements with China since 2004 demonstrates that shift.

In 2008, China published its Policy Paper on Latin America and the Caribbean, which set out its goals in political, economic, cultural and security affairs.<sup>26</sup> While Chinese leaders believe in a set of principles in international relations such as mutual respect for each other's territorial integrity and sovereignty, consideration of its national interests causes Beijing to make pragmatic compromises.<sup>27</sup> Chinese policy towards Latin America focuses on trade designed to promote economic growth in China. The Policy Paper explains the logic behind China's interest in Latin America and how the region is of strategic importance, primarily to encourage trade and commerce and the purchase of natural resources.<sup>28</sup> China also seeks to isolate Taiwan by focusing on those countries in Latin America and the Caribbean which still recognize the "Republic of China." A number of Caribbean and Central American republics fall into the latter group, representing a significant portion of Taiwan's support in the U.N., while South America has been the main focus of China's drive for access to natural resources.

The rise of bilateral relations between China and Latin American countries has been impressive. In 1990, the United States accounted for 60 percent of Latin America's foreign trade, and Asia for just 10 percent. By 2010, trade with the United States had dropped to 40 percent of Latin America's total, while trade with Asia doubled to 20 percent.<sup>29</sup> In 2011, China became

the top destination for the exports of Brazil, Chile and Peru, and the second for other countries in the region including Venezuela.<sup>30</sup> Chinese investments in Latin America have focused principally on natural resources. Since 2005, China has provided loan commitments upwards of \$75 billion to Latin America. China's loan commitments of \$37 billion in 2010 were more than those of the World Bank, IDB and U.S. Export-Import Bank combined for that year.<sup>31</sup> China also joined the IDB in 2009.<sup>32</sup>

China is not creating a new problem for certain Latin American countries of "resource dependency," but is extending, transforming and increasing an old one. China's presence in Latin America is not uniformly dispersed, and the benefits of China-Latin American trade are highly concentrated in a few countries and sectors. In 2006 only 10 sectors in six countries—Argentina, Brazil, Chile, Colombia, Mexico and Peru—comprised 74 percent of all Latin American exports to China, and 91 percent of all commodities exports to China. These top sectors included copper ores, soybeans, iron and crude petroleum.<sup>33</sup> Latin American exports to China grew by 370 percent between 2000 and 2007, primarily in oil, soy, copper, iron ore and forest products. Meanwhile, manufacturing imports from China to the region grew by 420 percent.<sup>34</sup>

A growing middle class in Asia is resulting in greater demand for meat, which in turn calls for increasing production in Latin America for pasturelands and soybean production to feed livestock. Some estimates are that over the next 40 years, Latin America will need to almost double its production of grains and meats to meet global demand.<sup>35</sup> This creates new pressures to expand deforestation. Latin America needs to in-



crease agricultural production to meet demand, but not at the expense of increasing its greenhouse gas emissions.<sup>36</sup> At the same time, climate impacts on Latin American agriculture are expected to be severe, resulting in stark revenue and productivity losses.<sup>37</sup> Adapting Latin American agriculture to climate impacts while developing low-carbon land management techniques are key areas of cooperation between China and Latin America, especially Brazil. Efforts might include the design of more sustainable livestock systems, reducing the environmental footprint of agriculture through preserving existing forest cover and encouraging reforestation, sustainably intensifying production on already deforested land, and increasing the use of drought-resistant crops while continuing to reduce poverty in rural areas.<sup>38</sup>

China has emerged as the world leader in renewable energy and Chinese investment in renewable energy in Latin America is the most tangible exchange between the two regions related to climate change outside of the UNFCCC negotiations. Chinese activity in renewable energy is increasing: in South America, Chinese wind-turbine makers are entering into the market by offering government-backed loans at interest rates as much as 50 percent lower than local banks, to ensure buyers choose Chinese products instead of Western alternatives.<sup>39</sup> In Peru, China's Yingli Solar, one of the world's largest photovoltaic manufacturers, has supplied 40 megawatts of photovoltaic modules for

a solar plant. This solar plant is the largest in Latin America and is expected to produce enough energy to power over 67,000 homes.<sup>40</sup>

Increased Chinese cooperation in renewable energy could offer Latin American countries greater access to this expertise and support the push needed for greater ambition on mitigation at the UNFCCC. While Latin America will also need to almost double its installed power capacity to roughly 600 gigawatts by 2030, the region may be able to meet its future energy needs through renewable energy sources.<sup>41</sup> China's new membership in the IDB coincides with a strategic shift in the bank, following a significant capital increase from the bank's contributors and increasing demand from the region for clean energy projects. One of the goals set in the IDB's capital increase agreement calls for 25 percent of the bank's lending portfolio to support tackling climate change and fostering renewable energy. In 2011, the IDB approved \$736 million in financing for private sector renewable energy and environmentally-friendly projects, compared with the \$663 million invested by the bank between 2000 and 2010 mostly through support from Japan and European donors.<sup>42</sup> Given the bank's emphasis on clean energy projects and China's growing role in this area, there is very impressive potential for Chinese investment and companies to contribute to this positive trend and finance major renewable energy projects across Latin America.<sup>43</sup>

## TRADE AND INVESTMENT MEET DEVELOPMENT PATHWAYS AND THE UNFCCC NEGOTIATIONS: THREE CASES

We now address China's interaction with Costa Rica, Venezuela and Brazil at the bilateral levels and at the UNFCCC negotiations. We focus on Costa Rica because of its low-carbon past and its role in the new progressive AILAC group, on Venezuela due to its historic high-carbon pathway and its leadership in the ALBA group and role in the Like-Minded Group, and on Brazil, the South American giant who is at once a leader and outlier in the region, participating mostly with China in the BASIC group with some of the major emerging economies.

### **Between China's Investment in an Oil Refinery and Costa Rica's Role in AILAC**

As one of the world's most progressive nations on climate change, Costa Rica presents a distinctive and important case for understanding what role China may play in the region's future. The nation has achieved high levels of human development in the form of literacy, life expectancy, and GDP per capita per unit of greenhouse gases emitted. In 2008 Costa Rica sought to further distinguish itself on the world stage with a bold pledge to become carbon neutral by 2021, by sharply reducing emissions in the waste, transport and agricultural sectors, and by off-setting remaining emissions through reforestation.<sup>44</sup> This far exceeded pledges made by the EU to reduce emissions by 20 percent by 2020.

In 2012 Chile, Colombia, Costa Rica, Guatemala, Panama and Peru launched a new negotiating bloc at the UNFCCC, the Independent Alliance of Latin America and the Caribbean (AILAC). By then the countries were encouraged by the Cartagena Dialogue experience to create their own group, in order to improve their visibility and impact. In the af-

termath of the UNFCCC negotiations at Copenhagen (the fifteenth meeting of the conference of Parties, or COP15) in 2009, the Cartagena Dialogue was created in an effort to bridge the distance between developed and developing countries. The Cartagena Dialogue, which includes a mixture of developing and developed countries including the AILAC countries, creates an informal and open space for countries working towards an ambitious, comprehensive and legally-binding regime. The Latin American countries in the Cartagena Dialogue worked closely with their partners in 2010 and 2011 at COP16 and COP17 respectively.<sup>45</sup>

Although all members of AILAC are part of the G77, these countries alongside others such as the Least Developed Countries and Small Island Developing States have at times distanced themselves from elements within the G77 since 2009 and are pushing for emissions reductions by all nations. By forming the AILAC group, member countries have further distinguished their position from the Like Minded and BASIC groups; AILAC's view is premised on the perspective that the conventional UNFCCC groupings of developed and developing countries are now largely obsolete, given China's position as the world's largest carbon emitter with per capita emissions approaching those of Europe.<sup>46</sup> Costa Rican Minister of the Environment Rene Castro commented in 2012 that, "We would like to avoid a scenario in which a stiff interpretation of the principles becomes a barrier to climate security...The application of the principles going forward has to enable bigger, better, faster response to climate change." He added: "The new global agreement has to be 'applicable to all' and for us that means that as part of the agreement every party will make a contribution in the form of a legally-binding commitment."<sup>47</sup>

These positions potentially put AILAC and Costa Rica at odds with China, Venezuela and Brazil, among others. AILAC and China both state the importance of CBDR but the distinct interpretations of this principle by each actor is important. Crucially, AILAC has called on all emitters (including China) to reduce their emissions to ensure the 2 degree target remains viable. Despite this difference, all members of the G77—including AILAC and China—have been able to articulate some common interests in maintaining the right to develop and doing so with financial and technological support from developed countries.<sup>48</sup> Both AILAC and China emphasize that developed countries need to drastically reduce their emissions. But while China emphasizes developed countries' historic responsibility to reduce emissions, Costa Rica stresses that developed countries' "lack of ambition puts the brake on global ambition."<sup>49</sup> On climate finance, Costa Rica and China both stress that developed countries need to deliver on their promise to contribute \$100 billion in funding by 2020 to developing countries.

Since Costa Rica broke diplomatic ties with Taiwan in 2007, cooperation with China has accelerated. In 2011 the China-Costa Rica Free Trade Agreement entered into force, and China is now Costa Rica's second-largest trading partner, after the United States. In February 2014, Costa Rica joined the Pacific Alliance alongside Chile, Colombia, Mexico and Peru. The Pacific Alliance was created in June 2012 and was set up largely to increase trade and commerce of these countries with Asian markets.<sup>50</sup> The Alliance reflects the desire of its members to be open and dynamic economies trading both within the region whilst opening up to world trade.<sup>51</sup>

A contentious plan to upgrade the National Oil Refinery (RECOPE) on Costa Rica's east coast site of Moín with \$1.5 billion in Chinese funds shows the difficulties of maintaining bold mitigation pledges as

part of AILAC while also accepting Chinese finance. The plan to upgrade the oil refinery aims to improve the quality of the refined fuel and seeks to more than triple production there from 18,000 to 65,000 barrels per day.<sup>52</sup> The Costa Rican government maintains that the oil refinery upgrade is essential to create jobs and lower petroleum prices. In addition to China's broader interest in deepening cooperation and commercial ties with Costa Rica, Chinese motives behind the oil refinery investment could be based on Chinese interests in developing a strategic point in Central America for oil refinement.

A number of Costa Rica's leading thinkers and global groups were mystified that the government would risk undermining the country's pledge to become carbon neutral by 2021 by building an oil refinery they deem unnecessary, at the expense of low-carbon and sustainable options.<sup>53</sup> As the campaigning group Climate Action Network asks, "How can an oil refinery fit in a carbon neutral economy, as carbon capture and storage is still a pipedream?"<sup>54</sup> There are concerns that the new oil refinery could be a bridgehead for future oil and gas exploitation in the area.<sup>55</sup> Due to a conflict of interest between a Chinese company and Costa Rica's RECOPE, the project was put on hold and RECOPE's Executive President Jorge Villalobos resigned in June, 2013.<sup>56</sup> However, as of March 2014 the upgrade to the refinery is going ahead according to the administration of President Laura Chinchilla. Yet the fate of the refinery still remains somewhat unclear, since presidential candidates Luis Guillermo Solís and Johnny Araya who face a run-off election in April 2014 have starkly polarized positions on the project.<sup>57</sup>

Costa Rica's membership in the Pacific Alliance and its interest in improving commercial ties with Asia are clear. However it is also—alongside other Pacific Alliance members such as Colombia and Chile—a

member of AILAC, which has significant differences with China at the UNFCCC negotiations. The Pacific Alliance countries are opening up their economies and developing closer relations with China, while at the same time attempting to advance progressive climate policies. There is a similarity between the Pacific Alliance and AILAC in as far as those countries involved are forging their own path in terms of alternative regional integration efforts in Latin America and climate policies at the UNFCCC. But it would seem that the level of compatibility between the aims of the Pacific Alliance and AILAC is less given AILAC's positions at the UNFCCC and the Pacific Alliance and China's focus on trade and commercial ties in carbon intensive and heavily polluting sectors.

The Pacific Alliance and AILAC were both created in 2012, and it is unclear whether the goals of the two groups are compatible. It is also unclear what impact the formation of these groups has had on their member's domestic climate change policies. There appears to be two parallel currents underway: trade and finance ministries push for and received membership in the Pacific Alliance, while environment and climate ministries have focused on forming AILAC in the UNFCCC negotiations. China might be inadvertently pulling the Pacific Alliance members away from their climate goals—as in the case of Costa Rica—while indirectly bolstering their climate policies through increased investment and the resultant economic growth and international confidence brought on by the progress made by the Pacific Alliance. What seems likely is that the objectives of the Pacific Alliance are not necessarily intertwined with those of AILAC, but rather the two groups' objectives run parallel with each other. Venezuela's external positions on climate and energy are more plainly contradictory.

## **Venezuela and China's Thirst for Oil and the Like-Minded Group**

Chinese investment in Latin American countries has so far been overwhelmingly concentrated in natural resources and energy. China is developing an aggressive "energy diplomacy" to guarantee its secure and long-term access to energy resources.<sup>58</sup> Chinese public oil companies are buying up oil and gas reserves and securing energy supplies with substantial energy investments in Brazil, Argentina, Peru, Ecuador and Venezuela.<sup>59</sup>

Venezuela appears to be in its own league. Given that Venezuela holds the world's largest oil reserves—which represent a substantial portion of the available amount of carbon that can safely be put into the atmosphere (the global carbon budget)—its role on climate change could prove decisive. As environmental writer Bill McKibben put it in an influential 2012 article, former President Chavez insisted that "climate change is undoubtedly the most devastating environmental problem of this century," yet simultaneously forged ahead with plans to develop the vast Orinoco tar sands as "the most significant engine for a comprehensive development of the entire territory and Venezuelan population." McKibben pointed out that the Orinoco deposits are larger than the controversial tar sands of Canada, and if both deposits were taken together it would fill up the whole available atmospheric space.<sup>60</sup>

Venezuela does not currently have specific legislation that confronts climate change.<sup>61</sup> However, the government has distributed over 70 million energy-saving light bulbs as part of a national energy efficiency initiative<sup>62</sup> and it has reforested 35,000 hectares of land since 2006 through a program called *Misión Arbol*.

In 2012, Venezuela announced plans to put in place a program to limit greenhouse gas emissions across four sectors, including its petroleum industry. Skeptics suggest that these plans have little chance of being implemented.<sup>63</sup> According to ClimateScope 2013, which assessed the climate investments in the region, Venezuela ranked 20th out of 26 countries in its ability to attract capital for low-carbon energy sources and efforts to build a green economy.<sup>64</sup>

China and Venezuela formed a strategic alliance in 2001 with multiple accords in energy, infrastructure and industry. Following talks in 2008 in Beijing between leaders from the two countries, former President Chavez said that China required considerable amounts of energy and that Venezuela was committed to providing it.<sup>65</sup> In 2010, the China National Petroleum Corporation signed a deal to help Venezuela develop a major Orinoco oil field. In 2011, Venezuela said it would invest \$5 billion in the Orinoco heavy crude belt to increase production with the aims of reaching 4 million barrels a day in 2014 and 10 million barrels daily by 2030.<sup>66</sup> Venezuela is now the China Development Bank's (CDB) largest foreign borrower. All of the lines of credit are secured against oil supply contracts.<sup>67</sup> China has lent Venezuela approximately \$46.5 billion between 2005 and 2012.<sup>68</sup> The majority of Chinese finance in Latin America—including Venezuela—consists of oil-sale contracts or “commodity-backed loans,” which are loans repaid to China in oil, often at prices locked in at current rates.

During Venezuelan President Nicolas Maduro's first trip to China in 2013, even more agreements were signed. Oil minister Rafael Ramirez said the joint venture involved new investments worth \$14 billion.<sup>69</sup> From just 49,000 barrels a day in 2005, oil exports to China are planned to reach 1 million barrels per day within two years, a twenty-fold increase in a decade.<sup>70</sup>

Chinese loans are allowing Venezuela to deepen its commodity-led growth model, which may not be in Venezuela's long-term interests. The oil rush raises serious questions about the resource boom's likely environmental impacts; China's banks are known for weak safeguards on environmental monitoring of their loans and Venezuelan regulation is likewise considered weak by global standards.<sup>71</sup> Economically, the nation's dependence upon one product—oil revenues—is being deepened. Oil already accounts for roughly 95 percent of Venezuela's export earnings, more than 50 percent of its federal budget revenues and around 30 percent of the entire gross domestic product.<sup>72</sup> So the dominance of oil for Venezuela's economy and politics is not likely to change in the immediate future, and it is very difficult to imagine the country being in favor of a strong U.N.-led climate change regime that promotes a global low-carbon future.

Given Venezuela's current ideological preference of exporting oil to China, the country's partnership with China serves its own interests in two ways. First, Venezuela can export oil to a preferred ally and thus secure much-needed loans. Second, Venezuela can position itself alongside China at the UNFCCC negotiations in order to avoid an aggressive climate treaty that would undermine its own economy and arguably China's as well.

In the UNFCCC negotiations, both nations negotiate as part of the G77. Venezuela also negotiates as part of ALBA—the Bolivarian Alliance for the Peoples of Our America. Venezuela was very vocal at Copenhagen in 2009 about the lack of country participation in the drafting of the Copenhagen Accord and the lack of transparency and respect for U.N. procedures. China of course co-penned the Copenhagen Accord with its BASIC colleagues and the United States; Venezuela, alongside its ALBA partners and Sudan, Pakistan and



Tuvalu publically rejected the accord. However, 2009 was the last time we have seen China and Venezuela disagree at the talks on such a major issue.

In 2012 China and Venezuela began to participate in the “Like-Minded” Group alongside other developing countries, including its ALBA partners, India and Saudi Arabia. The Like-Minded Group seeks to uphold the UNFCCC’s principles of CBDR and equity, and to push developed countries to act first on emissions reductions according to their historical responsibility for climate change. These countries are restating old north-south divisions and resisting efforts by some countries to blur the distinctions and assign responsibility to all countries to act now. China and Venezuela participate in the Like-Minded Group for a number of reasons. First, Venezuela and ALBA’s insistence on developing countries’ rights to develop—given persistent poverty—is quite similar to that of China. Second, both claim the historical responsibility of developed countries to act first, a core “climate justice” discourse championed by Venezuela. Finally, these positions allow each to challenge U.S. hegemony and frame their struggle as a fight for climate justice.

China has repeatedly pushed to maintain the “firewall” between developed and developing countries. By framing its opposition to binding commitments in the language of CBDR, China uses rhetoric that resonates deeply with many developing countries, including Venezuela. China can maintain solidarity with developing countries, which keeps attention on industrialized nations and off major developing-country emitters, and ultimately legitimizes its opposition to binding reduction limits. China’s aversion to emission cuts on both equity and national interest grounds is in common with Venezuela’s position.<sup>73</sup> In this respect, Venezuela and China perceive the negotiations in a similar light.

A number of authors suggest that the common identity within the G77 originated from a sense of inequality and of being shut out of the world’s political and economic systems. Today, global power structures create conditions which encourage the formation of an identity based on a lack of access to meaningful participation in international decision-making. Political posturing with ideological and identity concerns, most notably along north-south lines, has been a hallmark of the UNFCCC climate negotiations. G77 leaders are presented with an opportunity to score political points at home and abroad by chastising the most developed countries.<sup>74</sup>

The G77 may be fragmenting as a bloc at the UNFCCC negotiations,<sup>75</sup> but its endurance in spite of the extremely divergent positions of its members in terms of climate vulnerability, fossil fuel dependency and attempts to push for ambitious action by all suggests that centripetal forces often outweigh centrifugal ones. G77 members also have a larger negotiation role with the BASIC countries among them than they would without them. Venezuela therefore can play a more assured role as part of the G77 and in the Like-Minded Group alongside its ALBA partners and China.

The domestic and international interactions of the two countries are two sides of the same coin: Chinese-Venezuelan relations at the bilateral level do not appear to treat climate change as a priority, and in the negotiations both place strong emphasis on maintaining the “firewall” of responsibility between the global north and the global south. Bilateral relations are focused primarily on commodity-backed loans in order to secure oil for China and to provide Venezuela with the means to invest in its development programs. Taken together, Chinese-Venezuelan relations are conducive towards supporting efforts to diversify Venezuela’s economy away from oil toward cleaner al-

ternatives. The prospect of a strong universal climate regime therefore presents Venezuela with a number of substantial challenges given the centrality of oil for its development.<sup>76</sup>

### **China's Demand for Agricultural Products in Brazil and BASIC**

The case of Brazil's relationship with China is quite different than that of Costa Rica or Venezuela. In 2009 the former Brazilian trade secretary, Welber Barral, declared an "historic moment" when China replaced the United States to become Brazil's most important trading partner.<sup>77</sup> In 2010, in spite of the global economic slowdown, Brazil's economy grew an estimated 7.5 percent, with much of this a result of trade with China.

The trade relationship is based largely on Brazilian commodities exports, but here we focus on soybeans. Brazil's exports to China of agricultural commodities are massive and increasing. China consumes more than half of the world's soybeans, and soybean prices have surged more than threefold over the past decade as China's growing middle class buys more pork and beef, both fed on soybeans. For Brazil, China has rapidly emerged as the most important market for its soybean exports, so Brazil's soybean producers are highly dependent on China.<sup>78</sup> Chinese demand for these agricultural commodities may be tied to increased deforestation in the Brazilian Amazon, both directly through land purchases and indirectly through the rapid rise in exports to China of soybean and beef products.<sup>79</sup>

The bulk of Brazil's greenhouse gas emissions come from land use change, including deforestation. As a result, the reduction of deforestation has been a central pillar of Brazil's climate policy.<sup>80</sup> In 2009, Brazil

established a national greenhouse gas reduction target of roughly 36 percent below its projected 2020 emissions. Between 2005 and 2010, Brazil's emissions fell nearly 39 percent, with a 76 percent drop in cumulative emissions from deforestation.<sup>81</sup> In 2012, Brazil proudly announced that deforestation rates had reached the lowest levels ever recorded. Success in reducing deforestation in the Amazon was attributed to a range of factors such as strong commitment by the Ministry of the Environment, a dramatic increase in law enforcement by the federal government and the increased impact of NGOs on the media and government.<sup>82</sup>

Looking ahead, however, Brazil's leadership on climate change is uncertain. In late 2013, the Brazilian government admitted that deforestation in the Amazon had increased by nearly a third over the previous year, confirming that the considerable progress made to stem the destruction of the world's largest rainforest had suffered a setback. The increase was due in part to expanding farms and a rush for land around big infrastructure projects.<sup>83</sup> During 2011 and 2012, a conservative coalition in the Brazilian Congress made up of "ruralistas" secured a reform of the Forest Code, which gave partial amnesty to farmers that had deforested beyond their legal permits before 2008. There is concern that the new Forest Code is leading in part to this increase in deforestation.<sup>84</sup> Although Brazilian President Dilma Rouseff was able to veto some parts of the proposed changes to the Forest Code, environmental groups argue that attempts to reduce deforestation are being undermined.

Philip Fearnside and his colleagues suggest that profits earned from soybean trade with China is strengthening the political sway of Brazilian agribusiness, with profound effects on domestic politics leading to weakened environmental protections.<sup>85</sup> This has clearly

been the case in the Forest Code-soybeans to China connection. Eduardo Viola argues that Brazil's role in the global politics of climate change has not reached its potential leadership role, due to entrenched traditional ideas about development and attitudes about short-term use of natural resources. He describes a deep-seated and enduring conception of national sovereignty as being exclusive, which he considers poorly adapted to the challenges of the global economy.<sup>86</sup> In the last five years under former President Lula, he argues, Brazil transitioned from the conservative side of global climate politics to a more moderate conservative position.<sup>87</sup>

The impact of successful policy activism by figures such as former Ministers of Environment Marina Silva and Carlos Minc helped to drive the uptick in efforts to drastically reduce deforestation since 2004. As deforestation declined, a climate policy "blockage" was removed, perceptions of the policy trade-offs changed, and an opportunity was created for a coalition of civil society groups, businesses and policy entrepreneurs to call for more stringent domestic climate policies.<sup>88</sup> At Copenhagen in 2009, former President Luiz Inácio Lula da Silva announced Brazil's strong pledges to reduce its emissions.<sup>89</sup> After President Dilma Rousseff took over, however, this momentum for climate protective policy appears to have stalled.

Brazil's participation in BASIC alongside China and the other major emerging economies separates it from the rest of Latin America at the UNFCCC negotiations.<sup>90</sup> Brazil's participation within BASIC fits into its broader foreign policy agenda of emphasizing strong south-south cooperation.<sup>91</sup> But the BASIC bloc has

shown fissures, and part of the reason is due to the different social and economic profiles of each nation.<sup>92</sup> Brazil distinguishes itself from other BASIC countries by having most of its emissions coming from land use and deforestation, as opposed to those from the fossil energy of its BASIC partners' portfolios. Brazil's position in BASIC seems to be that it favors negotiating concrete emission reduction targets sooner, rather than having them imposed from outside later.<sup>93</sup>

Brazil is potentially BASIC's most ambitious member on emissions reductions, but recently its role appears to have shifted under President Dilma to a greater focus on economic growth. She has provided incentives for car purchases and sharply decreased subsidies for the country's pioneering ethanol automobile fuel program, swinging the country's "flex fuel vehicle" owners over to buying gasoline. In Warsaw in 2013, Brazil swung back to a harder line on holding developed countries to reductions based upon their historical responsibility for atmospheric carbon, a drum it began beating in Kyoto in 1997. The EU, among others, regarded the return of this Brazilian proposal in Warsaw as counterproductive.<sup>94</sup> However, it is unclear how actively Brazil and China are coordinating their climate positions, since BASIC meetings have recently been reported to be attended only by lower level diplomats. Trade and commercial issues may simply trump the climate change issue in driving the nation's position, and trade with China represents a major and fast-growing sector. Domestic constituents in Brazil, such as agribusiness and industry would appear to support this resistance to ambitious national and international climate policy, and their position is strengthened with the sharp increases in soy exports.

## THE HIGH OR LOW ROAD? DISCUSSION AND POLICY IMPLICATIONS

Latin America has been a global leader in low-carbon growth, creating high social development at relatively low per capita greenhouse gas emissions.<sup>95</sup> Substantial Chinese investments in natural resources and commodities, when combined with those of other nations and firms, run the risk of increasing Latin America's carbon and ecological footprint, taking it in an unsustainable direction and onto a higher-carbon development pathway.

Chinese investments and imports of Latin American commodities may be strengthening the relative power of "dirty" ministries (mining or energy) or domestic constituents (such as agribusinesses in Brazil) vis-à-vis environmental and climate change ministries and departments, which in the region are traditionally weak and marginalized. China may thus be inadvertently undermining Latin American countries' attempts to promote climate change policies, by reinforcing and strengthening actors within those countries and governments that do not prioritize climate change. China's activities in those countries may be having the adverse effect of either helping to lock these countries into high-carbon development pathways or undermining their domestic and international climate policies.

Official declarations and the scant media coverage on the interactions of China, Brazil, Venezuela and Costa Rica at the UNFCCC negotiations can only tell us so much. Given the secretive nature of these talks, we are in the dark as to the extent and type of interactions taking place on climate change away from the spotlight. We can only observe key areas of overlapping interests and some cases where country positions are starkly different. We have supplemented these observations with a series of interviews. It is un-

certain whether China has ever held back aid, trade or investment—or support in other areas of international diplomacy—in exchange for Latin American nations' failing to agree with its positions on key UNFCCC negotiating points.<sup>96</sup> Decisions on national positions, after all, do not generally occur at the negotiations, but at higher levels of government back in the national capital behind closed doors. In some cases we have seen Chinese and national officials and heads of state meeting and signing major agreements on trade and investment, and far smaller ones on agricultural cooperation and renewable energy.

China's relationships with Brazil and Venezuela appear primarily focused on accessing those countries' natural resources, a pattern putting those nations on (or keeping them on) a high-carbon development pathway. These kinds of Chinese investments have gained far more attention in African countries. But the Chinese investment in an oil refinery in Costa Rica follows that country's shift away from recognizing Taiwan in the United Nations. Meanwhile, Costa Rica's position as a leading environmental player has deteriorated (as shown by its drastic slip in an environmental performance index) while it has simultaneously played a part in the creation of AILAC. The scale of Chinese-Latin American trade and investment in heavily polluting and carbon-intensive sectors comes precisely as other major funders such as the World Bank are stepping back from fossil fuel loans, particularly from funding new coal plants where other resources are available.

The willingness of countries such as Costa Rica and others to put domestic emissions reduction offers on the table has led to the emergence of a new discourse in the UNFCCC negotiations that all countries should

do as much as they can based on their own capabilities. Costa Rica and AILAC's actions are an attempt to pressure larger emitters that have refused to take on binding commitments, such as India and China, but also and especially developed countries including the United States.<sup>97</sup> An open question is whether some Latin American nations will continue to hoe an independent row in the UNFCCC negotiations, or fall more in line with one of their principal benefactors (China) as some of their neighbors appear to have done.

The pressures of economic growth are testing Latin American governments' commitments to their domestic climate policies and their international pledges and postures. These pressures highlight the importance of sticking to international commitments and the vital contribution China could make in the region to ensure consistency between strong rhetoric on ambition at the UNFCCC negotiations and domestic climate action at home.

China and Costa Rica have some important differences at the UNFCCC negotiations, yet trade and commercial ties are flourishing. China would seem to be not overly concerned with Costa Rica's distinct positions at the UNFCCC, since bilateral ties in economic and commercial sectors are progressing well. This suggests that China's emphasis on improving economic and commercial relations supersedes any potential concerns that Costa Rica is not rowing in the same direction at the UNFCCC. However, the power disparity between China and Costa Rica is clearly a concern for Costa Ricans critical of the new oil refinery, which they see as undermining their country's brave climate policies. Costa Rican leaders are in a difficult predicament given the importance of Chinese investment, but also the risk that cooperation poses to their climate policies. Given China's interest in natural resources and energy, Costa Rica's ability to persuade China to emphasize low-carbon cooperation is an im-

portant challenge.<sup>98</sup> However, this is precisely the case Costa Rica should be making since it has an excellent opportunity to redirect Chinese-Costa Rican relations towards low-carbon growth.<sup>99</sup> Costa Rica could lobby China to increase its bilateral cooperation on climate change, environmental protection and renewable energy. However, little has so far materialized.

There are indications that China and some Latin American countries are viewing climate change as an important issue. Given China and Latin America's focus on reducing poverty and building economic growth, that climate change is discussed within official Chinese-Latin American documents at all is an important step. With climate impacts increasingly being felt in Latin America and China, cooperation to mitigate the risk and adapt is a matter of urgency.

The research outlined here raises some implications for policy discussions relevant to the bilateral interactions and to the UNFCCC negotiations. There is little doubt China's presence in Latin America is likely to grow and deepen, and that Latin American governments are keen to maintain and build on those ties. At the bilateral level Chinese links in the region are focused primarily on the extraction of natural resources and securing access to energy reserves with a high-carbon footprint; the impact so far is bolstering 'dirty ministries', and a climate change initiative between China and Latin America has yet to emerge. China's growing investment in clean energy in the region is a positive step, but still largely insignificant compared to the billions of dollars going to fossil fuels, mining and agricultural commodities that may drive deforestation.

China and Latin American governments will need to ensure that they are not consolidating a high-carbon partnership. Progress will be contingent on whether China and Latin American countries can effectively



reduce the environmental impact of their relations, build initiatives to reduce emissions and adapt to climate impacts while mainstreaming low-carbon development into their relations and economies. Maintaining or moving to low-carbon pathways is critical for those Latin American countries which are seen as progressive voices at the UNFCCC negotiations and examples for the world. While increasing trade with China has a strong appeal to foster economic growth and build diversified south-south partnerships, building a high-carbon partnership could be disastrous for Latin America and the world in the long term.

The UNFCCC COP20 in Peru in December, 2014 and COP21 in France in 2015 are meant to be the deadline for the new climate change agreement, so during their run-up we are likely to see a continuation or an “entrenchment” of the climate change alliances outlined here. China and Venezuela will likely remain partners within the Like-Minded Group, and potentially become isolated as other developing country groupings such as the Alliance of Small Island States, Least Developed Countries and AILAC push for raising the emission reduction pledges for all countries. Unless President Dilma of Brazil is defeated in elections at the end of this year (which seems fairly unlikely), Brazil and China as part of BASIC will likely continue to push for strong targets from developed countries while emphasizing developed countries’ historic responsibility for greenhouse gas emissions.

In Costa Rica, a second round in the presidential election will be held in April 2014. Regardless of the new president’s climate and environmental politics, Costa Rica’s green image has been tarnished. Yale

University’s Environmental Performance Index shows that Costa Rica has dropped from 5th to 54th out of 178 countries in its 2014 study.<sup>100</sup> This drop in the rankings is a serious concern not only to Costa Rica’s green reputation but raises difficult questions about the viability of its carbon neutral target by 2021.

A major push on Chinese-Latin American cooperation on renewable energy could enhance both actors’ role at the UNFCCC negotiations. If generously scaled, it would have a positive impact on the negotiations, given the focus on shifting from heavily polluting fossil fuels to clean energy in order to keep alive the goal of staying under 2 degrees of warming.

As we approach the next UNFCCC conference in Lima this December, there are excellent opportunities to push for greater action on climate change within Chinese-Latin American relations. Peru and Latin America will be on view and they will want something positive to show the world. Both China and Latin America could benefit substantially in terms of new opportunities for low-carbon growth, but also by pushing for an ambitious climate change deal in 2015, which could limit very costly climate impacts in the future. Investing now in low-carbon development has a potentially much lower price tag than waiting and running the risk of paying substantially more later on for the ugly disaster cleanup. Chinese-Latin American relations need to pivot quickly to avoid cementing a high-carbon partnership and embrace a strong sustainability agenda, one which reflects the urgency of tackling climate change within their rapidly evolving relationship.

## REFERENCES

- Blázquez, Jorge and José María Martín-Moreno (2012) *Emerging Economies and the New Energy Security Agenda*. Real Instituto Elcano, 27 April, 2012.
- Bovarnick, A., F. Alpizar, C. Schnell, Editors (2010) *The Importance of Biodiversity and Ecosystems in Economic Growth and Equity in Latin America and the Caribbean: An economic valuation of ecosystems*. United Nations Development Programme, 2010.
- Brand, Erik and Matthew Schewel (2012) "Energy Policy and 21st Century Globalization: The Responses of Brazil and Venezuela, and Opportunities for Renewable Energy Development in the Americas". In *Latin America in the Globalization Age: Hopes and Fears*, Manuela Nilsson and Jan Gustafsson (eds), 2012, Palgrave Macmillan, UK.
- British Petroleum (2008) *Statistical Review of World Energy*. 2008 UK: London.
- British Petroleum (2012) *Statistical Review of World Energy*. 2012, UK: London.
- Bunker, Stephen G. (1985) *Underdeveloping the Amazon*. Champaign-Urbana: Univ. of Illinois Press.
- Cardoso, Fernando Henrique and Ernesto Faletto (1979) *Dependency and Development in Latin America*. Berkeley CA: University of California Press.
- British House of Commons (2012) *Corrected Transcript of Oral Evidence by the Former UK Special Representative for Climate Change, John Ashton, to the Energy and Climate Change Committee*. 21 June, 2012. Accessed 10 August, 2012 <http://www.publications.parliament.uk/pa/cm201213/cmselect/cmenergy/c392-i/c39201.htm>.
- de la Torre, Augusto, Pablo Fajnzylber, John Nash (2009) *Low Carbon, High Growth: Latin American Responses to Climate Change*. The World Bank, 2009.
- Downs, Erica (2011) *Inside China, Inc: China Development Bank's Cross-Border Energy Deals*. John L. Thornton China Center Monograph Series, Number 3, March 2011, The Brookings Institution.
- ECLAC (2010a) *Foreign Direct Investment in Latin America and the Caribbean*. UNECLAC, Chile.
- ECLAC (2010b) *Economics of Climate Change in Latin America and the Caribbean*. Summary 2010, UN, Santiago, Chile.
- ECLAC (2011a) *People's Republic of China and Latin America and the Caribbean: Ushering in a new era in the economic and trade relationship*. ECLAC, 2011, Chile.
- ECLAC (2011b) *Natural Disaster Prevention and Response in the Americas and Financing and Proposals*. Santiago, Chile: ECLAC.
- ECLAC (2012a) *The People's Republic of China and Latin America and the Caribbean: Dialogue and cooperation for the new challenges of the global economy*. ECLAC, Chile: Santiago.

- ECLAC (2012b) *Sustainable Development 20 Years on from the Earth Summit: Progress, gaps and strategic guidelines for Latin America and the Caribbean*. UNECLAC, Chile, Santiago.
- ECLAC (2012c) *Green Growth and Sustainable Development: Regional Perspectives' Side Event Sponsored by the UN Regional Commissions, United Nations Conference on Sustainable Development*. 21 June 2012, Rio de Janeiro, Brazil.
- ECLAC/IDB (2010), *Climate Change: A Regional Perspective*. Santiago de Chile: ECLAC.
- Eduardo Viola (2013) *Brazilian Climate Policy since 2005: Continuity, Change and Prospective*. Centre for European Policy Studies Working Document, No. 373, February 2013.
- Edwards, Guy and Timmons Roberts (2013) *The EU and Latin America and the Caribbean: Paving the Road towards a New Global Climate Change Agreement in 2015?* Policy Brief, EU-LAC Foundation, November, 2013.
- Ellis, Robert Evan (2009) *China in Latin America: The Whats and Wherefores*. Boulder, CO: Lynne Rienner Publishers, 2009.
- Escribano, Gonzalo (2012) *Ecuador's Energy Policy Mix: Development, Conservation and Nationalism with Chinese Loans*. Elcano Royal Institute. April 2012.
- Fearnside, Philip M., Adriano M. R. Figueiredo, Sandra C. M. Bonjour (2013) "Amazonian forest loss and the long reach of China's influence". In *Environment, Development and Sustainability*, April 2013, Volume 15, Issue 2, pp 325-338.
- Feinberg, Richard (2011) "China, Latin America, and the United States: Congruent Interests or Tectonic Turbulence?" Review Essays, *Latin American Research Review*, Vol. 46, No. 2, 2011, Latin American Studies Association.
- Food and Agriculture Organisation of the United Nations (2011) *State of the World's Forests*. FAO, Rome, 2011.
- Frank, Andre Gunder (1969) *Capitalism and Underdevelopment in Latin America*. New York: Monthly Review Press.
- Gallagher, Kevin P. and Roberto Porzecanski (2009) *China and the Latin America Commodities Boom: A Critical Assessment*. Working Paper Series 192, Political Economy Research Institute, University of Massachusetts Amherst.
- Gallagher, Kevin P., Amos Irwin, Katherine Koleski (2012) *The New Banks in Town: Chinese Finance in Latin America*. Inter-American Dialogue, March 2012.
- Gardini, G. L., and Lambert, P.W. eds. (2011) *Latin American Foreign Policies: Between Ideology and Pragmatism*. New York: Palgrave Macmillan.
- Garibaldi, Jose Alberto, Araya, Monica, and Edwards, Guy (2012) *Shaping the Durban Platform: Latin America and the Caribbean in a future High Ambition Deal*. CDKN Policy Brief, March, 2012.
- Georg Kaser (1999) "A review of the modern fluctuations of tropical glaciers". In *Global and Planetary Change*, 22, 93-103, 1999.
- Hallding, Karl, Marie Olsson, Aaron Atteridge, Antto Vihma, Marcus Carson, and Mikael Román (2011) *Together Alone: BASIC Countries and the Climate*

- Change Conundrum*. Nordic Council Publication 2011-530.
- Held, David, Charles Roger and Eva-Maria Nag (2013) "Editors' Introduction: Climate Governance in the Developing World" in David Held, Charles Roger and Eva-Maria Nag (eds) *Climate Governance in the Developing World*.
- Hochstetler, Kathryn (2012) *The G-77, BASIC, and global climate governance: a new era in multilateral environmental negotiations*. Rev. Bras. Polít. Int. 55 (special edition): 53-69, 2012.
- Hochstetler, Kathryn & Eduardo Viola (2012) "Brazil and the politics of climate change: beyond the global commons." In *Environmental Politics*, 21:5, 753-771.
- Hongbo Sun (2010) *China's Aid to Latin America: Past and Present* (Our translation).
- Hurrell, Andrew and Sandeep Sengupta (2012) "Emerging powers, North-South relations and global climate politics". In *International Affairs* 88: 3, 2012, 463-484.
- International Energy Agency (2013) *Redrawing the Energy-Climate Map: World Energy Outlook Special Report*. OECD/IEA, 2013.
- International Monetary Fund (2010) *World Economic Outlook: Rebalancing Growth*. Washington, 2010.
- Intergovernmental Panel on Climate Change (2007) *Climate Change 2007 (Fourth Assessment Report): Synthesis Report Summary for Policymakers*. Geneva: IPCC.
- Lewis, Simon L., Paulo M. Brando, Oliver L. Phillips, Geertje M. F. van der Heijden, and Daniel Nepstad (2011) "The 2010 Amazon Drought". In *Science*, 4 February 2011: 331 (6017), p. 554.
- Lum, Thomas, Hannah Fischer, Julissa Gomez-Granger and Anne Leland (2009) *China's Foreign Aid Activities in Africa, Latin America, and South East Asia*. Congressional Research Service, 25 February, 2009.
- MacArthur Foundation (2011) *Conservation & Sustainable Development, International Programs Strategic Framework 2011-2020*. Chicago, March 2011.
- Magrin, G., C. Gay García, D. Cruz Choque, J.C. Giménez, A.R. Moreno, G.J. Nagy, C. Nobre and A. Villamizar (2007) *Latin America. Climate Change 2007: Impacts, Adaptation and Vulnerability*. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, M.L. Parry, O.F. Canziani, J.P. Palutikof, P.J. van der Linden and C.E. Hanson, Eds., Cambridge University Press, Cambridge, UK, 581-615.
- Maria Cristina Silva Parejas (2010) "Energy Security and Climate Change in Relations between the EU, China and Latin America: Major Challenges and Areas for International Cooperation". In *China, the EU and Latin America: Current Issues and Future Cooperation*. Edited by Birte Klemm and Niu Haibin, Shanghai Institutes for International Studies and Friedrich-Ebert-Stiftung, 2010.
- Marie Olsson, Aaron Atteridge, Karl Hallding and Joakim Hellberg (2010) *Together Alone? Brazil, South Africa, India, China (BASIC) and the Climate Change Conundrum*. Policy Brief, Stockholm Environment Institute, 2010.

- Masters, Lesley (2012) What future for BASIC? *The emerging powers dimension in the international politics of climate change negotiations*. Institute for Global Dialogue Issue 95, March 2012.
- Mata, Luis Jose and Carlos Nobre (2006) *Background paper: Impacts, vulnerability and adaptation to climate change in Latin America*. Bonn: United Nations Framework Convention on Climate Change.
- Matt Ferchen, Alicia Garcia-Herrero and Mario Nigrinis (2013) *Evaluating Latin America's Commodity Dependence on China*. BB13/05 Working Paper, BBVA Research, 10/F Two International Finance Centre, Hong Kong, January 2013.
- Moreno, Luis Alberto (2011) *The Decade of Latin America and the Caribbean: A Real Opportunity*. Remarks by the President of the IDB at the book launch of "The Decade of Latin America and the Caribbean: A Real Opportunity", Buenos Aires, Argentina, May 27, 2011.
- Nachmany, M., Fankhauser, S., Townshend, T., Collins, M. Landesman, T., Matthews, A., Pavese, C., Rietig, K., Schleifer, P. and Setzer, J. (2014) *The GLOBE Climate Legislation Study: A Review of Climate Change Legislation in 66 Countries*. Fourth Edition. London: GLOBE International and the Grantham Research Institute, London School of Economics, 2014.
- NYU Wagner School (2008) *Understanding Chinese Foreign Aid: A Look at China's Development Assistance to Africa, Southeast Asia, and Latin America*. 25 April, 2008.
- OECD (2011) *Development Cooperation Report 2011*. Paris: OECD.
- Oliver JGJ, Janssens-Maenhout G and Peters JAHW (2012) *Trends in global CO<sub>2</sub> emissions; 2012 Report*. The Hague: PBL Netherlands Environmental Assessment Agency; Ispra: Joint Research Centre.
- Pendzich, Christine (2010) *Latin America and the Caribbean: Economic Growth and the Environment, 2010-2020*. The Woodrow Wilson International Center for Scholars and USAID, 2010.
- Prebisch, Raul (1950) *The Economic Development of Latin America and Its Principal Problems*. New York: United Nations.
- Rabatel, A., Francou, B., Soruco, A., Gomez, J., Cáceres, B., Ceballos, J. L., Basantes, R., Vuille, M., Sicart, J.-E., Huggel, C., Scheel, M., Lejeune, Y., Arnaud, Y., Collet, M., Condom, T., Consoli, G., Favier, V., Jomelli, V., Galarraga, R., Ginot, P., Maisincho, L., Mendoza, J., Ménégos, M., Ramirez, E., Ribstein, P., Suarez, W., Villacis, M., and Wagnon, P. (2013) "Current state of glaciers in the tropical Andes: a multi-century perspective on glacier evolution and climate change". In *The Cryosphere*, 7, 81-102, doi:10.5194/tc-7-81-2013, 2013.
- Ramirez, Marcela and Kent Butts (2011) *Civil-Military Collaboration to Address Adaptation to Climate Change in South America*. Issue Paper, Volume 5-11, March 2011, Center for Strategic Leadership, U.S. Army War College.
- Ratliff, William (2012) "China and Latin America: What Sort of Future?" In *Latin America in the Globalization Age: Hopes and Fears*. Manuela Nilsson and Jan Gustafsson (eds) 2012, Palgrave Macmillan, UK.

- Roberts, J. Timmons and Nikki Thanos (2003) *Trouble in Paradise: Globalization and Environmental Crises in Latin America*. London: Routledge publishers.
- Roberts, J. Timmons (2011) "Multipolarity and the New World dis(Ord): U.S. Hegemonic Decline and the Fragmentation of the Global Climate Regime." In *Global Environmental Change*, Vol. 21 No. 3.
- Roberts, J. Timmons and Bradley Parks (2007) *A Climate Of Injustice: Global Inequality, North-South Politics, and Climate Policy*. Cambridge, Mass.: MIT Press.
- Ryan, Daniel (2012) *Informe sobre el Estado y Calidad de las Políticas Públicas sobre Cambio Climático y Desarrollo en América Latina: Sector Agropecuario y Forestal*. Plataforma Climática Latinoamericana, 2012.
- Silva, Eduardo (2012) "Environment and Sustainable Development" In *Routledge Handbook of Latin American Politics*. Peter Kingstone and Deborah J. Yashar (eds), Routledge, 2012.
- Stalley, Phillip (2013) "Principled Strategy: The Role of Equity Norms in China's Climate Change Diplomacy". In *Global Environmental Politics*, Volume 13, Number 1, February 2013, pp. 1-8.
- Steinberger, Julia K. and J. Timmons Roberts (2010) "From Constraint to Sufficiency: The Decoupling of Energy and Carbon from Human Needs, 1975-2005". In *Ecological Economics* 70: 425-433.
- Steinberger, Julia, J. Timmons Roberts, Glen Peters, and Giovanni Baiocchi (2012) "National emissions pathways and human development: correcting for carbon embodied in trade". In *Nature: Climate Change* 2 (2), 81-85.
- Tissot, Roger (2008) "What is the Future of China-Venezuela Oil Relations?" In *Latin America Energy Advisor*, 5 May, p. 1.
- UNEP/ECLAC (2010) *Vital Climate Change Graphics for Latin America and the Caribbean*. Panama City, Panama: United Nations Environment Programme.
- United Nations Development Programme (2007) *Fighting climate change: human solidarity in a divided world*. Human Development Report 2007/2008 (Basingstoke: Palgrave Macmillan, 2007).
- United Nations Environmental Programme (2010) *Latin America and the Caribbean: Environmental Outlook*. Global Environmental Outlook (GEO) LAC 3, UNEP, 2010.
- United Nations Environmental Programme (2011) *Eficiencia en el uso de recursos en America Latina: perspectivas e implicaciones economicas*. Boletín ONU 11(263). Centro de Informacion de Naciones Unidas (CINU).
- United Nations Environment Programme (2012) *Global Environment Outlook-5: Environment for the future we want*. UNEP, 2012.
- Vergara, Walter (2011) "The Economic and Financial Costs of Climate Change in Regional Economies in Latin America". Presented at *The Economic and Financial Costs of Climate Change in Regional Economies in Latin America and the Caribbean Event*, Conference of Parties (COP 17), Durban Exhibition Centre, Durban, South Africa, 7th December 2011.
- Vergara, Walter (ed.) (2009) *Assessing the Potential Consequences of Climate Destabilization in Latin*

- America Latin America and Caribbean*. Region Sustainable Development Working Paper 32, Washington D.C.: The World Bank.
- Vergara, Walter, Ana R. Rios, Luis M. Galindo, Pablo Gutman, Paul Isbell, Paul H. Suding and Joseluis Samaniego (2013) *The Climate and Development Challenge for Latin America and the Caribbean: Options for Climate Resilient Low Carbon Development*. Inter-American Development Bank, 2013.
- Vergara, Walter, Hiroki Kondo, Edgar Pérez Pérez, Juan Matías Méndez Pérez and Victor Magaña Rueda, María Constanza Martínez Arango and José Franklyn Ruíz Murcia, Grinia Jesús Avalos Roldán and Enrique Palacios (2007) *Visualizing Future Climate in Latin America: Results from the application of the Earth Simulator*. Latin America and Caribbean Region Sustainable Development Working Paper 30, November 2007, The World Bank.
- Viola, Eduardo, Matías Franchini and Thaís Lemos Ribeiro (2012) *Climate governance in an international system under conservative hegemony: the role of major powers*. Rev. Bras. Polít. Int. 55 (special edition): 9-29, 2012.
- Vosti, Stephen, Siwa Msangi, Eirivelthon Lima, Ricardo Quiroga, Miroslav Batka and Chad Zanoocco (2011) *Agricultural Greenhouse Gas Emissions in Latin America and the Caribbean: Current Situation, Future Trends and One Policy Experiment*. Discussion Paper, Inter-American Development Bank, USA: Washington D.C.
- World Bank (2011) *Latin America and the Caribbean's Long Term Growth: Made in China?* World Bank, 2011. Washington D.C.
- World Bank (2012) *Inclusive Green Growth in Latin America and the Caribbean*. World Bank: Washington D.C.
- World Bank (2012) *GDP data 2012*. Available at:<http://databank.worldbank.org/data/download/GDP.pdf>.
- Zhao, S. S. (2006) "China's National Security Strategy and Diplomatic Engagement." University of Miami Center for Hemispheric Policy, 12 December p. 15 quoted in Ratliff (2012) *China and Latin America: What Sort of Future?* in "Latin America in the Globalization Age: Hopes and Fears" (eds) Manuela Nilsson and Jan Gustafsson, 2012, Palgrave Macmillan, UK.



## ENDNOTES

1. China, the EU and Latin America: Current Issues and Future Cooperation (2010) Edited by Birte Klemm and Niu Haibin, Shanghai Institutes for International Studies and Friedrich-Ebert-Stiftung, 2010.
2. World Bank GDP data 2012 <http://databank.worldbank.org/data/download/GDP.pdf>.
3. This can be viewed in contrast with the U.S. and European Union (EU), which both have climate change initiatives in Latin America with the U.S.'s Energy and Climate Partnership of the Americas and the E.U.'s EUROCLIMA program.
4. Kevin Gallagher, personal communication, October, 2012.
5. Vergara, 2011.
6. Magrin, G et al, 2007.
7. Carbon Tracker & The Grantham Research Institute, LSE, 2013 'Unburnable Carbon 2013: Wasted capital and stranded assets' <http://carbontracker.live.kiln.it/Unburnable-Carbon-2-Web-Version.pdf>
8. Silva Parejas, 2010.
9. Fabiana Frayssinet 'Climate Change Threatens Crop Yields in Brazil' 17 September, 2013, IPS-Inter Press Service.
10. The carbon impact of the 2010 Amazonian drought may eventually exceed the 5 billion tones of CO<sub>2</sub> released following the 2005 drought event. This compares to the estimated 5.4 billion tones of CO<sub>2</sub> emitted through fossil fuel use in the United States in 2009. Lewis et al, 2011.
11. Rabatel et al, 2013.
12. Vergara, Walter, A. M. Deeb, A. M. Valencia, R. S. Bradley, B. Francou, A. Zarzar, A. Grünwaldt, and S. M. Haeussling. 2007. "Economic Impacts of Rapid Glacier Retreat in the Andes." EOS 88 (25): 261-68.
13. ECLAC (2011) Natural Disaster Prevention and Response in the Americas and Financing and Proposals, Santiago, Chile: ECLAC.
14. Vergara et al, 2013.
15. United Nations Development Programme [UNDP], 2007.
16. UNEP, 2010.
17. Ryan, 2012.
18. 'Trends in global CO<sub>2</sub> emissions', Netherlands Environmental Assessment Agency (PBL) and the European Commission's Joint Research Centre (JRC). 2012.
19. Oliver JGJ et al, 2012.
20. See for example Harris, Paul G., ed. 2010. China's Responsibility for Climate Change: Ethics, Fairness and Environmental Policy. Bristol, UK: The Policy Press.
21. "The Main Task of Durban Conference Should be Achieving the Carbon Dioxide Emission Reduction Goal by 2020" [http://www.qstheory.cn/gj/gjzx/201112/t20111205\\_127754.htm](http://www.qstheory.cn/gj/gjzx/201112/t20111205_127754.htm).
22. Masters, 2012.
23. Stalley, 2013.
24. Ibid.
25. Gardini and Lambert, 2011.
26. China's Policy Paper on Latin America and the Caribbean (2008).
27. Zhao, S. S. 2006 p. 15 quoted in Ratliff, 2012.
28. Jiang Shixue 'China's Aid to Latin America' Unpublished document, no date.
29. Moreno, 2011.
30. ECLAC, 2012a.
31. Gallagher et al, 2012.

32. 'China joins IDB in ceremony at Bank headquarters' Inter-American Development Bank, 12 January, 2009.
33. Gallagher and Porzecanski, 2009.
34. MacArthur, 2011.
35. Simla Tokgoz, Prapti Bhandary, Mark Rosengrant (2012) 'Forces shaping present and future agricultural trends in Latin America and the Caribbean: Alternative Scenarios', 30 April 2012, International Food Policy Research Institute for the World Bank, LCSSD.
36. Vosti et al, 2011.
37. de la Torre et al, 2009.
38. World Bank, 2012.
39. Stephan Nielsen 'China Grabs Share in Latin America Wind with Cheap Loans' 20 November, 2012, Bloomberg.
40. Heath Reidy 'Spanish firms select Chinese PV to build Latin America's largest solar energy plant' 15 October 2012, Renewable Energy Technology <http://www.renewable-energy-technology.net/solar/spanish-firms-select-chinese-pv-build-latin-america%E2%80%99s-largest-solar-energy-plant> Accessed 5 September, 2012.
41. One study suggests renewables are sufficient to cover its projected 2050 electricity needs 22 times over Walter Vergara, Claudio Alatorre and Leandro Alves (2013) Rethinking Our Energy Future: A White Paper on Renewable Energy for the 3GFLAC Regional Forum, Discussion Paper, No. IDB-DP-292, Inter-American Development Bank, June, 2013.
42. 'IDB ramps up financing for green projects in Latin America and the Caribbean' Inter-American Development Bank, 16 March, 2012.
43. 'IDB Eyes China Projects Financing' Latin American Business Chronicle 23 November, 2010.
44. Claire Marshall 'Costa Rica bids to go carbon neutral' BBC News, 11 August, 2008.
45. Edwards and Roberts, 2013.
46. Roberts, Timmons & Guy Edwards. 'A New Latin American Climate Negotiating Group: The Greenest Shoots in the Doha Desert', Brooking Institution Website Article 12 December, 2012.
47. Minister Rene Castro, Costa Rica, speech to high level segment, 5 December, 2012, Doha, Qatar.
48. Hochstetler, 2012.
49. Minister Rene Castro, Costa Rica, speech to high level segment, 5 December, 2012, Doha, Qatar.
50. Socorro Ramirez 'Regionalism: The Pacific Alliance' Americas Quarterly, Spring, 2013 <http://www.americasquarterly.org/content/regionalism-pacific-alliance>.
51. 'A continental divide' 16 May, 2013, The Economist.
52. Isabella Cota 'Costa Rica halts Chinese-backed plan for refinery upgrade' 20 June, 2013, Reuters.
53. Lisa Friedman 'China's friendship with Costa Rica may conflict with its green goals' 20 June, 2013, ClimateWire.
54. 'Costa Rica Carbon Neutral for 2020...Really?' 14 June, 2013, Climate Action Network International <http://www.climatenetwork.org/blog/costa-rica-carbon-neutral-2020really>.
55. Mauricio Alvarez 'Opinión: la refinera es el señuelo para explotar gas y petróleo' 4 June, 2013, Crhoy.com <http://www.crhoy.com/opinion-la-refinera-es-el-senuelo-para-explotar-gas-y-petroleo/>.
56. Alberto Font 'National Oil Refinery president resigns in dispute over China-backed refinery' 21 June, 2013, The Tico Times [http://www.ticotimes.net/More-news/News-Briefs/National-Oil-Refinery-president-resigns-in-dispute-over-China-backed-refinery\\_Friday-June-21-2013](http://www.ticotimes.net/More-news/News-Briefs/National-Oil-Refinery-president-resigns-in-dispute-over-China-backed-refinery_Friday-June-21-2013).

57. In early March 2014, Costa Rican presidential candidate Johnny Araya declared he is abandoning his campaign for April's run-off election which effectively ensures victory for Luis Guillermo Solís, to be elected president on 6 April. Although, Mr. Araya withdrew, Costa Rican law does not allow for candidates to drop out so the vote must still be held on 6 April and Mr. Araya's name will appear on the ballot. 'Costa Rica government's presidential candidate withdraws' 5 March, 2014, BBC News <http://www.bbc.com/news/world-latin-america-26461528>.
58. Blázquez and Martín-Moreno, 2012.
59. Downs (2011) points out that in 2009 and 2010, the China Development Bank (CDB) extended lines of credit totaling almost \$65 billion to energy companies and government entities in Brazil, Ecuador, Russia, Turkmenistan and Venezuela.
60. Bill McKibben 'Global Warming's Terrifying New Math' Rolling Stone, 19 July, 2012.
61. Nachmany, M et al 2014.
62. Guy Edwards and Susanna Mage 'Could Ecuador play a more pivotal role on climate change within ALBA?' 4 September, 2012, Intercambio Climático.
63. 'Oil-rich Venezuela inks plans to curb spiraling emissions' 17 August, 2012, Point Carbon.
64. Multilateral Investment Fund and Bloomberg New Energy Finance (2013) 'Climate Scope 2013: Assessing the Climate for Climate Investing in Latin America and the Caribbean' Multilateral Investment Fund and Bloomberg New Energy Finance.
65. Warren Bull 'Venezuela signs Chinese oil deal' BBC News, 25 September 2008.
66. Nathan Crooks 'Venezuela to Invest \$5 Billion in Orinoco Oil Belt, Chavez Says' Bloomberg 31 December, 2011.
67. Downs, 2011.
68. Inter-American Dialogue (2013) 'Was Maduro's Recent Trip to China a Success?' Latin America Adviser, September, 2013.
69. Tamara Pearson 'Maduro's Weekend in China Sees 2000 Buses Purchased for Venezuela, Strategic Alliance Deepened' 24 September, 2013 <http://venezuelanalysis.com/news/10044>.
70. Inter-American Dialogue (2013) 'Was Maduro's Recent Trip to China a Success?' Latin America Adviser, September, 2013.
71. Kevin Gallagher 'Forget the received wisdom: Chinese finance in Latin America is a win-win' The Guardian, 16 March 2012.
72. OPEC website: Venezuela Facts and Figures: [http://www.opec.org/opec\\_web/en/about\\_us/171.htm](http://www.opec.org/opec_web/en/about_us/171.htm).
73. Stalley, 2013. See also Hallding et al (2011) and Roberts and Parks (2007).
74. Hallding et al, 2011.
75. Roberts, 2011.
76. Guy Edwards and Susanna Mage 'Could Ecuador play a more pivotal role on climate change within ALBA?' 4 September, 2012, Intercambio Climático.
77. Moore, Malcolm 'China overtakes the US as Brazil's largest trading partner' 9 May 2009, The Telegraph <http://www.telegraph.co.uk/finance/economics/5296515/China-overtakes-the-US-as-Brazils-largest-trading-partner.html> Accessed 10th January 2012.
78. Even though deforestation rates were lower in 2010 than in 2000, Fearnside et al (2013) confirm that the effect of soybean-planted area in increasing both exports and deforestation over this period.
79. Fearnside et al, 2013.
80. Hallding et al, 2011.

81. Jeff Tollefson 'Brazil reports sharp drop in greenhouse emissions' 5 June 2013, Nature Publishing Group.
82. Viola, 2013.
83. Paulo Prada 'Brazil government figures confirm spike in Amazon deforestation' Reuters, Thursday, 14 November, 2013.
84. Viola, 2013.
85. Fearnside et al, 2013.
86. Viola, 2013.
87. Viola et al, 2012.
88. Held et al, 2013.
89. Hochstetler and Viola, 2012.
90. Masters 2012.
91. Brazil, South Africa, China, India (BASIC) and the climate change conundrum: Round table discussions, Chatham House, February 2011 cited in Hallding et al, 2011.
92. Ibid.
93. Ibid.
94. Author interview of EU delegate at COP19 in Warsaw, November, 2013.
95. Steinberger et al, 2012.
96. We raise this issue because some other world powers have done so.
97. Garibaldi et al, 2012.
98. Guy Edwards 'Chinese loan for oil refinery clashes with Costa Rica's climate policies' Intercambio Climatico, 20 June, 2013 <http://www.intercambioclimatico.com/en/2013/06/20/chinese-loan-for-oil-refinery-clashes-with-costa-ricas-climate-policies/>.
99. Monica Araya 'Costa Rica, China y el clima: un momento decisivo' La Nacion, June, 2013.
100. Yale University '2014 EPI discussed in Costa Rica's media' Environmental Performance index, February, 2013 <http://epi.yale.edu/the-metric/2014-epi-discussed-costa-ricas-media>. Conducted every other year, the EPI features new categories such as wastewater treatment, climate change, and energy.





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ISSN: 1939-9383



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