Climate Politics in Mexico in a North American Perspective

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Introduction

The evolution of climate politics in North America has been central to shaping the course of climate action at the international level. The federal, state and even city-level climate policy decisions of the United States—the largest historical and per capita emitter of greenhouse gases—have both significant bio-physical and political consequences. Likewise, Canada, through its 2002 decision to ratify the Kyoto Protocol and its more recent acknowledgment that it will not be able to meet its Kyoto target, is playing an active role in first bolstering and then weakening the Kyoto regime. As a result of the prominent role played by its Northern neighbors, climate policy in Mexico is often overlooked.

The premise for this briefing paper is that Mexico's political prominence in the climate arena is sure to increase over the next decades. First, regardless of the future of the Kyoto regime, international climate policy is likely move in the direction of binding greenhouse gas emissions reductions targets for developing countries. As the only two members of the OECD that did not take on targets under the Kyoto Protocol, Mexico and South Korea will be at the forefront of negotiations regarding developing country targets. Second, while the Mexico case is certainly not representative of all developing countries, understanding the dynamics of climate politics in Mexico can be a first step to building of base of knowledge of climate politics in non-Annex 1 countries. Third, given the extensive economic integration and institutional basis for collaboration, the North American region is a likely site for piloting a climate regime that integrates developed and developing economies.

Focusing on Mexico also contributes to a discussion of North American climate politics by highlighting some commonalities across borders (please see Table 1 for an overview of climate and energy statistics for Mexico, the United States, and Canada). In particular, Mexico and Canada may have more in common on the climate issue than first appears (Rowland, Stoett in this volume). Both are oil producing countries, whose economies are relatively energy inefficient and for whom the US is the primary export market (Belausteguigoitia & Lopez-Bassols, 1999). Both countries are potentially very vulnerable to climate change impacts; Mexico due widespread poverty and high levels of biological diversity and Canada because of the vulnerability of social and ecological communities in the Arctic to warming. Finally, in both countries, domestic climate policy choices are likely to be influenced by the domestic and international climate policy choices of the United States.

The core of this briefing paper is a detailed, historical analysis of Mexican climate change politics.[1] I structure my discussion of the evolution of Mexican climate politics around developments in four societal arenas (scientific/research community, government, industry, and civil society), and I highlight four key features of the political terrain that have shaped the evolution of climate change politics in Mexico. First, the initial agenda for action on climate change was set by climate scientists in the national university and by bureaucrats in the national environmental ministry. Their early control of the issue had the path-dependent effect of establishing Mexico as a supporter of international action on climate change. Second, with the rise in the international prominence of the UN climate negotiations, a wider array of government ministries began to engage in the climate policy process and bureaucratic politics impeded forward action. From 1995 to date, Mexico has followed a stop-and-go pattern of climate policy

[1] For an overview and history of general environmental policy in Mexico please refer to the OECD environmental performance review for Mexico (OECD, 1998). The most comprehensive compilation of research and policy analyses addressing climate change in Mexico was assembled by researchers at the Instituto Nacional de Ecologia (Martinez & Fernandez Bremauntz, 2004).

making. Third, in contrast to the US and Canada, industry actors, in particular Petroleos Mexicanos, Mexico's national oil company, have been advocates for precautionary action on climate change. And fourth, equally surprisingly, Mexican environmental NGOs have been largely absent from the climate debates. After a detailed discussion of these four features of the terrain of Mexican climate politics, I conclude the paper by assessing the future prospects of climate policy in Mexico.

The terrain and evolution of Mexican climate politics

1. Scientific community: Issue definition and initial agenda setting

Interest in climate change in Mexico dates back to the early 1990s. A defining feature of the climate issue at that time was its institutional home. Interest in climate change was initially concentrated among a small group of scientists and environmental bureaucrats at the Universidad Nacional Autonoma de Mexico (UNAM), the national university, and at the Instituto Nacional de Ecologia (INE), the research branch of the federal environmental agency, the Secretaria de Medio Ambiente y Recurosos Naturales (SEMARNAT).[2]

A concerted climate change research effort was initiated after the negotiation of the 1992 UN Framework Convention on Climate Change (UNFCCC). Through a collaborative effort, INE and the UNAM Centro de Ciencias Atmosphera (CCA) established a Programa Nacional Cientifico sobre Cambio Climatico Global, that is a national scientific program on global climate change, as a means to coordinate dispersed research relevant to the climate change issue (Gay Garcia, 1994). These efforts received a further boost via financial support from the US Country Studies Program (CSP), which provided financial and technical assistance to developing countries to support efforts to address climate change. Mexico's application for support was funded in during the first round of applications in October 1993. The Mexico country study process was coordinated by INE and UNAM, and information was generated on three topics: 1) a greenhouse gas inventory for Mexico; 2) Climate change and greenhouse gas emissions scenarios; and 3) improving on previous studies of Mexico's vulnerability to climate change impacts (Ramos-Mane & Benioff, 1995)

The Mexico country studies process produced both technical and political results. The short-term outputs of the process were three workshops in April 1994, May 1995, and January 1996, presenting a range of research papers on inventories, scenarios and vulnerability (Benioff, Ness, & Hirst, 1997). The country studies work was also the basis for Mexico's first national greenhouse gas inventory, published in December 1995 (Di Sbroiavacca & Girardin, 2000), its first National Communication under the UNFCCC, completed in 1996 and submitted in November 1997 (Government of Mexico, 1997), and a summary report on the vulnerability studies (Gay Garcia, 2000).

[2] SEMARNAT was established in 1994 as the Secretaria de Medio Ambiente, Recursos Naturales, y Pesca (SEMARNAP). The name change dates to 2000 (SEMARNAT, 2002). Prior to 1994, environmental issues were under the purview of the Sub-secretaria de Desarollo Urbano y Ecologia (SEDUE), the ministry of urban development and ecology, established in 1982. In 1992, SEDUE was transformed into the Secretaria de Desarollo Social (SEDESOL), the ministry of social development. At the same time, two independent technical bodies were created to support SEDESOL: the Instituto Nacional de Ecologia (INE), an environmental research institute, and the Procuraduria Federal de Proteccion al Ambiente (PROFEPA), an environmental enforcement agency (OECD, 1998).

Politically, the country studies process acted to centralize the group of scientists and bureaucrats working on climate change in Mexico. The contributors to various workshops and reports were housed within INE, various programs at UNAM, and the Instituto Mexicano de Petroleo (IMP), a research institute focusing on oil. Climate change as an issue was claimed by these organizations. Key individuals turned their status in the research community into leadership roles in the policy arena. For example, in 1995, after the entry-into-force of the UNFCCC, UNAM Professor Carlos Gay Garcia, a lead convener of the research effort supported by the US Country Studies Program, became the lead expert on the Mexico delegation to the UNFCCC Conferences of the Parties (COPs) and the head of delegation at the Subsidiary Body meetings.

2. Government: Inter-ministerial competition and stop-and-go policy-making

With the entry-into-force of the UNFCCC, the profile of the climate issue shifted from being perceived as primarily a scientific issue to being viewed as a policy concern. 1995 thus marks the beginning of federal climate politics in Mexico. The overall stance of the Mexican government has been that climate change is a serious environmental issue, and that Mexico, in aggregate, faces a greater risk from climate change impacts than from adverse economic effects of greenhouse gas regulation. However, this generally supportive policy position masks significant disagreement between different federal agencies and significant fluctuations over time in federal government interest in the climate issue. I identify six key periods that have been markers in the evolution of Mexican climate politics at the federal level (see Table 2). Each of these periods has either advanced or retarded building momentum for climate regulation within the Mexican government.

The first phase of Mexican federal climate politics, scientists from UNAM and INE stepped into the policy arena. In 1995, UNAM professor Gay Garcia created an "Ad-hoc Group" to coordinate inter-ministerial dialogue on climate change. This group prepared the Mexican policy position, in advance of the Conferences of the Parties, and was dominated by representatives from UNAM, INE and SEMARNAT. This early period was one of momentum-building that lasted until 1997, when in the lead-up to the Kyoto Protocol negotiations, climate change became a hot political issue.

The second key event was the jump in the political profile of the climate issue in 1997. In the build-up to the Kyoto negotiations in December of 1997, the international climate negotiations process gained much higher public and political salience in the international arena, and, consequently, it began to be recognized as a much more important issue within Mexico. At that time, Mexico published its First National Communication under the UNFCCC (Government of Mexico, 1997) and hosted the twelfth plenary session of the Intergovernmental Panel of Climate Change (IPCC). The effect of the shift from scientific to political issue was a widening in the field of actors and agencies that perceived themselves as having a stake in the climate policy process. In 1997 climate change became an issue of concern to the ministries of energy, commerce and industrial development, agriculture and rural development, communications and transport, foreign affairs, and social development (SEMARNAP, 1998). Among these ministries, , began to take a much more active interest in the climate issue.

The Secretaria de Energia's (SENER) intensified engagement climate policy was particularly influential. Observers date serious SENER involvement in the climate issue to early 1997. The COP 3 negotiations in Kyoto in December 1997 were the first time a representative

from SENER was included in the Mexican delegation to the UN climate change negotiations, since the first round of the negotiations in 1991. By 1998, several internal documents had been generated by SENER addressing energy and climate change issues (SENER, 1998a, 1998b). Unlike SEMARNAT, SENER was less concerned with Mexico's ecological vulnerability to climate change impacts and instead focused the potential adverse effects of international climate regulation on Mexico's oil economy. At the time, most oil exporting countries were vocal opponents to action on climate change (Pershing, 1999). Bureaucrats in SENER echoed this policy stance and have generally voiced opposition to climate regulation. Evidence of the consequences of both SENER's involvement in climate policy debates and the general politicization of the climate issue can be seen in the fate of UNAM Professor Carlos Guy's "Ad Hoc Group" for inter-ministerial dialogue. In 1997, the informal group was converted into a formal Comite Intersecretarial de Cambio Climatico, with an expanded list of participating ministries (Belausteguigoitia & Lopez-Bassols, 1999; SEMARNAP, 1998). At the same time, Guy Garcia was replaced by Julia Carabias Lillo from SEMARNAP as the lead coordinator of the Mexican climate policy process.

The third key event in governmental climate politics was Mexico's decision to ratify of the Kyoto Protocol, a decision made on April 29, 2000 by the Mexican Senate. The decision to ratify was the result of an intense struggle between SEMARNAT and SENER. At the time, SENER was arguing against Mexican ratification of the Kyoto Protocol, while SEMARNAT was advocating for climate regulation. President Zedillo made the deciding choice to ratify, favoring the environment ministry. Petroleos Mexicanos (Pemex) was a key actor in this struggle (Gomez Avila, Rodriguez Martinez, Guzman, & Bauer, 2001). One might expect Pemex to have followed SENER's lead on climate change because of the close structural relationship between the two organizations. Formally, Pemex, along with the Comision Federal de Electricidad (CFE), the national electricity company, and Luz y Fuerza del Centro (LFC), the electricity and power company serving Mexico City, are very large and semi-independent sub-groups within SENER. Despite this close relationship, Pemex and SENER developed their climate policies relatively independently. While SENER opposed action on climate change, Pemex was an advocate for action on climate change, even co-hosting climate change workshops with SEMARNAT in December 1999 (see below for additional information on Pemex' climate policy).

As a non-Annex 1 party, Mexico's 2000 ratification of the Kyoto Protocol resulted in few additional obligations. Moreover, at the global level, the prospects in April 2000 of the Kyoto Protocol's entry-into-force were very uncertain. None of the major Annex-1 countries (including the European Union countries, the USA or Japan) had yet ratified the protocol. Nevertheless, domestic ratification of the Kyoto Protocol by Mexico sent a signal of moving forward on climate regulation. In line with this signal, SEMARNAT published a National Strategy of Climate Action. Unfortunately, Mexico's ratification of the Kyoto Protocol did not build significant momentum for action on climate change because the decision to ratify was made towards the end of Zedillo's six-year term and the National Climate Program was not carried forward under the following administration.

The fourth key political event in governmental climate politics was thus the election to the Mexican presidency of Vincente Fox in August 2000, a position he assumed in December of that year. Not surprisingly, as the first non-PRI president in seventy-one years, environmental issues were not at the top of Fox's agenda. Moreover, among environmental issues, climate change was of low priority to Fox's environmental staff, as the issue had suffered several

political setbacks in the international arena. Not only had the November 2000 round of the Kyoto Protocol negotiations (COP 6 in The Hague) collapsed because of US-EU disagreement, but climate change advocates in Mexico received a further blow in March of 2001, when US President George W. Bush withdrew the US completely from the Kyoto Protocol negotiations. A corner stone of Mexico's interest in the Kyoto Protocol was access to the Kyoto mechanisms, specifically the Clean Development Mechanism (CDM). Before the US pull-out, the size of the CDM was estimated at US $2-4 billion, translating to a price of US $10-20 per ton of carbon, with the US being the main purchaser of emissions (Quadri, 2000). The expectation was that the US would look to its southern neighbor for CDM opportunities (CCA/CEC, 2001). With the US pull-out, expectations for the size of the CDM collapsed, and prospects for a North American emissions trading bubble vanished (Betsill, in this volume).

The fifth turnaround in Mexican federal climate politics occurred in spring of 2002. Fox's appointed Secretary of the Environment, Victor Lichtinger, had been a member of the Mexican delegation to five rounds of the international UN climate negotiations (INCs 1 to 5 part 1), but it was not until after a presidential visit to Europe in the spring of 2002 that Lichtinger started raising the profile of the climate issue in Mexico. Lichtinger met with the heads of European and EU environment ministers during the push for EU ratification of the Kyoto Protocol. The EU's decision to ratify was announced in May 2002. With EU ratification, the CDM once again became a viable mechanism to attract foreign investment into Mexico's energy and environmental sectors. Climate discussions within Mexico's federal government ministries in 2002 focused on the creation of a national climate change office, or more accurately a national CDM project approval authority.

Little concrete action came from the flurry of activity in 2002, and the sixth and final period of Mexican climate politics is characterized by little real progress. In part the lack of progress is due to competition between federal agencies over control of the climate issue. INE, which played a lead role historically, had been divested of its policy functions in 2000 and re-tasked as a research institute. Today, it maintains the responsibility for generating the greenhouse gas inventory data and the National Communications (Tudela, Gupta, & Peeva, 2003). Policy decisions continue to be deliberated via the Comision Intersecretarial de Cambio Climatico, which includes among its members seven ministries (agriculture, transport, social development, environment, energy, economy, and foreign affairs). SEMARNAT is the coordinating ministry and also houses a department of climate change projects, which acts as the designated national authority for CDM projects (SEMARNAT, 2006). However, this department within SEMARNAT does not seem to play the prominent role envisioned in 2002 for a Mexican Climate Change Office. Most new activities on climate change appear to be driven by bi-lateral initiatives. In 2003, the US and Mexico pledged to strengthen bi-lateral cooperation on climate change, creating a Bi-lateral Working Group on Climate Change (US Department of State, 2003). Likewise, Canada and Mexico signed a joint statement on climate change cooperation during COP/MOP 1 in December 2005 (Government of Canada, 2005).

3. Industry: Petroleos Mexicanos as an industry pioneer

A striking feature of Mexican climate politics is the active engagement of certain key industries in the climate policy debates. As mentioned above, Petroleos Mexicanos (Pemex), Mexico's national oil company, was a vocal advocate for action on climate change in from 1999 to 2002. Pemex is also the first and only developing country oil company to have taken on a

company-wide carbon dioxide emissions reduction target and to pilot an internal corporate emissions trading system (Pemex, 2002). More recently, fifteen Mexican companies, mostly from energy-intensive sectors, were recognized for participating in a greenhouse gas inventory initiative and for publicly reporting their emissions (WRI, 2006b). In the following paragraphs, I describe in detail the origins of Pemex' proactive climate policy. I focus on the Pemex case because the company's engagement with climate change issues became path-setting for the Mexican private sector.

Pemex's interest in climate change dates back to 1995 when the company cooperated by providing information for Mexico's first National Communication under the UNFCCC.[3] The Pemex in-house environmental magazine, *Gaceta Ecologica*, first included an article on climate change in their September 1997 issue, in the lead-up to the December 1997 Kyoto Protocol negotiations. The next step was the December 1999 launch of its new and improved environmental division, where Pemex first publicly announced its climate-friendly policy, at a conference jointly organized by Pemex, SEMARNAT, the UN Development Program (UNDP), and UNAM (Pemex, 2001). The company published its first official climate policy statement in April of 2000, with the launch of the *1999 Annual Report on Safety, Health, and Environmen*t—the first of its kind. The report announced Pemex' proactive policy on greenhouse gas emissions and provided information on the generation of carbon dioxide emissions from Pemex operations. Estimated emissions for 1999 summed to almost 40 million tones of CO2—approximately equivalent to the annual greenhouse gas emissions of Ireland (WRI, 2003). The following year, Pemex announced a corporate emissions reduction target, pledging to reduce its greenhouse gas emissions by one percent by the end of 2001, and developed an internal emissions trading program (Pemex, 2002). To date, Pemex currently stands apart from its peers as the sole nationally-owned, developing-country oil company that has adopted a company-wide carbon dioxide emissions reduction target.

How did Pemex come to adopt a proactive climate policy? I argue that the process by which Pemex executives formulated the company's climate strategy was one of "importing environmentalism." Pemex is proud of its position as the sixth largest oil company in the world and, despite state-ownership, strives to mimic the management techniques of the global oil majors. It has a documented history of surveying industry best practices and then tailoring them to Pemex' situation in Mexico (Quintanilla & Bauer, 1995). Pemex' climate program showcases how the company's executives took their cues from the international oil and climate governance communities and then formulated a Pemex climate policy. In particular, Pemex acted as "close follower" of British Petroleum (BP), the oil major that Pemex managers identified as the industry leader in the climate arena.

A close analysis of the components of Pemex' climate policy reveals the similarities to BP's climate program, and Pemex executives publicly acknowledged their copying of BP. In a 1999 speech the president of Pemex gave credit to BP for setting the standard for environmental management in the oil industry and for inspiring the Pemex program. The connections between Pemex and BP were facilitated by Environmental Defense (ED), a US NGO, and the US Agency for International Development (USAID). In May 2000, six months after hosting its December 1999 climate conference, several Pemex representatives attended a workshop in Washington, DC, titled "Market Approaches to Environmental Protection." The workshop was organized by the USAID Center for the Environment. The USAID Mexico representative used this

[3] As such, Pemex was a late entry into the climate change field when compared to the Western oil majors. Exxon, BP and Shell all began to engage with the climate issue in the late 1980s.

opportunity to arrange a meeting between the Pemex representatives, including Javier Bocanegra, a senior environmental manager at Pemex, and the emissions trading team from Environmental Defense that was presenting during the workshop. Individuals from Pemex and Environmental Defense met repeatedly during the course of the workshop, meetings which laid the groundwork for Pemex to join BP, Shell and other companies in the ED Partnership for Climate Action. The Partnership brought together companies willing to take on corporate greenhouse gas emissions reductions targets and experimenting with emissions trading as a mechanism for meeting targets in a cost-effective manner (ED, 2000).

Four conditions facilitated Pemex' "importing" of its climate policy. First, it is unlikely that Pemex would have pursued a climate-friendly policy if Mexico had been an adamant opponent to action on climate change at the international level. Despite the stop-and-go character of Mexican climate politics, in the international community, Mexico has been an advocate for action on climate change. Second, Pemex was not pre-disposed to reject a climate-friendly policy because its initial contact to international climate issues was made via SEMARNAT, the environmental ministry, rather than SENER, the energy ministry. The initial seeds of Pemex' climate policy can be found in the company's early collaboration with environmental scientists at INE and UNAM. The two communities were brought into contact via the national Greenhouse Gas Inventory project, mandated by the 1992 UNFCCC. Had this contact not been initiated, the most likely outcome is that Pemex would have adopted SENER's more adversarial approach to climate regulation.

Third, Pemex managers were able to justify the climate friendly policy via pre-existing business objectives. Although the particular content of Pemex' climate policy came from the international community, Pemex justified the policy via its own business needs. In the late 1990s, Pemex was under strong pressure to reform it operations, focusing particularly on improved operational efficiency and access to foreign investment (Shields, 2001). Pemex' climate policy addressed each of these objectives. Most of the projects identified through the internal emissions trading system are efficiency projects. One Pemex executive described the program as an attempt to change the way employees think. In the past, Pemex' primary goal was to maximize production, regardless of cost. Now the emphasis is shifting to efficiency, and emissions trading serves as a tool to reorient employees' priorities. Likewise, CDM projects were promoted as a means to channel foreign investment. CDM projects bypass the constitutional restriction by being defined as the "the sale of environmental services."

The fourth precondition for Pemex' climate friendly policy was the receptiveness of Pemex leadership to environmental initiatives. Rafael Fernandez de la Garza, Director Corporativo de Seguridad Industrial y Proteccion Ambiental, came to Pemex from a regulatory position in the nuclear industry. During his tenure as a nuclear regulator, he as the target of the successful Laguna Verde anti-nuclear environmental campaign. Interviewees reported that his experience in nuclear industry made him very environmentally aware. Likewise, key employees within the environment division acted as norm entrepreneurs, promoting action on climate change as a viable oil company policy strategy.

Since 2002, Pemex has backed away from its active engagement with climate change. The ED Partnership for Climate Action is no longer active, and Pemex did not follow-up its 1% reduction target with a more stringent 10% reduction target, as was being discussed in 2002. That year also marked the last year that Pemex published a corporate annual report on health, safety, and environment. Nevertheless, I argue that Pemex played a pioneering role, generating

interest in climate change among industry actors in Mexico and Latin America and among state-owned oil companies.

Pemex' support for action on climate change weighed in Zedillo's 2000 decision to ratify the Kyoto Protocol. Moreover, the Mexican government is currently promoting both CDM and emissions trading mechanisms. They are in close discussion with Pemex to make sure that Pemex projects are eligible under the CDM rules. Moreover, the government has followed Pemex' lead and is developing an interest in emissions trading. In September of 2002, preliminary discussions were being held within the environment and energy ministries regarding the expansion of the emissions trading system to include CFE, the national electricity company, along with Pemex, and even the idea of a national trading system. Although this discussion did not materialize in a concrete program, a recent private sector initiative is a positive sign. In 2004, Mexico adopted a corporate greenhouse gas protocol developed by the World Resources Institute (WRI), and the World Business Council for Sustainable Development (WBCSD). Jointly with SEMARNAT, WRI and WBCSD launched the Mexico Greenhouse Gas Program, under which fifteen Mexican companies compiled corporate greenhouse gas inventories—the necessary precursor to emissions trading. Twelve additional companies are still in the process of compiling their inventories (WRI, 2006b).

In addition to efforts within Mexico, Pemex has also been a regional industry leader on climate change. In October 2001, the oil and gas industry association of Latin America and the Caribbean (ARPEL) organized a workshop on designing projects to meet CDM criteria. The workshop was held in Mexico City and Pemex acted as host. The pattern of organizing and hosting climate related workshops continued in 2002. In May of that year, Pemex once again played host to an ARPEL workshop, this one focusing on emissions trading. A month later Pemex, along with the Canadian Petroleum Institute, held a workshop on the CDM. The workshop was scheduled to coincide with Pemex Environment Week and the release of its third Environmental Health and Safety annual report. Finally, Pemex may turn out to be a leader among state-owned oil companies. Earlier this year, Saudi Aramco, Saudi Arabia's national oil company, convened a conference of experts to brief corporate executives on the climate change issue.[4]

4. Civil society: Climate change not a priority issue

Within North America, the Mexico case is unique for the absence of a civil society-led campaign around climate change. The NGO community in Mexico is vibrant, yet still in the early stages of its development. Delgado (2001) identifies the 1980s and particularly the battle against the Laguna Verde nuclear power plant as the beginning of a self-identified environmental NGO community in Mexico. This community continued to thrive and expand in preparation for the first Earth Summit in Rio in 1992 and beyond. However, it has not mobilized around the climate issue. A combination of factors accounts for the fact that no Mexican NGO has launched a climate campaign.

Most importantly, climate change is not a priority environmental issue for environmental NGOs in Mexico. Mexico is not a major global greenhouse gas emitter. Based on 1995 greenhouse gas emissions, Mexico ranked fourteenth, between South Korea and South Africa, contributing just 1.48% to total global greenhouse gas emissions (SEMARNAP, 1998). Moreover, the Mexican government has generally been forward thinking on the climate issue. In

[4] Personal communication, March 23, 2006.

addition, there is little public pressure for action on climate change. Although there is no rigorous public opinion data documenting public awareness and understanding of the causes and consequences of climate change, anecdotal evidence suggests that the issue is as misunderstood in Mexico as in most other countries. For example, during a national evening news broadcast about Environmental Secretary Lichtinger's visit to the EU in April of 2002, the anchor read text regarding the ozone hole and CFCs as the main part of a segment on global warming.

Most Mexican NGOs focus their efforts on environmental concerns that are perceived as more pressing and deserving of attention than climate change. They focus on local issues, either "green" conservation issues or "brown" contamination and pollution concerns. Green-issue NGOs have a high profile in Mexico and work on conservation projects through collaborations between local community groups and large international NGOs, such as Conservation International and the World Wide Fund for Nature (WWF). As one of twelve "mega-diverse" countries, Mexico is a biodiversity "hotspot" (Toledo & Ordonez, 1993). Brown-issue NGOs are generally focused on local pollution and do not link with international campaigns.[5] For example in the oil-producing state of Tabasco, there is a long history of activism focused on the adverse environmental effects of oil extraction and refining activities. The target of activism is Pemex (Town & Hanson, 2001). In Mexico City, the primary issue of concern is local air pollution and the focus is on redesigning the city's transportation infrastructure (WRI, 2006a). These activities are recognized as generating climate co-benefits (West, Osnaya, Laguna, Martinez, & Fernandez Bermauntz, 2004), but the driver for action is local air pollution concerns (Betsill, this volume).

Among the Mexican environmental NGO community, there are three groups well-positioned to potentially organize a climate campaign. They are Greenpeace Mexico, the Centro Mexicano de Derecho Ambiental (CEMDA), and the Union de Grupos Ambientalistas (UGA). These three groups employ staff with advanced degrees, can access the international environmental advocacy community, and have the relevant experience in Mexican politics; in other words they have the necessary resources and expertise to campaign on climate change. However, policy directors and campaigners from Greenpeace Mexico, CEMDA and UGA all reiterated that that climate change is simply not a priority issue for their organizations.

Future prospects for climate action in Mexico

Understanding the history and evolution of climate politics in the scientific, political, economic, and civil society arenas sheds light on future prospects for climate action in Mexico. First, Mexican interest in the climate issue is driven by the actions of Annex-1 countries, including but not limited to the United States and Canada. Second, a primary barrier to federal action is inter-ministerial competition over ownership of the climate issue. Third, the most active site for entrepreneurial action on climate protection is emerging in the private sector.

Climate activities in state and non-state arenas in the US and in other Annex-1 countries have played a significant role in Mexican climate politics. The US Country Studies Program was central to organizing Mexico's climate research community, a constituency that played a galvanizing role in Mexico's initial response to climate change. The evolution of federal climate politics in Mexico also showcases the importance of connections to Annex-1 countries, particularly the United States. At the federal level, action on climate change in Mexico has followed a stop-and-go pattern. After building momentum by voting to ratify the Kyoto Protocol

[5] Greenpeace is the one exception to this rule. The Greenpeace Mexico office campaigns on both conservation and pollution issues, mobilizing local groups as well as resources from the international Greenpeace organization.

in early 2000, action decelerated with the election of a new president in August of 2000 and came to a standstill when the US announced that it was withdrawing from the Kyoto Protocol negotiations in April 2001. Interest in the issue was reignited only when the European Union and Japan ratified the Kyoto Protocol in 2002. Finally, activity in the United States has been a key part of climate action in Mexico's private sector. Both the Pemex climate change initiatives and the Mexico Greenhouse Gas Program followed a common organizational pattern. They are the products of collaborations between business actors in Mexico and US-based environmental NGOs.

Unfortunately, the current state of international and domestic climate politics in the US and Canada makes unlikely a significant change in Mexico's climate policy. In principle, with the August 2006 presidential election, there is once again an opportunity for a change in the level of government interest in the climate issue. However, neither Andrés Manuel López Obrador nor Felipe Calderón, the two leading candidates in the presidential election, is focused on the climate issue. Only a decision by the US to re-engage in the Kyoto process or a decision by Canada to meet its Kyoto target via significant CDM investment in Mexico would drive renewed interest in the climate issue in Mexico. If this were to happen, action on climate change in Mexico would still face the obstacle of inter-ministerial competition over the issue. Mexico's current course on climate change is being set by an inter-ministerial dialogue at the federal level, which is characterized by competition between ministries, particularly the environmental ministry (SEMARNAT) and the energy ministry (SENER).

Given inter-ministerial competition at the federal level and the absence of civil society interest in climate change, the private sector remains as the most promising arena in which to promote bottom-up action on climate change in Mexico in the short term. Coupled with the upsurge in sub-national climate change activities in the US, there are many prospects for partnerships. Particularly promising are activities in the transportation and energy sectors that link US NGO and business and industry actors in Mexico. Such activities could build on pre-existing environmental collaborations at sub-national administrative levels, such as air pollution control activities in Mexico City or on the US-Mexico border region. To date, Mexico has not yet seen the emergence of vibrant city and state-level climate politics, which are the focus of action in the United States and Canada.

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Table 1: Key energy and climate statistics for Mexico, Canada, and the US

	Mexico	Canada	United States
*Population – 2006	107 million	33 million	298 million
*GDP PPP – 2005 (US$)	$1.068 trillion	$1.08 trillion	$12.41 trillion
*GDP official fx rate – 2005 (US$)	$669.5 billion	$1.023 trillion	$12.47 trillion
*GDP per capita – 2005 (US$)	$10,100	$32,900	$42,000
CO2 Emissions – 1999 (million metric tons)	358	489	5,584
CO2 emission/capita – 1999 (metric tons per person)	3.7	16.0	19.9
Total energy consumption – 1999 (metric tons of oil equivalent- toe)	149 million	241 million	2.2 billion
Energy Intensity/GDP PPP – 1999 (toe/million $intl)	169	314	264
Vehicles/capita – 1998	0.14	0.56	0.77

Sources: (CIA, 2006; WRI, 2003)

Table 2: Key events/phases in the evolution of Mexican governmental climate politics

Phase 1: 1995-1996 Scientists dominant policy process	**1995** – Carlos Gay at UNAM establishes an "Ad-Hoc Group" to coordinate inter-ministerial dialogue on climate change. **May 1995** – Second US Country Studies Workshop **September 1995** – INE publishes Preliminary National Inventory of Greenhouse Gases. **January 1996** – Third US Country Studies Workshop
Phase 2: 1997 Jump in political prominence of climate issue	**April 1997 – "**Ad-Hoc Group" is reorganized into a formal Inter-Ministerial Committee for Climate Change. **September 1997 –** SENER begins to engage in climate policy debates **September 1997** – Mexico publishes First National Communication under UNFCCC **September 1997** – Mexico hosts 12th plenary session of IPCC. **December 1997** – Kyoto Protocol negotiated
Phase 3: 1998-2000 Upsurge in momentum with ratification of Kyoto Protocol	**1998** - SEMARNAT supports ratification of Kyoto Protocol **1999** - SENER opposes ratification of Kyoto Protocol on climate change **December 1999** – Pemex announces proactive climate policy **April 29, 2000** – Mexican Senate votes to ratify Kyoto Protocol
Phase 4: 2000-2001 Decline in interest in climate change under new President	**August 2000** – Vincente Fox elected to presidency **December 2000** – President Fox assumes office **March 2001** – US President George W. Bush withdraws US from Kyoto Protocol
Phase 5: 2002 Upsurge in interest with European ratification of Kyoto Protocol	**Spring 2002** – Fox appoints Victor Lichtinger as Secretary of the Environment **May 2002** – EU ratifies Kyoto Protocol **October 2002** – discussion re creating a Mexican CDM office
Phase 6: 2003-2005 Domestic action bogged down due to inter-ministry competition	**March 2003** - Bi-lateral Working Group on Climate Change between US and Mexico **January 2004** - Mexico establishes national Climate Change Office **December 2005** - Joint statement on climate change cooperation between Canada and Mexico