

DISTRIBUTION: General J/09-01/SR-/Rev.1 ORIGINAL: English

# Commission for Environmental Cooperation (CEC) of North America Joint Public Advisory Committee Regular Session 09-01

# **Workshop on Climate Policy Coherence in North America**

# Grand Hyatt Denver Hotel 22–23 June 2009 Denver, Colorado, United States

# Summary Record<sup>1</sup>

The Joint Public Advisory Committee (JPAC) of the Commission for Environmental Cooperation (CEC) of North America held a workshop on Climate Policy Coherence in North America in conjunction with the CEC's Sixteenth Regular Session of its Council, on 22–23 June 2009 in Denver, Colorado, USA.

This summary record reports on each item of the agenda, records all decisions made by the Committee and identifies action items and responsibilities. (See Annex A for the agenda and Annex B for the list of participants.)

Previous summary records, advice from JPAC to Council, and other JPAC-related documents may be obtained from the JPAC liaison officer or through the CEC's website at <a href="http://www.cec.org">http://www.cec.org</a>.

# Welcome and opening remarks, by the JPAC Chair, Nelly Corea

JPAC Chair Nelly Correa welcomed everyone to the session and gave a brief overview of the structure and mandate of the Joint Public Advisory Committee (JPAC).

She also informed the audience that the Canadian and Mexican governments had recently appointed the following new members to the committee: Laurent N. Benarrous, David Emerson, Tim J. Hearn, Nancy Southern and Glen Wright from Canada; and Rodolfo Lacy from Mexico. Unable to attend were Carlos Sandoval Olvera from Mexico, who would be arriving later that day, and Patricia Cleary from the United States.

#### Overview, by Adrián Vázquez, CEC Executive Director

Mr. Vázquez began his presentation by welcoming everyone and by thanking JPAC for giving him the opportunity to share a few thoughts with the audience.

Final Version

<sup>&</sup>lt;sup>1</sup> Disclaimer: Although this summary was prepared with care, readers should be advised that while JPAC members have approved it, it has not been reviewed nor approved by the interveners and therefore may not accurately reflect their statements. Please also note that there were some difficulties with the translation equipment and some portions of the interventions may have been omitted.

He emphasized how important it is for the Council to produce a new strategic plan for the CEC that reflects the concerns of the North American public, and he mentioned the crucial role played by JPAC in that regard. He reminded the audience of the opportunity that emerges from the upcoming North American Leaders' Summit, given the desire of Prime Minister Harper, President Obama, and President Calderón to send a strong signal of promoting efficient environmental actions on a North American scale.

Mr. Vázquez reiterated the importance of the role of JPAC in guiding the CEC Council during these changing times, and he mentioned that the Secretariat would be waiting eagerly for its recommendations.

# JPAC Workshop on Climate Policy Coherence in North America

# Keynote address, by Durwood Zaelke, Director, Institute for Governance and Sustainable Development

Mr. Zaelke began his presentation by mentioning that the story he had to tell was about good and bad news—the bad news being climate change and how recent scientific findings indicated that the situation is much worse than we realize.

Mr. Zaelke noted that we are already facing global warming that will surpass the assessed tipping point, causing abrupt climate changes: there is a 90% probability of a 2.4°C warming within 50 years. We have reached the point where we will likely lose the Arctic sea ice, which could disappear completely within five to ten years. The conservative predictions of the IPCC (International Panel on Climate Change) indicate that 80% of the snow and ice will disappear in 20 years, which will cause significant impacts on millions of people. There is a 5–10% chance of 4.3–5°C warming during this century—defined as the disaster scenario—with consequent loss of the Antarctic and Greenland ice sheets that would set off an additional acceleration of the warming. Mr. Zaelke stressed that deforestation of Amazonia and world forests in general will kill one of the great weapons we have to fight climate change. Finally, he pointed out that, although an essential measure, cutting carbon dioxide (CO<sub>2</sub>) emissions does not produce cooling for at least a thousand years, and this means we can only limit additional warming on top of the warming in which we are already invested.

The good news is that CO<sub>2</sub> is only half the problem, the other half being non-CO<sub>2</sub> warming agents such as black carbon, tropospheric ozone, methane and hydrofluorocarbons (HFCs), which offer both a big scope of emission reduction opportunities and the possibility of a fast response, given their relatively short atmospheric lifetime. Mr. Zaelke focused on three big, short-term and fast-action strategies to reduce non-CO<sub>2</sub> warming agents and to expand bio-sequestration.

• Black carbon emissions stay in the atmosphere for only days or weeks and represent 3 gigatonnes of CO<sub>2</sub> equivalent (CO<sub>2</sub>-eq.) per year. Reducing or avoiding these emissions could offer considerable co-benefits in terms of public

health improvement. It should be seen as an opportunity to coordinate local air pollution policy on climate change.

- Mr. Zaelke pointed out the necessity to regulate HFCs. In his opinion, the Montreal Protocol on Ozone-depleting Substances is the best climate treaty that has been created so far.
- Production of biochar [charcoal created by pyrolysis from biomass such as agricultural waste] could be an incredibly important strategy for carbon sequestration. It can be done on a decentralized basis anywhere in the world. Mr. Zaelke explained that bio-sequestration, including production of biochar, is the only way to return the atmosphere to the safe maximum limit of 350 parts per million (ppm) CO<sub>2</sub> within decades.

With these three strategies in mind, Mr. Zaelke presented some principles that should be considered as we design the right governance approach. He first mentioned the importance of expanding our solutions to non-CO<sub>2</sub> forces, since tackling only CO<sub>2</sub> would not be enough. Regulatory measures and strong compliance mechanisms are also important because market-based measures alone will not be sufficient. Lastly, we have to start talking about carbon negativity opportunities, given the strong targets that have to be reached in order to obtain carbon stabilization.

# **Questions and comments**

- A member of the audience asked Mr. Zaelke if, given the concern that policies are not always guided by strong scientific facts, he thought there was hope that science would influence policies in the three NAFTA countries and in other parts of the world. Response:
  - There is hope. Mr. Zaelke reminded the audience that although there are a lot of uncertainties in terms of national and international policies, there are other actions that can be undertaken. We need to take care of the cities, since this would be cheap and fast. He also gave the example of carbon-negative cement, black carbon, and biochar.
- Mr. Zaelke was asked to comment on the different regulatory regimes described in his speech: (1) the Montreal Protocol as a mechanism that allows substitution and provides compliance in the regulatory regime; (2) the power area, where the dominance of carbon-rich sources implies a need for regulatory regimes to provide incentives to move away from these sources of power over time; (3) the agriculture area and the issue of having a regulatory regime that responds to environmental justice.

# Response:

(1) The Montreal Protocol has forced the development of alternatives because of the phase-out schedule that was put out in advance. If we have a strict regulatory regime, business will focus on it and develop innovative offsets. (2) Part of our overuse of carbon energies is wasteful energies, and the rising

prices of oil has not solved the efficiency problems since the price elasticity of oil is so strong. Thus, there is a need for regulation to provide effective energy efficiency improvements. (3) Concerning agriculture, there are many ways to address carbon justice, and biochar could be a very good solution.

- The keynote speaker was asked about the possible actions for cooperation that could be undertaken at a North American scale, including by the CEC.
   Response:
  - Mr. Zaelke mentioned that the three countries could cooperate on technology transfer, on promoting best practices, and on sharing enforcement and compliance mechanisms. He reiterated the importance of the bottom-up approach, insisting that cities, states, provinces and even schools are doing things that could inspire cooperation.

# Presentation, "Conserving North America's Natural Heritage in a Rapidly Changing World," by Exequiel Ezcurra, Director, University of California Institute for Mexico and the United States

Dr. Ezcurra first said that, as a conservation biologist, he would defend the hypothesis that adaptation to large-scale environmental change is not an issue of the future but a very important need of the present.

He commented on the water crisis, which has been accelerated by climate change. Describing water as an environmental service provided by natural ecosystems, Dr. Ezcurra pointed out that modern urban growth has impaired our ability to obtain water from natural sources. Obtaining water from anthropogenic production is extremely expensive, in terms of energy used. As a society, we have evolved towards an energy-intensive and hence highly expensive system of water appropriation and supply. Talking about the increase in extreme climate—related events, Dr. Ezcurra stated that climate change will increase annual mean temperatures by 1–2°C, with marked bursts of heat waves in summer. This apparently small temperature change can provoke serious water deficiencies in our ecosystems. Increased variation in climate-related events is causing a significant fire threat to our natural ecosystems, putting at risk the catchment capacity of our indigenous aquifers.

Dr. Ezcurra also pointed to the fact that sea-level rise, as a result of climate change, will induce significant changes in the dynamics of our coastal wetlands and in the way that freshwater discharge into the ocean operates. This will likely affect the dynamics of fisheries, wildlife and the ecosystems that protect our coasts. He also commented on the surprising ramifications of air pollution: the fact that atmospheric pollution is a major driver of natural forest die-back, that nitrogen deposition from the burning of fossil fuels will induce large-scale transformations of our indigenous scrubs into more flammable grass-invaded ecosystems, and that forest degradation and increased fire frequency may impair the capacity of our watersheds to harvest water for human consumption.

He concluded his presentation with optimism, by noting that we do have the capability to use our natural resources in an efficient way. He recommended the development of an agenda to protect wilderness, and emphasized both the environmental services provided by the ecosystems and the importance of preserving our future.

# **Questions and comments**

- The JPAC Chair thanked Dr. Ezcurra for his presentation and asked him to comment on both the importance of preserving environmental services and on the economic cost of losing those services.
   Response:
  - Dr. Ezcurra reiterated that ecosystems produce very important services that allow the preservation of biodiversity around the world. As examples, he pointed to the increased number of hurricanes, resulting in the deprivation of fish stocks, as well as to the destruction of mangroves, stressing the huge economic cost of losing those services.

# Presentation, "North American GHG Emissions and Mitigation Potential," by Gabriel Quadri, EcoSecurities Country Director for Mexico and Central America

Mr. Quadri began his talk by presenting the emissions profiles of the three countries in a more global context. The United States and China are the biggest greenhouse gas (GHG) emitters in the world. Mexico, currently in 10th place, will become a more and more important player in the climate arena, given its significant emission growth rate.

He outlined the Mexican inventory of emissions, as well as the projected emissions for 2020. It is worth noting that transport is the sector likely to become the largest emitter, that emissions from deforestation and from Pemex will likely diminish, that emissions from cement plants will grow due to increased production, and that the rest of the sectors will more or less keep their relative share.

Regarding the Mexican emission-reduction costs, here are some of the comments he made:

- Although the cheapest reductions are in energy efficiency in services and in housing, volumes are very limited.
- The largest reduction potential is in transport (gasoline consumption) and costs are quite low and even negative.
- There are large low-cost methane emission reductions in Pemex and landfill.
- Energy efficiency in industry and cogeneration are needed; however, they are apparently costly, due to high capital costs.

Mr. Quadri then presented the Mexican policy goals, policy instruments, and financing for 2020, and he concluded by addressing the offsetting modalities and by presenting some arguments for a North American carbon market.

# Presentation, "The Climate Policy Landscape in North America," by Thomas Peterson, President and CEO, the Center for Climate Strategies

Mr. Peterson explained that the upward evolution of sub-federal actions has clearly redefined the policy and political landscape in North America, in terms of opportunities set for national and international actions. At the federal level, the role of unilateral action is significant (including in North America) and this could potentially completely redefine the multi-lateral processes. He stressed what a major worldwide impact the relationship between the US and China has. Talking about the targets, he explained that there is a common agreement on the concepts but there is still a lack of understanding in terms of the economic impacts associated with those targets, and that the competitiveness issues are crucial, although they clearly have been overstated. He also emphasized the potential economic benefits of climate action, whether these are cost savings or secondary macrobenefits, such as job creation or income economic expansion.

As each country looks more deeply into climate actions and how to formulate policies at different levels, it becomes clear that comprehensive approaches pay off. These are approaches that minimize cost and maximize co-benefits and target attainment. In that regard, Mr. Peterson reminded the audience that sub-federal actions provide extensive roadmaps, results, and benchmarks. However, the barriers to actual adoption of these actions are high in some cases, such as funding issues and institutional reforms. A capand-trade system is economically necessary, at least at the federal level. However, cost impacts are still uncertain and represent a barrier to adoption. As for offsets, although there is hope that a robust and efficient market will emerge, there are concerns about how functional offsets will be and how relatively small and structurally deficient this market could be as a result.

Mr. Peterson stressed the complexity of structuring climate actions at a trilateral level, given that national governance varies significantly in the three countries. He insisted that highly integrative structures are inevitable; we are going to see much more cooperation, including with the private sector, which will play a larger role. He explained that getting a comprehensive climate policy for North America means combining a set of different things at different levels of government, including trade issues.

# Panel discussion, "The Prospect and Challenges of Regional Climate Policy Cooperation"

Moderator: Rodolfo Lacy, Program and Project Coordinator, Mario Molina Center

This panel was given the mandate to consider key issues and challenges of regional policy cooperation facing Canada, Mexico and the United States and to identify and elaborate upon the most critical areas that may benefit from coordinated climate policy response in North America. Panelists were asked to make a ten-minute presentation on specific topics and then engage in a discussion with other presenters, as well as the public.

# The Canadian perspective, given by David McLaughlin, President and CEO, National Round Table on the Environment and the Economy (NRTEE)

After briefing the audience on NRTEE, Dr. McLaughlin pointed out that Canada was initially a signatory to Kyoto and then ignored the treaty, since its targets were becoming unachievable. The country is now focusing on the post-2012 framework. At the provincial level, he insisted on two dynamics, the first being provinces forging ahead in the absence of federal policies, the second being provinces intending to form common policy and political fronts to influence federal actions. He enumerated some factors influencing Canadian policy approaches, including the energy and political economics (growing energy exports to the US, and uneven emission profiles across the country), the lack of public consensus, and the difficulties underlying a minority Parliament. He pointed out the relatively high GHG abatement cost for the country. Dr. McLaughlin presented Government of Canada's key climate change principles, including a balance between environmental protection and economic prosperity, the development and deployment of clean technologies, and the commitment of all emitting countries. He presented the actual federal policy on climate. Then he introduced the audience to the latest NRTEE report, which provides a guideline to achieving the targets set under the federal plan.

On the prospect for regional cooperation, Dr. McLaughlin noted that Canada likes to have a unique bilateral relationship with the US, and he used the recent Clean Energy Dialogue as an example. In that regard, key alignment issues for Canada with the US are the stringency of the targets, the timing of the process, the compatibility of the system, the competitiveness concerns, including the allocation of the carbon credits, and the prospect of the protectionism known as border carbon adjustments.

# The Mexican and international perspective, given by Julia Martínez, Head of the Climate Change Program, *Instituto Nacional de Ecología* (INE—National Institute of Ecology)

After thanking the moderator and the JPAC Chair, Ms Martínez summarized the most important effects of climate change in Mexico. She talked about the climate scenario projections for Mexico to 2080. She presented the relative Mexican contribution in terms of GHG emissions, both in the world and by sector at the national level. She introduced the audience to the Mexican National Development Plan (2007–2012), whose objective 10 is to reduce GHG emissions and objective 11 is to promote adaptation measures to face climate change. She also explained the components of Mexico's Special Program on Climate Change (PECC), including its long-term vision, the adaptation and mitigation policy, and cross-cutting issues. She explained the implications of low-carbon growth as a potential path for Mexico, stressing the fact that the country has the potential to peak its emissions by 2015, and to reduce them by 25% from 2005 levels by 2030. She defined the idea of the State Program for Climate Change (SPCC) as an instrument of environmental policy that sets paths of action on climate change at the state level, in coordination with the federal and municipal governments and with the participation of the private sector and civilian organizations. The National Institute of Ecology (INE) is scientifically and technically supporting the development of SPCC. The institute is also negotiating national and international financial resources to develop programs and their implementation.

# The North American perspective, given by Stacy Van Deveer, Associate Professor, Department of Political Science, University of New Hampshire

Dr. Van Deveer praised the prominent role that sub-federal policy leadership has had over the last 20 years, and made the comparison to the federal initiatives, which have been sorely lacking in their willingness to tackle climate issues. He explained that there are many ways to categorize policy choices concerning this issue, and he separated these into four different sets: command/control regulation, taxes, new markets and market-based instruments, and subsidies. He reiterated that regulation is absolutely essential, while market-based instruments alone are not sufficient. He noted an area of consensus so far in the workshop: the need to look at existing policies at all levels of jurisdiction, because many of them are headed in the wrong direction when looked at through the lens of climate policy.

On multi-governance, he referred to Thomas Peterson's earlier comment on the variety of initiatives that are going on in the three countries at various levels of society. According to him, the main issue is to learn lessons from the minority of states, cities, and provinces that are doing well. He argued that the best role of the three federal governments might potentially be to set minimal conditions but leave the playing fields open for states and local governments and firms. There is a lot of mitigation to do in a short amount of time, and federal policies or any trinational systems have the potential to staunch or reduce the policy experimentations at the sub-national level. Dr. Van Deveer made the recommendation that the CEC might want to move away from an exclusive focus on the three federal governments and address how to engage the innovative areas of state and provincial actions and a whole host of policy experiments that are yielding results and diffuse those to professional organizations.

**Moderator Rodolfo Lacy** introduced a 30-minute discussion period with the panelists and the public, on the challenges of regional policy cooperation facing Canada, Mexico and the United States. He invited the panelists to comment on the uncertain situation of climate change policies at the international level and on what could be expected from the NAFTA governments vis-à-vis North America in that uncertain context.

**Stacy Van Deveer** told the audience that he does not think the policy landscape is as uncertain as some of the discussions suggested. He argued that some political actors are using or increasing uncertainty in order to continue to delay actions. It is certain that GHG emissions in the three North American countries must go down regardless of what will happen in Copenhagen. He argued that the competitiveness concerns over climate policies are likely to be much smaller than is often claimed.

**Julia Martínez** referred to comments made earlier by Dr. Ezcurra on wetlands vulnerability and she explained that the National Institute of Ecology has several pilot projects that are addressing the issue. She mentioned the idea of a Green Fund that would finance projects in developing countries.

**David McLaughlin** suggested that although it may be too soon to predict the outcomes of Copenhagen, there are a few things that need to occur to guarantee progress. The reality is that countries have to get going and Canada is in this kind of situation. We have to put measures in place and we will learn from those as we move along. However, he said, we will not succeed unless all major emitters contribute.

**Thomas Peterson** reminded everyone that every time a multilateral negotiation takes place, true signs of progress always come down to unilateral actions from key parties. He explained that it will be interesting to see how much Canada, the United States and Mexico are willing to do unilaterally.

### **Questions and comments**

It was brought to the attention of both the panelists and the public that there is an international agreement called The Convention on Biological Diversity that could be effective for climate change actions.

There is a concern that processes concerning climate change actions do not always include all stakeholders that are affected, such as the communities, which are often excluded from the discussions.

**Moderator Rodolfo Lacy** asked the panelists to make a final statement regarding the comments made by the public.

**Thomas Peterson** said that in the United States, there has generally been an attempt to include communities and indigenous people in the design of climate actions. He explained that most of the public participation processes have been designed to take into account the concerns and interests of the minorities, and this has set an extremely high bar for consensus-building.

**David McLaughlin** suggested that the CEC could focus on three elements: (1) knowledge transfer and sharing information, (2) performing original research for policy makers that allows for further information sharing, (3) developing an agenda for adaptation for North America.

**Julia Martínez** responded to the comment made on The Convention on Biological Diversity, saying that this Convention needs to work together with the United Nations Framework Convention on Climate Change and with the United Nations Convention to Combat Desertification, in order to give positive results in terms of adaptation to climate change.

**Stacy Van Deveer** insisted that the CEC should continue its efforts to engage the interests of non-urban people all over the continent.

Meeting report, "Towards a North American Carbon Market?," by Isabel Studer, Director of the Center for Dialogue and Analysis on North America, *Instituto Tecnológico y de Estudios Superiores de Monterrey* (Monterrey Institute of Technology and Higher Studies), Mexico City campus

Dr. Studer stressed that an international agreement on climate change may not be sufficient, given that this kind of top-down approach will have to be complemented by bottom-up approaches. Because of the high level of economic integration of the three countries, a regional perspective on climate change is important at the North American level. She pointed out the need to look for opportunities to reduce GHG emissions at the lowest possible cost, using as an example Mexico's potentially broad offset market as an opportunity for Canada and the US, whose GHG abatement costs are relatively high. Given that an international agreement on climate change is a very complex process, a regional agreement on this issue would be considered a step forward in that direction.

Dr. Studer emphasized the crucial implications of the climate actions in the United States for Canada and Mexico. Both latter countries export fossil fuels to the US and, since an eventual cap-and-trade system in the US could result in protectionism measures (border carbon adjustments), this system could become a strong trading impediment for Canada and Mexico unless they adopt a climate policy as stringent as their neighbor's.

Although a North American cap-and-trade scheme is an idea that makes sense, given the high degree of integration of the three countries, Dr. Studer explained that such a plan is very complex and hard to achieve. That kind of system would require a very complex negotiation process, and it is unlikely that Canada and Mexico would accept the rules set by the United States Congress. However, she proposed the development of a North American Cooperation Agenda on Climate Change. The role of the CEC could be to work toward finding the common interests of the three countries, and this could include the harmonization of standards, fostering green energy generation and green job creation, and avoiding deforestation.

# Presentation, "Main Challenges to Developing Coherent Climate Policy Regimes in North America," by Jeff Schott, Senior Fellow, Peterson Institute for International Economics

Mr. Schott first stressed the significant challenge faced by the US and Canada to meeting their 2020 GHG reduction targets, as well as to meeting the deep cuts sought by 2050. Mexico, unlike most developing countries, is also seeking substantial reductions in GHG emissions. He explained that even if each country faces different political economy constraints, the three NAFTA members also share common interests. He mentioned the large energy-goods trade and electricity trade as examples. Almost 30% of US oil comes from North America, and in 2007 about 70% of the crude oil produced in Canada was shipped to the US.

However, the three countries face different challenges because of regional differences. For instance, while the US is a major consumer of petroleum, Canada and Mexico are

major producers. Mr. Schott emphasized how sources of energy differ among the countries. He identified the tensions between and among US states and Canadian provinces, and he introduced the components of the Waxman-Markey bill.

Finally, he noted seven distinct areas of opportunities for North American cooperation: (1) the US and Canada should negotiate how foreign electricity will be handled under renewable portfolio standards (RPSs); (2) the NAFTA countries might want to negotiate standardized definitions of renewable energy; (3) the US and Canada should push for further cross-border integration of electricity grids; (4) they should work together in the World Trade Organization (WTO) to promote coherence of trade and environment objectives; (5) they should cooperate on monitoring, reporting and verifying offsets, and he sees the CEC as clearinghouse for climate change–related data; (6) they should address the issues surrounding Chapter 11 of NAFTA, which should be seen as a potential litigation risk; (7) and the three countries should work toward increasing capacity building in Mexico.

# Roundtable discussion, "Towards Climate Policy Coherence in North America"

Moderator: Jeff Schott, Senior Fellow, Peterson Institute for International Economics

Canada, Mexico and the United States face a challenging transition to a lower-carbon economy. As previous sessions highlighted a number of those challenges, this roundtable asked participants to focus on opportunities for regional cooperation and delineate goals and options for North American climate and related energy and environmental action.

Mr. Schott invited the roundtable discussants to make a five-minute statement to respond to the key elements already presented. A discussion with the public would follow.

# Michal Moore, Professor of Energy Economics at the Institute for Sustainable Energy, Environment and Economy (ISEEE)

Dr. Moore addressed the issue of planning policies under uncertainty, first stressing that good policies should be flexible and realistic in their objectives and should be based on common standards and metrics and on common or agreed-upon time frames for goals and objectives. He explained that good policies have appropriate toolboxes and those include forecasting, monitoring tools, and modeling.

On the energy topic, he pointed out that the idea of being able to cut down emissions on the demand side is at the core of a lot of our climate change–related issues. On the supply side of energy, he stressed that we should take more into account the idea that technologies need to be used and inserted into the economy more intelligently.

Finally, he suggested that the structure for a coherent process must have clarity in its objectives and recommendations. The policies must be able to manage controversy while seeking consistency over time.

# Rodolfo Lacy, Program and Project Coordinator, Mario Molina Center

Mr. Lacy began his presentation by commenting on the climate change impacts that are already happening in North America, in terms of temperature, biodiversity and ecosystem modifications. He emphasized the need for more regional research programs on the basic science of climate change.

Referring to the McKinsey abatement cost curve for Mexico, he explained that the country will need appropriate financial mechanisms in order to take advantage of these mitigation opportunities. Funding may come from private initiatives but it also has to come from banks. He then pointed out that because Mexico doesn't have any experience in cap-and-trade systems, it will be very difficult for the country to develop that kind of system. As a result, there is a need for institutional support and this is part of what Mexico is seeking through cooperation.

Finally, he addressed the transportation-related issues by presenting the Mario Molina Center's proposal on fuel standards for Mexico.

# Alexia Kelly, Senior Associate, World Resources Institute (WRI)

Ms. Kelly addressed the North American opportunities for GHG abatement through the implementation of offsets. She explained that there are a significant number of cooperation opportunities between Canada, US, and Mexico in this area. For instance, she explained that Clean Development Mechanism projects are numerous in Mexico, and they could consequently represent a relevant GHG abatement solution for Canada and for the US.

She briefed the audience on current US developments in climate change legislation, noting that we should expect a bill where offsets are likely to be an important and contentious issue. She also pointed out some limits of the offset system set by the US bill.

Ms. Kelly stressed that although offsets present a unique opportunity for regions, states, and provinces to play an important role in climate policy, coordination and cooperation will be necessary.

# Andrew Mangan, Executive Director, US Business Council for Sustainable Development (USBCSD)

Mr. Mangan began by introducing his organization and explaining how it focuses on industry collaboration and private-public collaboration on various projects, including energy- and climate change-related projects. He described the by-product synergy concept, which brings together a group of companies in a specific region. They put in place a legal agreement that covers intellectual property and confidentiality, and they facilitate a process where they share information about their operations. This process allows them to identify common opportunities and common projects that can be initiated together. Mr. Mangan stressed that the by-product synergy concept has proven to be successful over the last 12 years in the three NAFTA countries, and it has produced economic, environmental, and societal results. He maintained that, considering the theme

of this workshop, this kind of project, which is very inclusive and practical and has very strong metrics, should be advanced by the three North American nations.

### Carmen Dybwab, Vice-president, Canadian Energy Research Institute (CERI)

Ms Dybwab proposed that key prerequisites of climate change policy coherence are the honesty and the objectivity of the targets and the need to be explicit in terms of the strategy at the national or the regional level in order to reach these targets. She explained that each nation is responsible for implementing a strategy that is workable within its jurisdiction, and that nations should trust and respect each other on that particular topic. Ms. Dybwab also stressed the importance of fact-based data in climate policy design. In that regard, she advocated for an ecosystem approach ensuring efficiency. The energy flows can be reduced to smaller regional levels which may cut across borders. She believes that the most effective way to tackle the GHG emission problem is to attain efficiency at these regional levels.

# Harvey Locke, Vice-president, The Wild Foundation

Mr. Locke talked first about the nature of carbon, reminding the audience that carbon comes from either fossil fuel or from the living layer of the Earth (organic carbon). He pointed out that we tend to talk only about climate change being a problem caused by emissions from fossil fuel, while all carbon emissions are bad for the climate. This should be taken into account in any climate mitigation strategy. Given that ecosystem services help fight climate change, it is important for the North American countries to think not only in terms of carbon released but also in terms of protecting and making sure carbon remains fixed. For instance, Canada and the United States could invest in Mexico to protect biodiversity.

# **Questions and comments**

- It was pointed out that an important transportation-related issue was not raised throughout the workshop. This issue is the need to find out ways to reduce the travelling demand.
- A comment was made on the need to improve climate adaptation policy. Given that the NAFTA members have already entered into a number of trinational regimes related to natural resources, a potential role for the CEC would be to look at opportunities for cooperation within these regimes.
- The discussants were asked to identify three recommendations they would give to the Council members of the CEC.
- How will a cap and trade system in the United States affect the Western Climate Initiative (WCI)?

The moderator asked the roundtable discussants to respond to the questions most relevant to their area of expertise and to make one recommendation they would give to the Council members of the CEC.

Michal Moore delineated four recommendations to the JPAC members: (1) carbon trading standards need to be revised to take into account the capabilities of every

individual nation to meet them; (2) given that Mexico has the ability to use green credits, we have to allow green investment credits based on the demographic and geographic characteristics of the country where they are issued; (3) allow credit for reinvestment in renewable energy, given that if we allow the export of renewable energy in a country such as Mexico where the import of the credit could return to the US, we might see a greater participation in these GHG emission goals set by Canada and the US; (4) we need a common set of standards and common metrics of energy output per unit in order to get a fair treatment of any energy resources.

**Rodolfo Lacy** explained that, in the transportation sector, we need to consider the lifecycle analysis as an important tool in building an energy efficiency standard. He suggested that a cap-and-trade system for the automobile industry would be a great incentive for the development of efficient vehicles and for preventing carbon leakage toward Mexico.

**Andrew Mangan** recommended focusing on practical elements in order to foster behavioral changes. He reminded the audience of the cost-negative actions of the McKinsey GHG cost curve that have yet to be implemented as an example of practical and logical actions to undertake.

**Carmen Dybwab** agreed on the need for better adaptation policies and the potential role for the CEC in that regard. The connection between energy used and water will require further research. In terms of recommendations to JPAC, she mentioned the importance of allowing each country to develop policies that fit best with their natural resources and economic realities. She brought forward the idea that the countries should come together and establish a set of binding principles, including the notion of comparative advantage and nondiscrimination.

The moderator thanked the roundtable discussants for their comments. Responding to the question related to the impacts of the federal legislation on the WCI, he pointed out that the federal pre-emption that is in the current draft of the Waxman-Markey bill applies only to the cap-and-trade system. It does not include all the other useful elements brought forward by this initiative. As a recommendation to JPAC, he encouraged the possibility of examining the pros and cons of incorporating a safe harbour for climate change policies under Chapter 11 of NAFTA.

# JPAC Regular Session 09-01, Tuesday, 23 June 2009

# Overview, by JPAC Chair Nelly Correa, and approval of the provisional agenda

The JPAC Chair, Nelly Correa, welcomed everyone to the session. She asked the JPAC members to introduce themselves to the public.

Ms Correa then provided a brief overview of JPAC and its mandate, and informed the audience that its members are nongovernmental volunteer citizens. JPAC ensures that the views of the North American public are taken into account when formulating its advice to

the CEC's Council, which it does in an objective and unbiased manner. She described the national advisory committees and the governmental advisory committees, explaining that they also provide advice to the CEC. She mentioned that Canada and Mexico were not represented at this time. She invited the US representatives to proceed with their recommendations.

# Report from representatives of the US National and Governmental Advisory Committees (NAC and GAC)

The US GAC and NAC were asked to provide recommendations to JPAC on Greening the North American Economy, and to provide a review of the future options of the CEC in terms of the role of the Secretariat.

Key recommendations made on Greening the North American Economy:

- On green buildings, the EPA (Environmental Protection Agency) Manager Portfolio Tool, which is used to track energy-used performance in buildings, is being adapted for use in Canada through a partnership between EPA and Natural Resources Canada. CEC could explore the potential for extending the Manager Portfolio Tool to Mexico, and for establishing a North American energy performance tracking system for existing buildings.
- On transportation, the three countries have programs for energy efficiency (Smartway in the United States, *Transporte Limpio* in Mexico, and Fleetsmart in Canada). CEC could encourage these programs to work together towards common metrics leading to harmonization across countries.
- On renewable energy, CEC could undertake a review of published studies to better inform developers, regulators and wildlife advocates on the status and significance of bird and bat mortality relative to utility-scale wind turbines.

Key recommendations made on future options for the CEC and on the role of the Secretariat:

- To limit the number and the nature of the projects undertaken under Article 10 of NAAEC.
- To narrow and define the nature and mission of the CEC. Its general mission should be to foster trilateral harmonization of policies and to promote greater cooperation on air, energy and climate change, greening the economy, healthy communities, and on protecting water resources.
- To maintain a focus on assessing the impacts of trade on the environment.

# Update on submissions and enforcement matters, by Dane Ratliff, Director, Submissions and Enforcement Matters Unit

The JPAC Chair invited the Director of the Submissions and Enforcement Matters (SEM) Unit, Dane Ratliff, to make his presentation. The Director began his presentation by

providing an overview of the SEM process. He gave an update on the submissions received and on the issues he and his team are dealing with.

The JPAC Chair opened the floor to comments and questions.

- A member of JPAC expressed some concerns about the concrete results achieved by the SEM process, given the absence of any obligation from the Parties (Canada, Mexico and the US). He also asked for some clarifications on Article 14 (2), which specifies that "the Secretariat shall be guided" by four criteria in deciding whether to request a response from the implicated Party.
- A member of JPAC pointed out the importance of the SEM Unit and described the process as an alternative for Mexico's citizens, considering the absence of any class actions in the country. However, he insisted on the need to improve the process in order to get more concrete and positive results.
- A member of JPAC deemed it unacceptable that some processes have been initiated as far back as 2004 and have yet to be completed.
- Various members of the audience suggested that an analysis should be conducted to better inform JPAC members, in order to help in formulating precise recommendations to the Council regarding the SEM Unit's efficiency.

The Director of the SEM Unit explained that what happens after the publication of a factual record is a matter for the Parties themselves and for the public. He suggested that perhaps JPAC plays a role to some extent in that. He insisted that a factual record guarantees that the Parties are focusing on the allegations raised by the submitters. Thus, it fosters the enhancement of public participation and the access to a kind of justice. On Article 14 (2) of NAAEC, he specified that although "guided" does not mean that it has to be followed to the letter, it means that the criteria have to be taken into consideration to determine whether to ask a response from the Party. In terms of the process itself, Mr. Ratliff explained that the SEM Unit needs to function with as much independence from the Parties and submitters as possible, and from JPAC. He said that neutrality and independence are key elements in allowing confidence in the process and in the ability to produce a successful factual record.

The JPAC Chair thanked the Director of the SEM Unit and mentioned that their committee would be in contact with him. She said that JPAC would be providing recommendations in order to make the process more understood and more efficient.

# JPAC discussion on a potential Advice to Council

The JPAC Chair asked the JPAC members to share their thoughts on the workshop on Climate Policy Coherence in North America, in order to define a recommendation for the CEC Council. They provided the following comments:

• We could prevent the increase of temperature on a short-term scale if we rapidly control the emission of non-CO<sub>2</sub> warming agents such as black carbon, methane and HFCs. Reducing only CO<sub>2</sub> emissions is not enough.

- Considering that a unilateral cap-and-trade scheme in the US could possibly lead
  to trade distortion as a result of the implementation of border provisions, and in
  view of the CEC's existing technical expertise and its networking capacity, the
  CEC could play a role in addressing the prospect of a North American carbon
  trading system.
- The CEC has developed a North American Atlas that could be used as a framework to develop a North American Agenda on Adaptation to Climate Change.
- We have to avoid carbon leakage that affects our industries.
- We have to mobilize financial resources in order to reinforce our capacity as a region to address the climate change issues.
- We have to harmonize GHG emission standards.
- We have to use our financial resources to avoid deforestation, increase the natural capital and preserve North American biodiversity.
- There is a need for effective regulations leading to concrete, measurable results.
- The main objective should be maintaining and enhancing healthy communities. In that regard, healthy communities are strongly reliant on healthy ecosystems, and we should work toward a better understanding of this relationship.
- A member of JPAC stressed that our governments must design their policies on science-based facts.
- Regarding harmonization and regulation, it is critical that our cooperation and coherence in policy design be based on clear definitions and on consensus around key words. A good example is the definition of renewable energy.
- Greater certainty in policy design implementation is very appropriate, as territorial imperatives are important. Given that some provinces and states may want to be more aggressive, regional implementation which fosters flexibility would be economically pragmatic. A pragmatic approach that can be flexible, that does address economic uncertainty and recessionary times, is a must in looking at the trinational policy on environmental reforms.
- It is important to look at the diversity of sources of fuel and power.
- On cap-and-trade, a JPAC member expressed a concern over the issue of speculation related to such system.
- It is critically important that North America focus on a secure strategy for energy that at the same time brings the countries into the necessary environmental trajectory for fighting climate change and other environmental issues. The fragmentation, duplication and inefficiency that can evolve if, for instance, we don't have an optimization of power lines, is an issue that needs to be addressed What we need at the North American level is a comprehensive approach for energy and the environment.

# **Observers' comments**

The JPAC Chair opened the floor to comments and questions from the public.

- The North American GHG mitigation system that may emerge from trilateral negotiations must be flexible enough to allow each country to participate equitably.
- A mechanism should be defined to allow Canada and the US to take advantage of the cheap GHG reduction opportunities in Mexico.
- We must take into account the conclusions of the Stern Report on the Economics of Climate Change, on the increasing costs of addressing climate change over time if we don't face the issue on a short-term scale. In that regard, we must focus our efforts on educating our communities on the issue.
- Trade and environment has been a fundamental issue for the North American region, not only in terms of NAFTA but also for the CEC. Given that climate change isn't only an environmental issue but also an economic one, it should be a priority for the CEC to keep providing information, in order for us to make the best decisions as a region.
- There is a concern regarding what is happening in the US Congress, in terms of the risk of having hidden protectionism measures, and this underlines potential trade and investment effects throughout the region. Thus, the CEC could, given its mandate, help making sure that some of the decisions made in Canada, Mexico and the United States are not affecting trade, investment, and job creation across North America.
- The issue of the budget must be addressed. The budget of the Commission has remained the same over the last 15 years. The CEC needs more financial and human resources in order to meet the expectations.

The JPAC Chair asked the JPAC members to comment on the elements raised by the public as well as on an eventual recommendation to the CEC Council on climate change.

- Regulators in the three countries have to start thinking about compliance. The existing regulatory regimes in North America have not started to address the restructuring of the utility-sector industry. In that regard, it may be a good idea to start including regulators in our JPAC discussions.
- Given that NAFTA was implemented 15 years ago, it is necessary to revise the nature of the CEC. The Commission needs to address new issues, including climate change. For instance, the CEC is the only trinational institution that could address seriously the issue of energy integration.
- The CEC could develop a North American Agenda for Cooperation on Climate Change. The idea would be to identify the areas of common interests where the three countries can complement each other.
- The CEC could develop a North American Agenda for Adaptation, given its areas of expertise and given that these adaptation-related issues are clearly transboundary.

#### Presentation on green building, by José Luis Fernández Zayas

The JPAC Chair introduced Dr. Fernández to the JPAC members and to the public. Dr. Fernández focused his presentation on incentives to improve the reduction of GHG emission in buildings in Mexico. He also emphasized opportunities of cooperation and market development in North America.

# Video presentation on the CEC

The JPAC Chair invited Eduardo Viadas, Media and Outreach Officer at the CEC, to present a video describing the CEC activities. The session was then adjourned.



# Commission for Environmental Cooperation (CEC) of North America

# Sixteenth Regular Session of the CEC Council and meetings of the Joint Public Advisory Committee (JPAC)

#### 22-23 June 2009

# Grand Hyatt Denver Hotel 1750 Welton Street, Denver, CO 80202, USA Tel.: 303 295 1234 Fax: 303 603 4094

### **Preliminary Program of Public Events**

# **Sunday, 21 June 2009** 19:00-20:00 **Registration of Participants** – Grand Ballroom Foyer, 2nd Floor, Grand Hyatt **Monday, 22 June 2009** 7:50-8:50 Registration of Participants – Grand Ballroom Foyer, 2nd Floor, Grand Hyatt 8:50-17:00 JPAC Workshop on Climate Policy Coherence in North America – Grand Ballroom, 2nd Floor, Grand Hyatt 8:50-8:55 Welcoming remarks by Adriana Nelly Correa, JPAC Chair 8:55-9:05 Overview presentation by Adrián Vázquez, CEC Executive Director 9:05-9:50 Keynote address by Durwood Zaelke, President and Founder, Institute for Governance and Sustainable Development 9:50-10:05 Question and answer period "Conserving North America's Natural Heritage in a Rapidly 10:05-10:25 Changing World" by Exequiel Ezcurra, Director, Institute for Mexico and the United States, University of California, Riverside 10:25-10:40 Question and answer period 10:40–10:50 **Break** 10:50-11:10 Expert Presentation: "North American GHG emissions and

mitigation potential" by Gabriel Quadri, Country Director for

Mexico and Central America, EcoSecurities

11:10–11:30	<b>Expert Presentation</b> : "The climate policy landscape in North America" by Thomas Peterson, President and CEO, The Center for Climate Strategies
11:30–12:25	<b>Panel discussion</b> : "The prospect and challenges of regional climate policy cooperation"
	Panelists:
	David McLaughlin, President and CEO, National Round Table on the Environment and the Economy (NRTEE)
	Julia Martínez, Head of the Climate Change Program, <i>Instituto Nacional de Ecología</i> (INE)
	Stacy VanDeveer, Associate Professor, Department of Political Science, University of New Hampshire
12:25–12:50	Public discussion
12:50–14:20	<b>Networking lunch [included]</b> – Pyramid Peak Ballroom, 37th Floor, Conference Center
14:20–14:40	<b>Meeting Report</b> : "Towards a North American carbon market?" by Isabel Studer, Director of the Center for Dialogue and Analysis on North America, <i>Instituto Tecnológico y de Estudios Superiores de Monterrey</i> (Mexico City campus)
14:40–15:00	<b>Expert Presentation</b> : "Main challenges to develop coherent climate policy regimes in North America," by Jeff Schott, Senior Fellow, Peterson Institute for International Economics
15:00–15:15	Break
15:15–16:45	<b>Roundtable discussion</b> : "Toward climate policy coherence in North America"
	Participants:
	Michal Moore, Senior Fellow, Institute for Sustainable Energy, Environment and Economy, University of Calgary, Alberta
	Rodolfo Lacy, Coordinator for Programs and Projects, <i>Centro Mario Molina</i>
	Alexia Kelly, Senior Associate, World Resources Institute (WRI)

Andrew Mangan, Executive Director, US Business Council for

Carmen Dybwad, Vice President, Canadian Energy Research

Sustainable Development (USBCSD)

Institute (ČERI)

Exequiel Ezcurra, Director, Institute for Mexico and the United States, University of California, Riverside (*tbc*)

16:45–17:15 **Public discussion** 

17:15–17:30 **Wrap-up** 

Tuesday, 23 June 2009				
8:30-9:15	Registration of Participants – Grand Ballroom Foyer, 2nd Floor, Grand Hyatt			
9:15-12:00	<b>JPAC Regular Session 09-01 (with the public as observers)</b> – <i>Grand Ballroom</i> , 2 <i>Floor, Grand Hyatt</i>			
		Overview by Adriana Nelly Correa, JPAC Chair, and approval of the provisional agenda		
	9:20-9:30	Report from the National and Governmental Advisory Committee representatives		
	9:30-945	Update on Submissions and Enforcement Matters by Dane Ratliff, Director, Submissions and Enforcement Matters Unit, CEC		
	9:45-11:00	JPAC discussion on a potential advice to Council Observers' comments		
12:00-13:30	Lunch [included] – Pyramid Peak Ballroom, 37th Floor, Conference Center			
13:30-15:00	JPAC Regular Session 09-01 (with the public as observers – cont'd)			
15:00-17:00	Networking Ses	ssion for the Public – Grand Ballroom, 2nd Floor, Grand Hyatt		
	environmental is	invited to meet and exchange views on North American ssues. Participants should appoint the chair of this session, who results at the public portion of the Council Session on 24 June.		
4 40.00	•			

- 17:00–19:00 Free
- 19:00–20:30 Welcoming Reception and Official Opening of the 16<sup>th</sup> Regular Session of the CEC Council (public) Pyramid Ballroom, 37th Floor, Conference Center
  - Opening remarks by Lisa P. Jackson, Administrator, US Environmental Protection Agency
  - Remarks by Mauricio Limón, Mexican Undersecretary for Management of Environmental Protection
  - Remarks by Jim Prentice, Canadian Environment Minister (to be confirmed)
  - Remarks by Adriana Nelly Correa, JPAC Chair
  - Remarks by Adrián Vázquez, CEC Executive Director



# Commission for Environmental Cooperation (CEC) of North America

# Sixteenth Regular Session of the CEC Council and meeting of the Joint Public Advisory Committee (JPAC)

# 24 June 2009

# Brown Palace Hotel 321 Seventeenth Street, Denver, CO 80202, USA Tel.: 303 297 3111 Fax: 303 312 5900

# **Preliminary Program of Public Events**

<del></del>					
		Wednesday, 24 June 2009			
8:30-9:15	Registration of Participants – Ballroom A, Brown Palace Hotel				
9:15-10:45	<b>Council Session (open to the public)</b> – Foyer Ballroom A, Brown Palace Hotel				
	9:15–9:20 9:20–9:40	Adoption of the agenda by Council Report by the CEC Executive Director on accomplishments of the CEC under the 2005–2010 Strategic Plan			
	9:40-10:45	Reports from the Council-appointed working groups			
10:45-11:00	Break				
11:00-13:05	JPAC Regular Session 09-01 (with the public as observers - cont'd)				
	11:00–12:00	The CEC North American Environmental Atlas by Francisco Javier Jiménez Nava, <i>Instituto Nacional de Estadística y</i>			
	12:00-13:05	Geografía CEC's Taking Stock 2005 report by Orlando Cabrera, CEC Program Manager, Air Quality and PRTR			
13:05–15:05	Lunch [included] – Brown Palace Club				
15:05–16:35	<ul> <li>Council Public Session – Ballroom A, Brown Palace Hotel</li> <li>Introduction on the conduct of the session by Adriana Nelly Correa, JPAC Chair</li> <li>Reports on the JPAC workshop and on the results of the networking session</li> <li>Statements by pre-selected presenters</li> <li>Comments by Council members</li> </ul>				

# 16:35 End of Session

# Sixteenth Regular Session of the CEC Council, 22-24 June 2009 – Denver XVIe Session ordinaire du Conseil de la CCE, 22-24 juin 2009 – Denver Decimosexta Sesión Ordinaria del Consejo de la CCA, 22-24 de junio de 2009 – Denver

# Participants List – Liste des participants – Lista de participantes

#### 1. Adkins, Jocelyn

U.S. EPA- Office of General Counsel 1200 Pennsylvania Ave. NW MC 2313A

Washington, D.C. 20460

United States

Phone: 202 564 5424 adkins.jocelyn@epa.gov

#### 2.. Aduna Barba, María de Lourdes

Presidencia Comisión Nacional de Ecología

**COPARMEX** 

Cordoba No. 10 Col. Roma

México, D.F. 03700

México

Phone: 555 511 5263 Fax: 555 511 9218 laduna@canajad.org.mx

#### 3. Alanís-Ortega, Gustavo

JPAC Member

Centro Mexicano de Derecho Ambiental Atlixco No. 138 Colonia Condesa

México, D.F. 06140

México

Phone: 555 286 3323 ex.13 galanis@cemda.org.mx

#### 4. Albovias, Anna S.

Manager, Latin - South America Division Environment Canada

200 Sacre-Cœur Blvd. 15th Floor Gatineau, Quebec K1A 0H3

Canada

Phone: 819 994 4747 Fax: 819 997 0199 anna.albovias@ec.gc.ca

#### 5. Amezcua Orellana, Cintia

Subdirectora de Cooperación Económica

Internacional ' UCAI

**SEMARNAT** 

Blvd. Adolfo Ruiz Cortines 4209 Col. Jardines

de la Montaña México, D.F. 14210

México

Phone: 555 628 3908 Fax: 555 628 0694

cintia.amezcua@semarnat.gob.mx

#### 6. Anghel, Cezar

Network Administrator

Commission for Environmental Cooperation

393, rue St-Jacques Ouest suite 200

Montreal, Quebec H2Y 1N9

Canada

Phone: 514 350 4300 Fax: 514 350 4345 acezar@cec.org

#### 7. Arnal Palomera, Eduardo

Cónsul General de México en Denver Consulado General de México en Denver 5350 Leetsdale Drive, Suite 100

Denver, CO 80246

United States

Phone: 303 331 1110 x 102

#### 8. Basurto, Daniel

Socio

Iniciativa para el Desarrollo Ambiental y

Sustentable, S.C.

Andrés Bello No. 45 piso 15 Col. Polanco

Chapultepec

México, D.F. 11560

México

Phone: 555 598 4800 Fax: 555 598 4800

dbasurto@iniciativasustentable.com.mx

#### 9. Beaver, Makayla

User Experience Designer

5 Ivy Lane

Denver, CO 80220

**United States** 

Phone:

mekayla.beaver@gmail.com

### 10. Benarrous, Laurent

JPAC Member

Jones Lang LaSalle

1 Place Ville Marie Bureau 2121 Montreal, Quebec H3B 2C6

Canada

Phone: 514 667 5659 Fax: 514 849 6919

Laurent.Benarrous@am.jll.com

#### 11. Brevé, Daniel

Public Participation Coordinator Commission for Environmental Cooperation 393, rue St-Jacques Ouest suite 200 Montreal, Quebec H2Y 1N9

Canada

Phone: 514 350 4300 Fax: 514 350 4345 dbreve@cec.org

#### 12. Bromm, Susan

U.S. EPA - Office of Enforcement and Compliance Assistance 1200 Pennsylvania Ave. NW MC 2650 R Washington, D.C. 20460 United States

Phone: 202 564 5400 Fax: 202 564 0700 bromm.susan@epa.gov

#### 13. Brown, James

Director - Climate Change Petro-Canada P.O. Box 2844 - 150 6th Ave. SW Calgary, Alberta T2P 3E3 Canada

Phone: 403 296 7733 jambrown@petro-canada.ca

#### 14. Cabrera, Orlando

Program Manager, Air and PRTR Commission for Environmental Cooperation 393, rue St-Jacques Ouest suite 200 Montreal, Quebec H2Y 1N9 Canada

Phone: 514 350 4300 Fax: 514 350 4314 ocabrera@cec.org

#### 15. Cameron, Diane

Deputy Director - Sustainable Development Division

Foreign Affairs and International Trade Canada 125 Sussex Drive

Ottawa, Ontario K1A 0G2

Canada

Phone: 613 944 0991 Fax: 613 944 0432

diane.cameron@international.gc.ca

#### 16. Canestraro, Donna

Program Manager Center for Technology in Government 187 Wolfe Road, Suite 301 Albany, NY 12205 United States Phone: 518 442 5619

# 17. Carrillo, Oscar

canestrato@ctg.albany.edu

Fax: 518 442 3886

NAC / GAC Designated Federal Officer U.S. EPA 1200 Pennsylvania Ave. NW MC-1601-E Washington, D.C. 20460 United States

Phone: 202 233 0072 Fax: 202 233 0060 carrillo.oscar@epa.gov

#### 18. Carroll, Nathaniel

Project Coordinator Ecosystem Market Place 1050 Potomac Street NW Washington, D.C. 20007 United States

Phone: 202 500 3132

ncarroll@ecosystemmarketplace.com

#### 19. Castellanos, Gilbert

U.S. EPA- Office of International Affairs 1200 Pennsylvania Ave. NW MC 2660R Washington, D.C. 20460

United States

Phone: 202 564 3906 Fax: 202 565 2409

castellanos.gilbert@epa.gov

### 20. Cerda Baez, Magdalena

Organizadora Comunitaria Environmental Health Coalition 401 Mile of Cars Way, Suite 310 National City, CA 91950

United States

Phone: 619 474 0220 Fax: 619 474 1210

magdalenac@environmentalhealth.org

#### 21. Chapman, Karen

Great Lakes Regional Director Environmental Defense Fund 223 North Union St. Delaware, OH 43015

**United States** 

Phone: 740 369 1241 kchapman@edf.org

#### 22. Chaume, Marie-Eve

Étudiante finissante à la maitrise en environnement

environneme

UQAM

1897 Laurier est

Montreal, Quebec H2H 1B5

Canada

Phone: 514 524 2505 evachaume@hotmail.com

#### 23. Contreras Contreras, Oscar Alfonso

Presidente

FUNACOMM A.C.

Fernando Quiroz #229 Col. Morelos

Toluca, Edo. De México 50200

México

Phone: 722 215 6087 Fax: 722 215 6087 funacomm@hotmail.com oscaracoca@hotmail.com

# 24. Contreras Vigil, Ana María

Directora General de Gestión de la Calidad del Aire y Registro de Emisiones y Transferencias de Contaminantes

SEMARNAT

Av. Revolución No. 1425, Col. Tlacopac

México, D.F. 01040

México

Phone: 555 624 3500 Fax: 555 624 3906

ana.contreras@semarnat.gob.mx

#### 25. Coronado, Irasema

Associate Professor University of Texas at El Paso 500 W. University Blvd. El Paso, TX 79968 United States

Phone: 915 747 5725 Fax: 915 747 7522 icoronado@utep.edu

#### 26. Correa, Sylvia

Senior Advisor for North America U.S. EPA- Office of International Affairs 1200 Pennsylvania Ave. NW MC 2660R

Washington, D.C. 20460

United States

Phone: 202 564 6443 Fax: 202 565 2409 correa.sylvia@epa.gov

#### 27. Correa Sandoval, Adriana Nelly

JPAC Member

Centro de Calidad Ambiental - ITESM Campus

Monterrey Bureau 2121

Monterrey, Nuevo León 64849

México

Phone: 52 818 328 4032 Fax: 52 818 359 6280 ancs@itesm.mx

#### 28. Cossette, Yves

266 Georges-Cloutier Quebec, Quebec G2A 2J6

Canada

Phone: 418 845 4564

ressources-actions@videotron.ca

#### 29. Costain, Kimble E.

Policy Analyst, Latin - South America Division

**Environment Canada** 

200 Sacre-Cœur Blvd. 15th Floor

Gatineau, Quebec K1A 0H3

Canada

Phone: 819 953 9774 Fax: 819 997 0199 kimble.costain@ec.gc.ca

### 30. Cournoyer-Proulx, Geneviève

Project Coordinator, Environment and Trade Commission for Environmental Cooperation

393, rue St-Jacques Ouest suite 200 Montreal, Quebec H2Y 1N9

Tollical, Quebec 1

Canada

Phone: 514 350 4300 Fax: 514 350 4314 gcproulx@cec.org

#### 31. Cryan, Megan

Advance Specialist U.S. EPA – Office of the Administrator 1200 Pennsylvania Ave. NW MC 1101A

Washington, D.C. 20460 United States

Phone: 202 564 1553 cryan.megan@epa.gov

# 32. Damo, Eno

Trade Policy Officer Government of Alberta 12th Floor, Commerce Place 10155 - 102 Street NW Edmonton, Alberta T5J 4G8 Canada

Phone: 780 422 128 Fax: 780 427 0699 eno.damo@gov.ab.ca

#### 33. Daoust, Nathalie

Council Secretary Commission for Environmental Cooperation 393, rue St-Jacques Ouest suite 200 Montreal, Quebec H2Y 1N9

Canada

Phone: 514 350 4300 Fax: 514 350 4314 ndaoust@cec.org

# 34. DeLeon, Rafael

Director

U.S. EPA- Office of Cooperative Environmental

Management

1200 Pennsylvania Ave. NW Washington, D.C. 20460

United States

Phone: 202 564 4899 Fax: 202 564 8129 deleon.rafael@epa.gov

# 35. Delgadillo, Eduardo

Administrator

Commission for Environmental Cooperation 393, rue St-Jacques Ouest suite 200

Montreal, Quebec H2Y 1N9

Canada

Phone: 514 350 4300 Fax: 514 350 4314 asilvaroli@cec.org

#### 36. Desai, Dinkerrai

JPAC Member

U. S. Army Material Command Directorate of Public Works, Bldg 173 Fort Monmouth, New Jersey 07703

United States

Phone: 732 532 1475 Fax: 732 532 6263

dinkerrai.desai@mail1.monmouth.army.mil

#### 37. Desmarais, Véronique

Chargée de projets Action-Climat Fonds d'action québécois en développement durable 840, rue Raoul-Jobin, bur. 200 Quebec, Quebec G1N 1S7

Canada

Phone: 418 692 5888 Fax: 418 692 1148 v.desmarais@faqdd.qc.ca

#### 38. Dimento, Joseph

Professor UCI Law School Irvine, CA 92697 United States Phone: 949 824 3409

Phone: 949 824 340 Fax: 949 824 2808 jfdiment@uci.edu

#### 39. Duchaine, Thomas

Chargée de projets en changement climatiques

Équiterre Canada Phone:

tduchaine@equiterre.org

### 40. Dufour, David

Commission for Environmental Cooperation 393, rue St-Jacques Ouest suite 200

Montreal, Quebec H2Y 1N9

Canada

Phone: 514 350 4300 Fax: 514 350 4314 ddufour@cec.org

#### 41. Dumais, Frédéric

Senior Analyst

Board of trade of Metropolitan Montreal

380 St-Antoine

Montreal, Quebec H2Y 3X7

Canada

Phone: 514 871 4000 x 4057 fdumais@ccmm.qc.ca

#### 42. Dybwad, Carmen

Vice President

Canadian Energy Research Institute - CERI

3512 - 33 Street NW # 150 Calgary, Alberta T2L 2A6

Canada

Phone: 403 220 2388 Fax: 403 289 2344 cdybwad@ceri.ca

#### 43. Elias, Arne

**Executive Director** 

The Centre for Sustainable Transportation

103-520 Portage Avenue

Winnipeg, Manitoba R3C 0G2

Canada

a.elias@uwinnipeg.ca

#### 44. Elvira Quesada, Juan Rafael

Secretario del Medio Ambiente y Recursos

Naturales

**SEMARNAT** 

Blvd. Adolfo Ruiz Cortines 4209 Col. Jardines

de la Montaña

México, D.F. 14210

México

Phone: 555 628 0602 Fax: 555 628 0694

secretario@semarnat.gob.mx

#### 45. Emerson, David

JPAC Member

Farris, Vaughan, Wills & Murphy LLP

25th Floor, 700 West georgia Street, Vancouver

British Columbia

Canada

Phone: 604 684 9151 Fax: 604 661 9349

demerson@farris.com rornelas@farris.com

#### 46. English, Elizabeth Ann

Foreign Affairs Specialist – Fisheries U.S. Department of Commerce

National Oceanic and Atmospheric

Administration Silver Spring, MD

United States

Phone: 301 713 2276

Liz.English@noaa.gov

#### 47. Enkerlin Hoeflich, Ernesto

Comisionado de la Comisión Nacional de Areas

Naturales Protegidas

**SEMARNAT** 

Camino al Ajusco No. 200 Col. Jardines en la

Montaña

México, D.F. 14210

México

Phone: 555 449 7001 Fax: 555 449 7025

enkerlin@conanp.gob.mx

#### 48. Estelle, Renee

Student

University of Denver

3985 104th Dr.

Westminster, CO 80031

United States

Phone: 303 465 0394

restelle@du.edu

#### 49. Etcheverry, José

**Assistant Professor** 

York University

Faculty of Environmental Studies

Toronto, Ontario M3J 1P3

Canada

Phone: 416 736 5252

rejose@yorku.ca

#### 50. Ezcurra, Ezequiel

Director

**UC MEXUS** 

3324 Olmsted Hall

Riverside, CA 92521

**United States** 

Phone: 951 827 7340 exequiel@ucr.edu

#### 51. Fernández, José Carlos

Senior Program Manager, Environment and

Trade

Commission for Environmental Cooperation

393, rue St-Jacques Ouest suite 200

Montreal, Quebec H2Y 1N9

Canada

Phone: 514 350 4300 Fax: 514 350 4314 jcfernandez@cec.org

#### 52. Fernández Bermauntz, Adrián

Presidente

Instituto Nacional de Ecología

Calle Periférico 5000. Col. Insugentes Cuicuilco

México, D.F. 04530

México

Phone: 555 424 6418 presiden@ine.gob.mx

#### 53. Fernández Zayas, José Luis

Universidad Autónoma de México

México, D.F. México

#### 54. Ferrante, Simonetta

Program Assistant

Commission for Environmental Cooperation

393, rue St-Jacques Ouest suite 200

Montreal, Quebec H2Y 1N9

Canada

Phone: 514 350 4300 Fax: 514 350 4314 sferrante@cec.org

#### 55. Flores, Luis

Program Manager International Conservation

Program

National Park Service

12795 W. Alameda Parkway, Suite 370

Denver, CO 80228

United States

Phone: 303 987 6690 Fax: 303 987 6675 luis\_flores@nps.gov

#### 56. Flores Ramírez, Alfonso

Director General de Gestión Intefral de Materiales y Actividades Riesgosas

**SEMARNAT** 

Av. Revolución No. 1425 Col. Tlacopac Nivel 27 México, D.F. 01040

México

Phone: 555 624 3377 Fax: 555 624 3589

alfonso.flores@semarnat.gob.mx

#### 57. Florescu, Elizabeth

Director of Research Millennium Project

13911 Deer Run Blvd. SE

Calgary, Alberta T2J 6L3

Canada

Phone: 202 686 5179

elizabeth@millennium-project.org

#### 58. Galvis, Mónica

Logistics Assistant Coordinator

Commission for Environmental Cooperation

393, rue St-Jacques Ouest suite 200

Montreal, Quebec H2Y 1N9

Canada

Phone: 514 350 4300 Fax: 514 350 4314

mgalvis@cec.org

# 59. García Chagoyan, Hector

Mexico Liaison Office Representative Commission for Environmental Cooperation

Progreso No. 3 Viveros de Coyoacán México, Distrito Federal 04110

México

Phone: 52 555 659 5021 Fax: 52 555 659 5023 hgchagoyan@cec.org

#### 60. Gardner, Jane

JPAC Member

Remediation Programs - Corporate

Environmental Programs - General Electric

Company

3135 Easton Turnpike

Fairfield, Connecticut 06431

**United States** 

Phone: 203 373 2932 Fax: 203 373 2683

Jane.gardner@corporate.ge.com

#### 61. Garver, Geoffrey

Environment consultant 20 rue des Sœurs Grises #106 Montréal, Québec H3C 5M1

Canada

Phone: 514 582 0929 gginmont@sympatico.ca

#### 62. Gomez, Laura

U.S. EPA - Office of International Affairs 1300 Pennsylvania Ave. NW, MC 2660R Washington, D.C. 20004

United States

Phone: 202 564 6474 Fax: 202 564 5736 gomez.laura@epa.gov

#### 63. González Mayagoitia, Jorge

Cónsul para Asuntos Politicos de México en Denver

Consulado General de México en Denver 5350 Leetsdale Drive, Suite 100

Denver, CO 80246 United States

Phone: 303 311 1110 x 102

#### 64. Gutiérrez Lacayo, Martín

JPAC Member

Pronatura México, A. C. Aspérgulas 22 (antes Pino) Col. San Clemente

México, D.F. 01740

México

Phone: 555 635 5054

martingutierrez@pronatura.org.mx

#### 65. Guzmán Luna, Sandra Leticia

Lic. Relaciones Internacionales

CEMDA

Atlixco 138 Col. Condesa

México, D.F. 06140

México

Phone: 555 286 3323 Fax: 555 211 2593 sandrag@cemda.org.mx

#### 66. Hammond, Thomas

Program Manager, Biodiversity Commission for Environmental Cooperation 393, rue St-Jacques Ouest suite 200 Montreal, Quebec H2Y 1N9

Canada

Phone: 514 350 4300 Fax: 514 350 4314 thammond@cec.org

#### 67. Hearn, Tim

JPAC Member Hearn & Associates #3840, 855 - 2nd St. SW Bankers Hall East Calgary,, Alberta T2P 4J8

Canada

Phone: 403 508 1940 t.hearn@telus.net

#### 68. Hellem, Steven

Executive Director Suppliers Partnership for the Environment 1155 15th St. NW Washington, D.C. 20005

United States

Phone: 202 530 0096 Fax: 202 530 0659 shellem@navista.net

# 69. Henkel Reyes, Ricardo

Presidente de la Comisión de Medio Ambiente Consejo Coordinador Empresarial Mexiquense,

A.C

Manuel Herrera No. 140 Col. Morelos Toluca, Edo.de México 50199

México

Phone: 722 384 2582 Fax: 722 319 9802 ricardohenkel@gmail.com

# 70. Heredia, Marco Antonio

Program Manager, Environmental Law Commission for Environmental Cooperation 393, rue St-Jacques Ouest suite 200

Montreal, Quebec H2Y 1N9

Canada

Phone: 514 350 4300 Fax: 514 350 4314 maheredia@cec.org

#### 71. Herrmann, Hans

Senior Program Manager, Conservation and Biodiversity Program Commission for Environmental Cooperation

393, rue St-Jacques Ouest suite 200

Montreal, Quebec H2Y 1N9

Canada

Phone: 514 350 4300 Fax: 514 350 4314 hherrmann@cec.org

#### 72. Jackson, Lisa

Administrator U.S. EPA 1200 Pennsylvania Ave. NW Washington, D.C. 20460 United States

Phone: 202 564 4700 Fax: 202 501 1338

#### 73. Jarman, Holly

Assistant Professor Suny Albany 135 Western Ave. Albany, NY 12222 United States

Phone: 734 660 8054 hjarman@albany.edu

#### 74. Jiménez Nava, Francisco

Instituto Nacional de Estadistica Geografia e Informacion

Héroe de Nacozari 2301. Puerta 9 Nivel 2 Aguascalientes, 20290 Aguascalientes

México

Phone: 449 910 5365 Fax: 449 442 4729

francisco.jimenez@inegi.org.mx

#### 75. Johnson, Stéphanie

Director, Latin - South America Division Environment Canada 200 Sacre-Cœur Blvd. 15th Floor Gatineau, Quebec K1A 0H3 Canada

Phone: 819 934 5189 Fax: 819 997 0199

stephanie.johnson@ec.gc.ca

#### 76. Kammen, Daniel

Co-Director Berkeley Institute of the Environment University of California, Berkeley 310 Barrows Hall #3050 Berkeley, CA 94720-3050 United States

Phone: 510 642 1640 Fax: 510 642 1085 kammen@berkeley.edu

#### 77. Kelly, Alexia

Senior Associate World Resources Institute 10 G St. NE Washington, D.C. 20002 United States

Phone: 202 729 7888 Fax: 202 729 7651 akelly@wri.org

#### 78. Kelly, Stephen

Chief of Staff Environment Canada 10 Wellington, 28th Floor Gatineau, Quebec K1A 0H3

Canada

Phone: 819 997 1441 Fax: 819 953 0279 stephen.kelly@ec.gc.ca

#### 79. Kibel, Paul

Professor & Environmental Law Program Co-Director Golden Gate University School of Law 536 Mission Street San Francisco, CA 94105-2968 United States Phone: 415 442 6685

#### 80. Lacy, Rodolfo

pkibel@ggu.edu

JPAC Member
Centro "Mario Molina"
Paseo de los Laureles 458, despacho 406 Col.
Bosques de las Montañas
México, D.F. 05120
México

Phone: 559 177 1670 Fax: 559 177 1670 x 114 rlacy@centromariomolina.org

#### 81. Lapierre, Louise

Conseillère

Ministère du Développement durable, de l'Environnement et des Parcs - Québec 675Boul. René-Levesque E. 6e étage Ouebec, Ouebec G1Y1N7

Canada

Phone: 418 521 38258 Fax: 418 643 4747

louise.lapierre@mddep.gouv.qc.ca

#### 82. Lendo Fuentes, Enrique

Titular de la UCAI **SEMARNAT** 

Blvd. Adolfo Ruiz Cortines 4209 Col. Jardines

de la Montaña México, D.F. 14210

México

Phone: 555 628 3905 Fax: 555 628 0694 elendo@semarnat.gob.mx

#### 83. Lent, Rebecca

Director, Office of International Affairs -Fisheries

U.S. Department of Commerce National Oceanic and Atmospheric

Administration Silver Spring, MD United States Phone: 301 713 2276

rebecca.lent@noaa.gov

#### 84. Lentz Herrera, Alvaro Eduardo

Secretario de Vocalias Asociación Nacional de Energia Solar Antonio Gutierrez 59 Col. Iztapalapa México, D.F. 09270

México

Phone: 555 488 6661 x 15504 solar\_lentz@yahoo.com.mx

# 85. León Santos, Jesús

Coordinador de Programas Centro de Desarrollo Integral Campesino de la Mixteca A.C.

Conocido en el Arenal s/n Barrio de la Labor

Nochixtlan, Oaxaca 69600

México

Phone: 951 526 2091 jls\_jesus@yahoo.com

#### 86. Limón Aguirre, Mauricio

Subsecretario de Gestión para la Protección Ambiental

**SEMARNAT** 

Blvd. Adolfo Ruiz Cortines 4209 Col. Jardines

de la Montaña México, D.F. 14210

México

Phone: 555 624 3544 Fax: 555 628 0694

mauricio.limon@semarnat.gob.mx

#### 87. Lloyd, Evan

Director of Programs

Commission for Environmental Cooperation

393, rue St-Jacques Ouest suite 200

Montreal, Quebec H2Y 1N9

Canada

Phone: 514 350 4300 Fax: 514 350 4314 elloyd@cec.org

#### 88. Loya Ruisanchez, Berenice

AsistenteEjecutiva Iniciativa GEMI, A.C.

Tuxpan No. 39-503 Col. Roma Sur

México, D.F. 06760

México

Phone: 555 574 6500 Fax: 555 574 5977 ingemiac@prodigy.net.mx

#### 89. Mangan, Andrew

**Executive Director** 

United States Business Council for Sustainable

development

4425 S. Mopac, Bldg. II Suite 202

Austin, TX 78735 **United States** 

Phone: 512 328 8795 Fax: 512 892 6443 mangan@usbcsd.org

#### 90. Marion, Marcelle

Legal Scrub

Commission for Environmental Cooperation 393, rue St-Jacques Ouest suite 200

Montreal, Quebec H2Y 1N9

Canada

Phone: 514 350 4300 Fax: 514 350 4314 mmarion@cec.org

#### 91. Marquez, Rafael

JPAC Member

Texas Commission on Environmental Quality

2906 Victoria Cove Round Rock, Texas 78664

United States

Phone: 512 239 5515 rmarquezesp@aol.com

# 92. Martínez Fernández, Julia

Directora-Cambio Climático

Instituto Nacional de Ecología (INE)

Periférico Sur 5000, Piso 4

México, D.F. 04530

México

Phone: 555 490 0900 x 13178

jmartine@ine.gob.mx

#### 93. Martínez Melendez, Luz Aida

PhD Student

Universidad de Vermont

617 Main St.

Burlington, Vermont 05405

United States

Phone: 802 656 2900 lmartine@uvm.edu

#### 94. McDonald, Patricia

JPAC Member

847 E. Wild Rye Drive

Jackson, Wyoming 83014

United States

Phone: 307 734 2758 Fax: 307 734 2758

pattyamcdonald@earthlink.net

#### 95. McGovern, David

Assistant Deputy Minister Environment Canada

200 Sacre-Cœur Blvd. 15th Floor

Gatineau, Quebec K1A 0H3

Canada

Phone: 819 934 6020 Fax: 819 953 9412

david.mcgovern@ec.gc.ca

#### 96. McLaughlin, David

President and CEO

National Round Table on the Environment and

the Economy

344 Slater St. Suite 200

Ottawa, Ontario K1R 7Y3

Canada

Phone: 613 943 0399

Fax: 613 944 9295

mclaughlind@nrtee-trnee.ca

#### 97. Menzies, Xenia Maren

Intern

#3 - 300 Besserer

Ottawa, Ontario K1N 6B3

Canada

Phone: 613 204 6891

xenia.menzies@gmail.com

#### 98. Meyer, Mark

Vice President

Metalfit Inc.

5583 Snowflake Way

Parker, CO 80134

**United States** 

Phone: 303 840 2183

metalfit1@aol.com

#### 99. Moore, Michal

ISEEE Professor of Energy Economics and

Senior Fellow

ISEEE - university of Calgary

University of Calgary . ES 602, 2500 university

Drive NW

Calgary, Alberta T2N 1N4

Canada

Phone: 403 220 4386 Fax: 403 210 3894

mcmoore@ucalgary.ca mcm22@mcn.org

#### 100. Morin, Jocelyne

JPAC Assistant

Commission for Environmental Cooperation

393, rue St-Jacques Ouest suite 200

Montreal, Quebec H2Y 1N9

Canada

Phone: 514 350 4300 Fax: 514 350 4314 jmorin@cec.org

#### 101. Mumme, Stephen

Professor

Colorado State University 2436 Hollingbourne Drive Fort Collins, CO 80526

**United States** 

Phone: 970 491 7428 Fax: 970 491 2490 smumme@colostate.edu

#### 102. Muñoz Villareal, Carlos

Director General Adjunto de Cooperación

Internacional ' UCAI

**SEMARNAT** 

Blvd. Adolfo Ruiz Cortines 4209 Col. Jardines

de la Montaña

México, D.F. 14210

México

Phone: 555 628 3908 Fax: 555 628 0694

carlos.munozv@semarnat.gob.mx

#### 103. Nathan, Vincent

Assoc. Professor

Texas A&M Health Science Center

103 SRPH Adm. Bldg.

College Station, TX 77843-1266

United States

Phone: 979 862 4622 Fax: 979 845 0885

vnathan@srph.tamhsc.edu

#### 104. Navarro, Ernesto

Consultant, Mexico liaison

Commission for Environmental Cooperation

Progreso No. 3 Viveros de Coyoacán

México, Distrito Federal 04110

México

Phone: 52 555 659 5021 Fax: 52 555 659 5023 enavarro@cec.org

#### 105. Nickner, Nadine

**Economist** 

**Environment Canada** 

200 Sacre-Cœur Blvd. 15th Floor

Gatineau, Quebec K1A 0H3

Canada

Phone: 819 953 1518 Fax: 819 997 0199 nadine.nickner@ec.gc.ca

#### 106. Orozco, Marcela

JPAC Liaison Officer

Commission for Environmental Cooperation

393, rue St-Jacques Ouest suite 200

Montreal, Quebec H2Y 1N9

Canada

Phone: 514 350 4300 Fax: 514 350 4314 morozco@cec.org

#### 107. Ortega, Luis Enrique

Gerente Ambiental

MET-MEX Peñoles, S.A. de C.V. Av. Manuel Gómez Morin 444 Torreón

Residencial

Torreón, Coahuila 27268

México

Phone: 871 729 5500 Fax: 871 729 5532

enrique-ortega@penoles.com.mx

# 108. Padulo, Joanne

**Publishing Assistant** 

Commission for Environmental Cooperation

393, rue St-Jacques Ouest suite 200

Montreal, Quebec H2Y 1N9

Canada

Phone: 514 350 4300 Fax: 514 350 4314 jpadulo@cec.org

#### 109. Pantin, Luke

Senior Manager Section Head -Intergovernmental Relations Alberta Environment

Petroleum Plaza ST 9915 - 108 Street

Edmonton, Alberta T5K 2G8

Canada

Phone: 780 427 2010 luke.pantin@gov.ab.ca

#### 110. Patrón Laviada, Patricio

Procurador Federal del Medio Ambiente PROFEPA

Ctra. Picacho-Ajusco 200 Col. Jardines en la Montaña México, D.F. 14210

México

Phone: 555 615 2095 Fax: 555 449 6300 x 16349 ppatron@profepa.gob.mx

#### 111. Paul, Nicholas

Policy Analyst

Malisect Nation Conservation Council

150 Cliffe St.

Fredericton, New Brunswick E3A 0A1

Canada

Phone: 506 472 8803 Fax: 506 472 8543 nickpaul66@gmail.com

#### 112. Perez, Carlos

**EHS** Consultant

Reditus, LLC

1555 Lyell Ave. Suite 124

Rochester, NY 14606

**United States** 

Phone: 585 738 3281

cperez@yoursafetyteam.com

# 113. Peterson, Thomas

President and CEO

Center for Climate Strategies

1899 L. Street N.W. Suite 900

Washington, D.C. 20036

**United States** 

Phone: 202 540 9121 Fax: 202 540 9122 tdp1@mac.com

#### 114. Plain, Ronald

Aboriginal Program Manager Environmental Defence 256 Essex St.

Sarnia, Ontario N7T 4S2

Canada

Phone: 416 271 6269 Fax: 416 323 9301

rplain@environmentaldefence.ca

#### 115. Posadas, Alejandro

Representante para América del Norte - UCAI

**SEMARNAT** 

Embassy of Mexico

1911 Pennsylvania Ave. NW

Washington, D.C. 20006

**United States** 

Phone: 202 728 1777 Fax: 202 728 1781

alejandro.posadas@semarnat.gob.mx

#### 116. Powell, Keith

Manager information services

Commission for Environmental Cooperation

393, rue St-Jacques Ouest suite 200

Montreal, Quebec H2Y 1N9

Canada

Phone: 514 350 4300 Fax: 514 350 4314 kpowell@cec.org

#### 117. Prentice, Jim

Minister of Environment Canada

Government of Canada

Confederation Building, room 401

Ottawa, Ontario K1A 0H6

Canada

Phone: 613 992 4275

sonja.blondeau@ec.gc.ca

# 118. Ramírez, Oscar

Director de Especies Prioritarias para la

Conservacón

CONANP

Ctra. Picacho-Ajusco 200, Col. Jardines en la

Montaña

México, D.F. 14210

México

Phone: 555 449 6300

Fax: 555 449 6300 x 16349

oramirez@conanp.gob.mx

#### 119. Randall, Stephen

Legal Officer

Foreign Affairs and International Trade Canada

125 Sussex Drive

Ottawa, Ontario K1A 0G2

Canada

Phone: 613 992 6479 Fax: 613 992 6483

stephen.randall@international.gc.ca

#### 120. Ratliff, Dane

Director SEM Unit

Commission for Environmental Cooperation

393, rue St-Jacques Ouest suite 200

Montreal, Quebec H2Y 1N9

Canada

Phone: 514 350 4300 Fax: 514 350 4314 dratliff@cec.org

#### 121. Reyes Sánchez, Ariadna Itzel

Estudiante e investigadora Instituto Politécnico Nacional

Calle 40 A Número 48, Col. Santa Rosa

México, D.F. 07620

México

Phone: 555 388 6555 ariadna.irs@gmail.com

#### 122. Reyna Caamaño, Ruth Elizabeth

Professor ITESM

Ave. Eugenio Garza Sada 2501 Sur Monterrey, Nuevo León 64849

México

ruth.reyna@itesm.mx

### 123. Richardson, Karen

Program Manager, Environmental Information Commission for Environmental Cooperation 393, rue St-Jacques Ouest suite 200

Montreal, Quebec H2Y 1N9

Canada

Phone: 514 350 4300 Fax: 514 350 4314 krichardson@cec.org

#### 124. Riordon, Sheila

Director General - Environment, Energy and

Sustainable Development Bureau

Foreign Affairs and International Trade Canada 111 Sussex Drive, Rideau Pavillon Room R2-

203

Ottawa, Ontario K1N 1J1

Canada

Phone: 613 944 0886 Fax: 613 944 0432

sheila.riordon@international.gc.ca

### 125. Rodgers, Bill

Director of Communications Government of Canada

10 Wellington

Ottawa, Ontario K1A 0H3

Canada

Phone: 819 997 1441 veronica.petro@ec.gc.ca

### 126. Rodríguez Mora, María Elizabeth

Journalist

**NOTIMEX** 

Morena 110 Col. Del Valle

México, D.F. 03100

México

Phone: 555 4010 7496

elirodriguez63@hotmail.com

# 127. Rubenstein, Carlos

Deputy Executive Director

Texas Commission on Environmental Quality

14425 Mowsbury Austin, TX 78717

**United States** 

Phone: 512 239 3900 Fax: 512 239 3939

crubinst@tceq.state.tx.us

#### 128. Sandoval, Carlos

JPAC Member

Consejo Nacional de Industriales Ecologistas Gabriel Mancera No. 1141, Col. del Valle

México, D.F. 03100

México

Phone: 52 555 559 3611 Fax: 52 555 575 2337 ecologia@conieco.com.mx

#### 129. Sanger, Heather

Latin and South America Division **Environment Canada** 200 Sacre-Cœur Blvd. 15th Floor Gatineau, Quebec K1A 0H3 Canada

Phone: 819 934 6895 Fax: 819 997 0199 heather.sanger@ec.gc.ca

#### 130. Schmidt, Karen

Conservation and Biodiversity Program

Assistant

Commission for Environmental Cooperation 393, rue St-Jacques Ouest suite 200

Montreal, Quebec H2Y 1N9

Canada

Phone: 514 350 4300 Fax: 514 350 4314 kschmidt@cec.org

# 131. Schott, Jeffrey

Senior Fellow

Peterson Institute for International Economics 1750 Massachusetts Avenue, NW

Washington, D.C. 20036-1903

United States

Phone: 202 328 9000

Jeff.Schott@PETERSONINSTITUTE.ORG

# 132. Servin Castillo, Raymundo

Investigador

Venustiano Carranza No. 237 Col. Morelos

Reynosa, Tamaulipas 88620

México

Phone: 044 899 233 6902 calendarioaztecasol@gmail.com

### 133. Shigetomi, Kent

Director for Mexico, NAFTA and the Caribbean Office of the Americas Office of the U.S. Trade Representative 600 17th St. NW

Washington, D.C. 20508

**United States** 

Phone: 202 395 3412 Fax: 202 395 9675 kshigetomi@ustr.eop.gov

### 134. Smith, Russell

Director for International Environmental Policy and Multilateral Environmental Agreements Office of the U.S. Trade Representative

600 17th St. NW

Washington, D.C. 20508

**United States** 

Phone: 202 395 9450 Fax: 202 395 9865

russell\_smith@ustr.eop.gov

#### 135. Sosa, Javier

Director General de Vida Silvestre

**PROFEPA** 

Ctra. Picacho-Ajusco 200, Col. Jardines en la

Montaña

México, D.F. 14210

México

Phone: 555 449 6300 Fax: 555 449 6300 x 16349 jsosa@profepa.gob.mx

### 136. Sotelo, Olga

**Logistics Coordinator** 

Commission for Environmental Cooperation

393, rue St-Jacques Ouest suite 200

Montreal, Quebec H2Y 1N9

Canada

Phone: 514 350 4300 Fax: 514 350 4345 osotelo@cec.org

#### 137. Southern, Nancy

JPAC Member

ATCO

16th Floor

909, 11th Avenue SW

Calgary, Alberta T2R 1N6

Canada

Phone: 403 292 7434 nancy.southern@atco.com

#### 138. Stahl, Michael

Director, Office of Regional & Bilateral Affairs U.S. EPA - Office of International Affairs 1200 Pennsylvania Ave. NW, MC 2650R

Washington, D.C. 20460

United States

Phone: 202 564 2427 Fax: 202 565 6550 stahl.michael@epa.gov

#### 139. Stewart, Sarah

Special Counsel, International Trade Policy

**Humane Society International** 

2100 L St. NW

Washington, D.C. 20037

**United States** 

Phone: 202 293 5111 Fax: 202 293 5109 sstewart@hsi.org

#### 140. Stoub, Jeffrey

**Publications Manager** 

Commission for Environmental Cooperation

393, rue St-Jacques Ouest suite 200

Montreal, Quebec H2Y 1N9

Canada

Phone: 514 350 4300 Fax: 514 350 4314 jstoub@cec.org

#### 141. Studer, Ma. Isabel

Directora

Centro de Diálogo y

Análisis sobre América del Norte - ITESM

Calle del Puente 222 México, D.F. 14080

México

Phone: 555 483 1875 Fax: 555 483 1527 isabel.studer@itesm.mx

#### 142. Talberth, John

President of Senior Economy Center for Sustainable Economy 1704 B Llano St. Suite 194 Santa Fe, NM 87505

**United States** 

Phone: 510 384 5724

jtalberth@sustainable-economy.org

#### 143. Teitelbaum, Benjamin

Regional Development & Special Projects

Coordinator

Commission for Environmental Cooperation

393, rue St-Jacques Ouest suite 200

Montreal, Quebec H2Y 1N9

Canada

Phone: 514 350 4300 Fax: 514 350 4314 bteitelbaum@cec.org

#### 144. Trip, Luke

Program Manager, Sound Management of

Chemichals

Commission for Environmental Cooperation

393, rue St-Jacques Ouest suite 200 Montreal, Ouebec H2Y 1N9

Canada

Phone: 514 350 4300 Fax: 514 350 4314 ltrip@cec.org

#### 145. Turcotte, Denis

Délégué du Québec à Los Angeles Délégation du Québec à Los Angeles 10940 Wilshire Boulevard, Suite 720

Los Angeles, CA

Canada

Phone: 310 824 4173 Fax: 310 824 7759

denis.turcotte@mri.gouv.qc.ca

#### 146. VanDeveer, Stacy

MA Program Director

Department of Political Science 321 Horton Social Science Center

Durham, NH 03824

**United States** 

Phone: 603 862 0167 Fax: 603 862 0178 stacy.vandeveer@unh.edu

#### 147. Vázquez, Adrián

**Executive Director** 

Commission for Environmental Cooperation

393, rue St-Jacques Ouest suite 200

Montreal, Quebec H2Y 1N9

Canada

Phone: 514 350 4300 Fax: 514 350 4314 avazquez@cec.org

#### 148. Vázquez, Mario

Director of Planning and Tech. Assistance Border Environment Cooperation Commission Blvd. Tomás Fernández 8069, Fracc. Los

Parques

Ciudad Juárez, Chihuahua 32470

México

Phone: 656 688 4600 Fax: 656 625 6180 mvazquez@cocef.org

#### 149. Viadas, Eduardo

Media liaison

Commission for Environmental Cooperation 393, rue St-Jacques Ouest suite 200

Montreal, Quebec H2Y 1N9

Canada

Phone: 514 350 4331 Fax: 514 350 4314 eviadas@cec.org

#### 150. Vulpescu, Mihaela

Coordinator, Documentation Unit Commission for Environmental Cooperation 393, rue St-Jacques Ouest suite 200 Montreal, Quebec H2Y 1N9 Canada

Phone: 514 350 4300 Fax: 514 350 4314 mvulpescu@cec.org

# 151. Wennberg, Jeffrey

Chair
U.S. GAC
15 Grandview Terrrace
Rutland, VT 05701
United States

Phone: 802 773 7297 wennberg.ccs@gmail.com

#### 152. Wesson, Dolores

Chair U.S. NAC 7211 Fay Ave. La Jolla, CA 92037

United States

Phone: 858 729 4984 mdwesson@gmail.com

#### 153. Wiener, Steven

U.S. EPA - Office of International Affairs 1200 Pennsylvania Ave. NW, MC 2650R Washington, D.C. 20460

United States

Phone: 202 564 3993 Fax: 202 565 2412 weiner.steven@epa.gov

# 154. Wright, Glen

JPAC Member PrinterOn Corporation 221 McIntyre Drive Kitchener,, Ontario N2R 1G1 Canada Phone: 519 504 5363

Phone: 519 504 5363 gwright@gpark.ca

# 155. Zaelke, Durwood

President
Institute for Governance & Sustainable
Development
2300 Wisconsin Ave. NW, Suite 300B
Washington, D.C. 20007
United States
Phone: 202 338 1300
Fax: 202 338 1810

zaelke@igsd.org vmillon@igsd.org