



Commission for Environmental Cooperation of North America

**Ordinary Session 09-03 of the Joint Public Advisory Committee
Roundtable Discussion on the CEC's Priorities for 2010 and Beyond**

**Sheraton Hacienda del Mar
Cabo San Lucas, Baja California, México**

Summary Record¹

The Joint Public Advisory Committee (JPAC) of the Commission for Environmental Cooperation (CEC) of North America held an ordinary session on 1 December 2009 at Los Cabos, Baja California, Mexico. The main purpose of the meeting was to establish a common perspective with respect to the new priorities set out by the CEC Council of Ministers last June, and to identify possible key elements to be included in the 2010-2015 Strategic Plan.

These Summary Minutes report on each item on the agenda, entering all decisions made by the Committee and identifying actions and responsibilities. (Appendices A and B present the meeting agenda and list of participants, respectively.)

Prior summary minutes, JPAC's recommendations to Council and other documents relating to JPAC may be requested from the JPAC liaison officer or at the CEC website <<http://www.cec.org>>.

Welcome Message and Opening Remarks from JPAC Chair Adriana Nelly Correa

The JPAC Chair welcomed participants to the session and discussed the background on the role and structure of JPAC. She also mentioned that the entire conference would be streamed live (*via webcast*) in English, Spanish and French, making the session available to anyone with an Internet connection.

Preliminary Comments by CEC Acting Executive Director, Evan Lloyd

I have been asked to provide further context to today's discussions and briefly describe the process under which the CEC is to develop a strategic plan for 2010-2015, as well as how this and other public materials may affect this plan.

First, allow me to note something obvious; next week, world governments will be meeting in Copenhagen at a crucial U.N. environment meeting. The context of this meeting is the

¹ Disclaimer: Although this summary was prepared with care, readers should be advised that it has not been reviewed nor approved by the interveners and therefore may not accurately reflect their statements.

conclusions of the report from the 4th meeting of the Intergovernmental Panel on Climate Change, offering proof that human beings are altering the climate. Not just altering the climate, but rather the planet's systems as well, accelerating changes in the environment that affect species, humans and destabilize the ecosystems and services they provide—pure air and water, for example—which are the basis for our prosperity.

I will not speculate on the results of the Copenhagen meeting. Whatever they achieve in terms of global, legal or partial policies, our three countries—Canada, Mexico and the United States—have reaffirmed their intent to act on a local basis according to the three priorities identified by the CEC Council this year.

That brings us to today.

The Council has set the priorities. In the following five years, the Commission is responsible for fostering cooperation and supporting results in the following areas:

- Healthy communities and ecosystems.
- Climate change (and transition to) low carbon economies.
- Greening the North American economy.

The challenges we face are great, and these issues are quite broad.

The good news is that major progress continues to be made to define solutions.

To give an example—keeping global warming below 2% while transitioning to low carbon economies—scientists and engineers having identified the potential to reduce greenhouse gas emissions by 35% from 1990 to 2030, according to the Intergovernmental Panel on Climate Change.

This potential is found in changes to be made by the three economies and throughout the region.

A recent report has given explicit measures on how Mexico, for example, may reach this objective. Identifying the need to reduce emissions associated with energy production and consumption, transportation and energy production are typically included. In addition to efficient energy supply and demand options for the parties, the report notes the potential to decrease greenhouse gas emissions by modifying the spatial aspects of cities and the importance of sustainable woodland management to reduce emissions from deforestation.

I offer the good news that we have already identified the potential requirements to combat climate change and make the change to low carbon economies in great detail, with advice for each of our economies.

The bad news—at least in terms of emissions—is that despite this knowledge, we continue to move in the opposite direction, at least in the immediate future.

A more general problem is the fact that we must take quick, decisive action in all sectors.

It is one thing to have the potential to make great reductions to emissions, and another thing for legislators to agree to implement effective policies to reduce emissions, and companies, consumers and the public at large to take the actions necessary to make these reductions happen.

This is where today's discussion may help.

Your responsibility today is to consider, for each priority found by the CEC Council:

- What are the principal environmental challenges faced by Canada, Mexico and the United States?
- What is the best opportunity for action that may be achieved in a short time (five years, for example)?
- How may these actions be implemented in trilateral cooperation?

For their part, our three governments and their officials and experts will be in similar exercises over the next three months.

The result will be the identification of important cooperative actions to implement five-year strategies for the CEC Council's priorities. The Council will refine these actions to produce a new five-year strategic plan to be adopted at its next annual session, here in Mexico.

Public commitment and transparency are features that distinguish the CEC. It is appropriate that today's session and the public review of the Council's work be used to support the development of the CEC's new strategic plan.

DISCUSSION I: Healthy Communities and Ecosystem

David Brackett, President of D. Brackett Consulting Inc.

In the opinion of David Brakett, we can live off the environment for some time, but its time will always come. Given the economic crisis of recent years, we have been living on credit, but the time is coming for us to restructuring how we live together with the environment. The millennium ecosystem assessment has brought together a large number of experts in the area to generate approaches to environmental interaction, the assessment of natural goods and services, and how to relate conservation objectives with economic objectives. However, these tools have yet to be used properly, and it is very important that they begin to be used.

In the short term, the great challenge will be to react to variability. Biodiversity and ecosystems will adapt, some will change their borders, others will be reduced, species will move and will cease to be available to certain places, and others will go extinct. The core question is whether these changes are acceptable to have healthy ecosystems. In some cases, or in most cases, the answer is probably not.

Climate changes will make economies adapt. The lack of water will put much stress on agriculture. As they adapt, we have to ensure that they remain in balance to maintain healthy ecosystems and thus healthy communities.

Much effort has to be given to maintain resilient ecosystems with various collaborative strategies and networks.

The CEC is an excellent institution, but its capacity is limited and its coverage isn't broad enough. The CEC must foster regulatory regimes to reduce environmental distortions. The CEC must concentrate on the conservation of biodiversity, but also on water issues. The CEC has been very important in terms of putting people in touch with environmental experts and generating personal networks of great importance.

Silvia Manzanilla Naim, Environmental Planning Coordinator, Northwest Biological Research Center (*Centro de Investigaciones Biológicas del Noroeste*—CIBNOR).

The three countries now have a great opportunity to face a challenge of such great importance as climate change.

The woodlands along the Canada-U.S. border constitute a good indicator of the changing climate. Together, these two countries must better control these woodlands to mitigate deforestation from various causes.

At the U.S.-Mexico border, we find various types of ecosystems that depend primarily on fresh water. The U.S.-Mexico global warming scenario is a high increase in arid zones. Both countries will see a major reduction in water, principally Mexico and the southeastern United States. This will make water management a priority.

In the case of the relationship between Canada and the United States, the countries have worked together in several occasions, primarily to control the Great Lakes. But in the case of Mexico and the United States, there is no real environmental association. The Colorado River is the victim of overexploitation, mostly in the southern United States.

It is no secret that for many countries water will become an issue of national security: the United States has already listed it as such. This may lead to problems in water-scarce regions, since warm weather has reduced flows in some border rivers, particularly in the Colorado River. Border water treaties date back to 1994 and are already obsolete; a priority for cross-border collaboration is a treaty revision. Currently, there is an opportunity to work in this area, since the warm climate will reduce precipitation. It has been shown that El Niño, which will be more frequent, may restore Delta River waters.

The needed policies may require sacrifices by some sectors, but these sacrifices are necessary to ensure the agricultural development of the region and conserve aquatic ecosystems and biodiversity. Over the next five years, the three countries must more strictly control water and form truly collaborative treaties.

Chris Ganson, Principal Researcher, Transportation and Sustainable Cities Program, World Resources Institute (WRI)

In the past, fuel tax laws were passed to relate them to highway construction. While this looked like a good idea, it made car driving necessary and gave rise to various side effects. In the United States, approximately 4,000 people die each year in car accidents, and this is the leading cause of death for ages from 1 to 35. Air pollution in some cities make one in three children develop asthma. People are gaining weight because they prefer driving to walking, and in some states more than a fourth of the population is categorized as obese.

It has been shown that the vehicle emission gases contribute to climate change. This vision to give prevalence to cars is in place since 1939; can you travel faster in big cities this way? The answer is no, since on most roads are quickly congested, and if more lanes are added to roads, they are quickly filled.

The big challenge is to change the design of cities, now focused on transportation by automobile, to cities where there are different transportation options such as walking, bicycles, trains and automobiles. The benefits of reducing greenhouse gases with this paradigm shift, while many, are exceeded by other social benefits such as having cities where people like to walk, reduced accidents, and even with driving at least people are healthier and can save money since they no longer have the cost of keeping a vehicle.

Cities are complicated organizations in terms of analyzing transportation systems, since it is hard to predict the results of an action. This is due to the complexity of the cities themselves. To be able to plan new transportation systems, the first thing to do is to generate metrics. Emissions reductions may be one, and access to places or safety may be others. Objective for these metrics also have to be defined. Lastly, current measurements have to be taken to know the current status, to be compared against the changes obtained from the actions taken.

Each country has to invest in the transportation changes it requires, focusing on attaining defined goals when measuring metrics.

The current status of transportation systems is due to the large amount of money invested. The only thing that has to be done is that major transportation investments be made, keeping in mind the need to create pedestrian and bicycle paths.

Questions and Comments:

- *Gustavo Alanís (JPAC Member from Mexico):* The issue of protected areas is important, but areas must not be protected only on paper. That's why it is necessary, when making a protected area, to be clear on where the resources to maintain it will be drawn from. In Mexico, there are various laws and rules that are not enforced. The Commission should consider how to help them be enforced.
- *Rafael Márquez (JPAC Member from the United States):* With respect to Silvia Manzanilla's presentation on the Colorado River, the same situation is being faced by the Río Grande-Río Bravo, but in the opposite.

- *Rodolfo Lacy (JPAC Member from Mexico)*: The CEC has generated an Atlas with great effort. But there is information on ecosystems that the Atlas has yet to contemplate. A greater number of layers should be developed in this Atlas, and it should be accessible to all residents of North America to assist in their decision-making. One suggestion is to invest more in the Atlas to enable flow analyses.
 - *Response*: Yes, it is necessary to invest in the Atlas, since it is currently at a scale of 1 to 1 million, allowing only a regional analysis and not the analyses needed to attain the stated objectives. It has already been suggested that the Atlas be used to detect areas of connectivity among ecosystems.
- *Carlos Sandoval (JPAC Member from Mexico)*: Unlike before, construction companies have shown interest in ecosystems such as wetlands, as they see in them tourism business opportunities for various developments.
- *Online questions and comments from the public (via Thierry Conraud)*: In the CEC's role, how can we ensure that there is adequate awareness of its programs, analyses and results (such as the Atlas)?
 - *Response*: A print version is planned for launch in the three countries, and it is already available electronically on the Commission's website.
- *Silvia Manzanilla*: Water should be elevated to the level of national security in the three countries. The Commission should show that the countries are like partners, opening an U.S.-Mexico international water treaty. A recommendation to the CEC regarding the Atlas is to focus on the most vulnerable ecoregions where there are points of conflict, such as water, biodiversity management, timber, etc.
- *Dinkerrai Desai (JPAC Member from the United States)*: Question for Chris: How do you visualize the changes proposed for highly populated areas like Mexico City, New York and Ontario?
 - *Response*: Roadways take up a lot of space. Normally we don't notice it because we take it for granted. But if you take away car lane you can easily add a bike lane and extend pedestrian sidewalks on a large scale. There is a movement called "all way" providing space for any kind of movement. Allways are also places where people like to spend their free time. Streets have been lost as a place to socialize, as it was before.
- *Glenn Wright (JPAC Member from Canada)*: To make good recommendations to the Council, it should be kept in mind that resources are limited. Plans should be made that have not been made elsewhere. Water and climate issues have already been identified by other areas. Question for Chris: The changes you propose are very interesting, but they seem to be plans that will take 50 years or more to reorganize cities and reward housing developments with higher concentration. Are there any actions that can be done in the short term?
 - *Response*: The great majority of cities do not like to be told what to do. But there are success stories, particularly in the state of California where various future growth scenarios were considered and consensuses were built with local governments. What could be done among the three countries is to share this knowledge to make various development models.
- *David Brackett*: There has been a lot of talk about the release of project information and awareness of local parties, whether governments, NGOs or the community in general. It is complicated for the CEC to do projects on a local scale since there are

insufficient resources, but it is necessary to include these parties in the debate and design ways to interact with more local networks.

- *Jane Gardner (JPAC Member from the United States)*: Question for Chris: In practice, many people live in the suburbs and work in the city, which implies a commute by car. What is your proposal: to increase personal awareness efforts, or through government means like taxes, etc.? How can you make people stop using their cars?
 - *Response*: It needs to be voluntary. The plan is to give options to get to where they want to go. The reason for the proposals is to make people improve their way of life; I don't think people enjoy being in traffic for hours. There is evidence that people are preferring developments less extensive than in the past (where it is easier to get around without a car).
- *Rodolfo Lacy*: The issue of harmonized rules has been pushed back. The CEC was created with the interest to solve problems arising from the differences in rules in place in the three countries. Harmonization should not be confused with copying laws, which would hinder development in certain sectors.
- *Martin Gutiérrez Lacayo (JPAC Member from Mexico)*: The interconnection of the issues being discussed is broad and very important, and so much focus should not be given to the issues of vulnerability and climate change. An issue that has not been discussed is the generation of environmental service markets in North America. The data collected are an important source of material for local groups to offer various environmental services, such as using available information to create work groups to develop a North American climate action plan. I propose that a specific work group be created to focus, as with biodiversity, on gathering all information that has been collected to generate a climate action plan. Environmental management is of little use if it is not anchored with economic development in the three countries.
- *Gustavo Alanís (JPAC Member from Mexico)*: There has been much discussion on how to interact more with people, and more debate is needed on the issue to generate greater participation and responsibility. Many people do not know the CEC exists.
- *Online question from the public (via Thierry Conraud)*:
 - More information is needed on how to interact with the CEC.
 - Not only rules but also metrics to measure performance should be harmonized.
 - How can CEC programs be brought down to reality?
 - Is the conservation of biological diversity considered in the CEC?
 - A model should be created to reduce greenhouse gas emissions.

DISCUSSION II: Climate Change – Low Carbon Economies

Michael Moore, Senior Fellow, Institute for Sustainable Energy, Environment and Economy (ISEEE), University of Calgary, Alberta

There are many events showing that a big change is happening. Climate change may or may not be real, and it may be caused by man, astronomical events or natural cycles. Personally, I'm not really trying to answer these questions. The work I do is to create

strategies to deal with this phenomenon if it is real. Certain correlations may be found between climate change and carbon emissions, most of which are due to the consumption of fuel and other products.

The greatest opportunities to make a difference and with the highest impact are efficiency and legal certainty, better modeling tools so that decision makers know the possible effects of their decisions, developing data models and tracking systems, and to have carbon storage identification systems.

North America has to develop an energy plan. It would be the first step to overcome the policy problems found among countries. One thing to be taken into account is the big change in fuel demand, which not only changes their cost but also their distribution. Cross-border regulations should be drafted, which may be obtained with like metrics for all. Lastly, it is necessary to have long-term financial instruments to foster projects in line with environmental needs. This kind of instrument must be transparent and cross-border.

It is not necessary to believe that climate change is real to generate strategies to face it. If we take measures to reduce it and it is not real, the only thing we will have done will be to have invested in people, to have better development plans, and to live better. If it is real, we will be in a better situation to face it. But if it is real and we don't do what's necessary, we will be losing very valuable time.

Odón de Buen, President, Energy, Technology and Education (*Energía, Tecnología y Educación*—ENTE)

The challenges are climate change, air pollution, water supply and quality and biodiversity. The opportunities seem obvious, such as transportation and mobility, planning of population development, water conservation and treatment. In Mexico, when there is talk about water, there is also talk about saving electricity, since water has to be pumped out of deep wells. This also means oil savings, since a high percentage of electricity is produced in fossil fuel-burning plants.

Suggestions would be to change energy sources. Mexico should move toward renewable energies; while the law so mandates, it is not done. In the case of second-hand vehicles, more specific data are needed. Progress has been made in the harmonization of quality standards for refrigerators and other appliances, but much more has to be done. Mexico does not have data to improve energy consumption, such as data on the use of air conditions. On the other hand, Canada does have this kind of data, used to build green homes.

Building codes are an issue that the Commission has already worked on, and which continues to be important. Mexico is behind in modeling, which is needed for many things, from building modeling to modeling for correct decision-making. Mexico could make good use of the information and experience that the United States and Canada could provide on energy conservation. The Commission could offer major help by showing how governance can be ongoing and efficient.

In Mexico, the use of second-hand vehicles and electronics has to stop, since they require much higher energy consumption and are mostly not regulated.

Jeff Schott, Senior Fellow, Peterson Institute for International Economics

The main challenge is very clear, but at the same time very complex. It is to face climate change and substantially reduce greenhouse gas emissions. The three countries have endeavored to participate in the creation of international regimes to replace the Kyoto protocol. The United States and Canada have the goal to reduce emissions by 17 to 20 percent by 2020, with respect to the emissions seen in 2005. Mexico also aspires to reduce its emissions reported in 2002 by 50%, which is more ambitious than many developed countries have proposed in terms of reducing emissions. Attainment of these goals will require much effort in legal and economic areas, and that is where NAFTA should be of help.

To reduce greenhouse gas emissions and migrate to low carbon economies, the countries must improve their energy efficiencies, change to renewable energies and reduce deforestation and environmental degradation. The main challenge of leaders is to find how to reduce the cost of these adjustments—in fewer words, to change how individuals and companies use energy. One of the problems of facing climate change is that in some cases a price has to be put on things that used to be free. Politicians have to ensure that the measures taken to address climate change do not put their countries' companies at a disadvantage.

There are ways for NAFTA countries to collaborate:

- There should be greater communication among countries to coordinate policies on how to face climate change.
- Coordinating regulatory policies, such as the use of renewable energies and technologies.
- Establishing channels for technological and financial cooperation to improve adaptation and generate low greenhouse gas emission projects in Mexico.

The CEC agenda is very complex, primarily because its funding continues to the same as a long time ago, which represents a major reduction.

Questions and Comments:

- *Online question from the public (via Thierry Conraud):* What FTA support is available to Mexico to increase the possibility of reducing its carbon emissions?
 - *Response:* Support should be generated in the three countries' bank that finances the process.
- *Rafael Márquez (JPAC Member from the United States):* United States, Canada and Mexico are among the leading oil and gas producers. The use and handling of these products generates components such as methane. It should be noted that methane is 21 times more powerful than CO₂. When politicians and the media talk about CO₂, they forget to talk about equivalents to CO₂. Methane not only has a high environmental impact, but also the reduction of methane emissions would have a much quicker effect than reducing CO₂ emissions. Another characteristic of methane is its added value that, upon recovering from the environment, it may be

used as fuel, and its recovery, handling and transportation is less costly. That makes it a good investment not just ecologically, but also economically.

- *Response from Michael Moore:* A methane and black carbon recovery strategy may be an important way to achieve short-term results; there are already success stories demonstrating cooperation between the three countries.
- *Online question from the public (via Thierry Conraud):*
 - What are some practical steps that may be taken in the coming years to have an efficient carbon market?
 - *Response from Michael Moore:* Primarily there have to be good carbon credit policies.
 - *Response from Odón de Buen:* Systems should be created to detect, measure and issue certifications. In Mexico, operating models have to be improved practices should be homologated with those of the United States and Canada.
- *Gustavo Alanis (JPAC Member from Mexico):* Anything done on climate change should go hand in hand with decisions made internationally. Work has been done on a 10-point climate change policy. Energy models should be evaluated, and in Mexico should be changed radically. There need to be energy efficiency standards that are actually met. Most problems rely on transversal and comprehensive public policies, which may be proposed internationally.
- *Online question from the public (via Thierry Conraud):*
 - When will a greenhouse gas emissions market be included on the CEC agenda?
 - *Response from Rodolfo Lacy (JPAC Member from Mexico):* To trade carbon bonds, it is important to have clear trading rules. The CEC already has a basis, namely the pollutant release and transfer register that includes in part the record of greenhouse gases. A request is already being made to begin to trade in such gases. The three countries must be prepared to have similar greenhouse gas emission registers. Mexico does not have laws requiring industries to report a greenhouse gas release, nor is there a historical record of such gases. The CEC may focus on building a homogeneous system to control greenhouse gases, as needed for the market. A market has already been created with the Kyoto protocol, but it does not operate in North America.
 - There is a need for common indicators.
 - Methane is very important.
 - What is the CEC doing about environmental education?
 - *Response from Odón de Buen:* The CEC has limited resources and doing that requires many resources. A lot of information is available, but waiting for the CEC to undertake environmental education in general is very complicated, as it requires large investments.
 - People are asked to participate more, not just being informed but also being considered in decision-making.

- Canada's ecological balance is 20 years old. What can the CEC do about it?
 - What should the CEC's communication strategy be? Is it more important to be close to politicians holding decision-making power than the population at large?
- *Adriana Nelly Correa Sandoval (JPAC Chair)*: It is important to acknowledge the climate change impact on ecosystems that affect community health, such as meteorological patterns and changes in species distribution.
- *Martín Gutiérrez Lacayo (JPAC Member from Mexico)*: Something that has not been discussed is that we are in times of crisis. For this reason, politicians cannot do other than an immediate response, while the changes being proposed for the most part require investment. The CEC has to be smart as to how to manage its communications. The CEC may detect investments that can make fast, appreciable improvements to climate change and from there obtain resources to support studies and programs. The CEC could influence a new way of consumption, not just production. The CEC may find ways to generate new markets and businesses.
 - *Response from Michael Moore*: A simple solution to consumption would be to change Coke machine motors for more efficient motors. Another solution is to increase taxes on the entry of old vehicles into Mexico, thereby starting to solve the problem and not only pass it on. In the sense of new market forms, the use of black carbon in agriculture may be a big source of business.
- *Online question from the public (via Thierry Conraud)*:
 - For Mexico, it is much more complicated to comply with the environmental commitments than for the United States and Canada, due to the great disparity among them.
 - *Response*: Mexico may reach the goals it has proposed, first because its emissions are much lower in almost all sectors. Mexico's energy needs are much lower. Mexican standards are much more efficient than in the United States.
- *Dinkerrai Desai (JPAC Member from the United States)*: Question for Michael Moore: Why isn't carbon sequestration a highly implemented technique if it is so good?
 - *Response*: In order to sequester carbon, high pressure has to be applied to integrate it into sediment. This means that one uses a lot of energy to get rid of waste. If there were a simpler way to capture it, it would be much more commonly used.
- *Patricia McDonald (JPAC Member from the United States)*: Although the information panel has been quite useful, it is necessary to submit recommendations to the Council. It is important to analyze which of the priorities is best to address in terms of feasibility of scope and importance.
- *Carlos Sandoval (JPAC Member from Mexico)*: An aspect that would be important for the industrial sector would be the building of indicators for the North American carbon bond market. This would raise the CEC's level of knowledge and usefulness, making various projects more viable.

DISCUSSION III: Greening of the North American Economy

Michael Moore, Senior Fellow, Institute for Sustainable Energy, Environment and Economy (ISEEE), University of Calgary, Alberta

There are three primary challenges to attain the objectives:

1. Drinking water (supply and externalities affecting water quality), particularly in the energy sector.
2. Persistent emissions, CO₂, methane and other alkanes, carbon particles, control measures, containment measures, etc.
3. Loss of biodiversity and balance in ecosystems; deep implications of the loss of biodiversity in woodland ecosystems and rivers (loss of existence value).

Three actions may be taken (in terms of the three challenges cited above), by way of the CEC:

1. Public identification, licensing and comprehensive management of carbon storage and handling processes. Identification of the best sites for carbon management facilities. Using a referenced geological information system.
2. Creation of an international bank for carbon credits. It is one thing to establish a market for the exchange of carbon credits and bonds, which has been done through the Chicago market, and it is very different to offer a scheme to back carbon credits, especially for less favored populations.
3. Development and transfer of renewable energy technology, which may be approved openly not only by the three CEC countries but internationally. A couple of examples are geothermal and tidal energy (produced by sea waves).

How can we move ahead on these initiatives?

- Creating a carbon credit bank would establish an attainable regulatory framework not only for transactions and guarantees but also for the implementation of new technologies themselves.
- Creating a standard, transparent quantification associating the production and distribution of goods with the cost associated with the carbon required for such goods (*Transparent Carbon Charge*).
- Informing citizens of the associated carbon footprint and cost carried by each market-sensitive product. With this, people could choose whether to pay the premium for carbon-intensive products or elect those produced through more benign processes.

We can implement a staggered, scheduled moratorium for the different uses to preventively defend the ecosystems (forestry, fishing and agroindustrial production moratorium). With a standard biometric system, the three countries could let ecosystems rest without the reduced use leading to significant economic losses. Financing and incentives could be obtained from the regulation of biological cycles of ecosystems in balance.

This implies:

- Consistency in rules and regulations
- Research into alternative designs (for means of oversight and use)
- Application of standards reflecting the dynamic of ecosystem changes

- A strengthening strategy (socioeconomic leveraging) to adopt these changes
Carlos Muñoz Piña, General Director for Environmental Policy and Economics Research, National Institute of Ecology (*Instituto Nacional de Ecología—INE*)

Sustainability comes from several sources simultaneously, such as price balances, creation of green markets, product differentiation in the market, and relevant international trade policies.

Four Key Issues:

1. The three countries have well-intentioned subsidies that unfortunately have ecologically perverse effects

The purpose of the subsidies is appropriate, to help sectors in need to achieve better conditions. This is quite valid for some activities in the forestry sector and even in agroindustry. The support normally allows these sectors to expand production operations, but by expanding, they quickly affect the environment as controlling or offsetting measures are implemented. This translates into damage. CEC should watch the operation of some of these subsidies beyond trade growth, since they may have adverse ecological effects beyond the short-term market benefits.

A very clear example is the irrigation cost subsidy for Mexican farms. With the subsidy, the farmer not only pays less for water, but he also extracts more water with the money made available. Typically, little investment is made to update the hydraulic infrastructure, and he ends up reducing water tables more quickly, so in the next cycle there is less water and the soil is more affected, with a negative impact on competitiveness in the sector to be supported (vicious circle).

The solution: asymmetrical subsidies that fund production but do not reduce the natural barriers existing in markets.

2. Technological change, second-hand durable goods and services that cross borders and dissipating their ecological impact.

The pressure in developed countries to maintain state-of-the-art technology products often leaves excess inventory of past technology products that are brought into less development countries with certain premiums. An example would be the previously owned cars that enter Mexico, sold cheap in the United States and resold at higher prices to Mexico's poorer population (resale imports).

One solution is ecolabeling, and another is the rebalancing of income by regulating the acquisition of state-of-the-art technology. The causal chain of ecological impacts has to be tracked, defining whether second-rate technologies are in play, being reabsorbed by the market at a substantial ecological cost. In any case, incentives should be offered against the purchase of second-rate technology.

3. Pressure on ecosystems caused by international trade.

A demand tracking system is proposed, where the CEC, in coordination with economic think tanks, helps to model each of the three countries' absorption of different goods whose production chains put stress on the ecosystems where they are produced. Thus, preventive impact forecasts may be prepared, rebalanced with public policy changes.

4. Sector ceilings and specific characteristics.

The sector ceiling proposal involves establishing public policy mechanisms in which a specific energy consumption and environmental emissions profile is determined for each economic unit produced, establishing maximum quotas allowed for each sector and per volume produced. This would balance the comparative advantage of goods produced naturally in a region, fostering specialization along with usage moderated by its own pace, where producers reach the ceiling established for their sectors (thereby balancing investment while enhancing sector efficiency).

Questions and Comments:

- *Online question from the public (via Thierry Conraud):* Five major opportunities where we can work to make the automotive sector's supply chain environmentally sustainable in the next five years:
 - Accelerating the environmental sustainability of automotive products through innovation in chemical processes.
 - Creating systems to identify and take advantage of technological opportunities that improve environmental performance and financial viability of automotive systems.
 - Improving the automotive industry and its supply chains by reducing total energy consumption of cars and production systems alike.
 - Addressing hydrological sustainability by facing new water supply challenges throughout the automobile production chain.
 - Creating processes and systems that support efficient resource management programs in line with the frames of reference to be defined trinationally.
- *Dinkerrai Desai (JPAC Member from the United States) (Question for M. Moore):* I suppose that the carbon credit bank strategy you propose is preferable given current prices? What would happen if natural gas prices rise in the short term, making substitution difficult? Wouldn't a more balanced strategy be better?

Response: It is hard to argue against the balance of any strategy. If we had the capacity to build a more efficient system combining what we now know, we would develop some kind of high savings-profile hydraulic system, avoiding the negative effects of the different heat processes. We would look for the most renewability with the lowest level of intermittence, possibly with some sort of backup, for example—though costly—nuclear energy. You can't beat the argument that markets will seek out the most economical solution, and at present this points to natural gas which is relative cheaper for the low-impact profile it produces. My guess is that this will help us to gain time as increasingly cleaner and more economical technologies are developed.
- *Glenn Wright (JPAC Member from Canada) (question for M. Moore and C. Muñoz):* Focusing on the areas where the CEC may make specific contributions, we

cannot overlook the fact that the CEC itself is a product of a free trade agreement. The energy sector is common for all of us, for both electric and hydrocarbons. Wouldn't it be inappropriate for the CEC to focus on the energy sector? What do the panelists think about the possibility of us taking on this focus on the energy sector?

- *Response from Michael Moore:* In the energy sector, I think there's a big playing field. One of the ideas that support what has been presented for that sector is sector ceilings. Much of the impact that the CEC may have comes from its ability to identify the value of sound management in the energy sector and to recognize this through trinational public policy recommendations. But I think that the focus should not be on the energy sector alone, since the impacts on flora and fauna go beyond this important sector.
- *Response from C. Muñoz:* I will divide my response into three parts: 1) We have to stay focused on results, getting fresh data from specialized research centers in each of the three countries. 2) Thinking of immediate actions for 2010, I would go for the certification of biofuels, at least to ensure the homogeneity of the quality and carbon footprint of the biofuel being used. 3) We have to harmonize existing regulations, ensuring that similar policies find similar playing fields throughout the region.
- *Martín Gutiérrez (JPAC Member from Mexico) (Question for M. Moore and C. Muñoz):* In the CEC's role as maker of recommendations, what do you think about the continued work on homologation of visions of what "greening the economy" means throughout the region? How will we make recommendations that help the chains in the three countries to consistently participate in the green economy? Lastly, there must be participation from other branches of government, specifically legislators, in these processes.
 - *Response from C. Muñoz:* The green economy has a major political component, and there would be practical reasons to separate political discourse from the practical economic aspect of the "green economy". There is the economic benefit that comes from technological change, the benefit of the change on consumption and production patterns, and the economic benefit coming from a more robust regulatory framework. If these forces are kept in check, maturity gaps may be resolved while the distribution of benefits from "greening" grows at a sustained pace. The most exciting and difficult part of the green economy is coordinating public and private actions so that all sectors find real benefits as they move to more ecologically sustainable ways of life.
- *Gustavo Alanís (JPAC Member from Mexico) (Question for C. Muñoz):* In terms of homologating practical visions, what do you think would be important to achieve uniform ecolabeling rules in the three countries? Don't you think it is important for judges (Judicial Branch) to participate to ensure a uniform interpretation of frameworks, including those already existing?
 - *Response from C. Muñoz:* In terms of economic impact, a label works only if there is an actual demand for it. A good example is organic coffee, which has a high demand and a dynamic market. To create an ecolabeling platform, a standard of standards would have to be created, explaining the parameters

for each type of product and industry. The regulatory burden would be high, and the level of demand may be flat if ecolabeling for specific products does not add value as perceived by buyers.

- *Online question from the public (via Thierry Conraud):*
 - The CEC is due to NAFTA and it is very important to know NAFTA's ecological impacts in the region and how they have been measured. NAFTA trade should consider that there are natural limits to the trade of goods and services, even to sustainable economic growth. The CEC should be an agency that helps us to identify whether the rhythm of trade growth is compatible with the ecosystems' own capacity to tolerate the effects of such growth. This should form part of the CEC's constant metrics as in its role as recommender of regulations.
 - In Mr. Moore's experience, is the hydroelectric generation system feasible and usable in Mexico and the United States as in the Niagara Falls, to be used in other regions?
 - *Response from Michael Moore:* I'm not sure I understand the question. A quick response is that as soon as the prevailing hydrological conditions are present at the site, enabling the development of hydroelectric projects of this size, projects are viable. As to whether generation can be shared, I don't think the three countries have another border zone with Niagara's characteristics where such a project could be undertaken. Regarding credits, I think the Canadian model, on how to market the complete energy spectrum is highly applicable.
- *Adriana Nelly Correa Sandoval (JPAC Chair):* I want to revisit the issue of biofuels and wind power brought up by the panelists. This was already mentioned by JPAC in its Council recommendation on climate change. As to the use of sustainable energy sources, we believe that a renewable energy source is not automatically sustainable. I believe that the fast way to promoting sustainability is certification. If energy sources are certified (particularly biofuels), we will have clear evidence that consumption is fully sustainable, and not just renewable. Let's suggest to our ministers to bring the connection between sustainable production and trade to light through the homologation, certification and labeling. Let's recover the parity between trade and the environment.
- *Laurent Benarrous (JPAC Member from Canada and Moderator):* I'd like to use the next block of time to address concrete, doable and addressable measures from the three countries in the context of free trade, in addition to specific proposals from the panel as well as participants, to be assessed for recommendation in the specific framework of the next five years. In this sense, I bring up the following ideas:
 - Implementation of common accounting standards to record and track the carbon trade.
 - Implementation of a certification system for energy in general and biofuels in particular.
 - Definition and homologation of clean energies for the three countries as a whole.

- Implementation of uniform vehicle standards identifying the quality and ecological footprint of both new vehicles and existing vehicles in the market, to be used as a uniform basis in the short term.

A plenary session format is followed to take up the issues mentioned by the moderator, on greening the North American economy:

1. Implementation of common accounting standards to record and track the carbon trade (aimed not only at costs but also at the ecological footprint or carbon content and consumption in each product of the economy), stressing symmetrical and transparent information.
2. Implementation of a certification system for energy in general and biofuels in particular.
3. Harmonization of product ecolabeling systems to identify the ecological footprint of products for consumers.
4. Definition and homologation of clean energies for the three countries as a whole.
5. By consensus, the improvement of merchandise transportation flows is added. Given the trade among the three countries, this will strengthen the sustainable competitiveness of the whole region.
6. Managing the adverse effect on ecosystems caused by of sector subsidies.

Jane Gardner (JPAC Member from the United States) (Summary and Conclusions): I want to ask each panelist and other volunteers to provide a summary of what key action (or two key actions) they would submit as a recommendation and outcome of this panel.

- *Response from Michael Moore:* I would choose to recommend joint projects, specifically a joint project in the area of farming integrated with the most relevant environmental issues. In my earlier contribution I mentioned Black Carbon, which would also be a key project and good starting point for various convergent initiatives. The most important research centers in each country should participate, to provide consistency and reproducibility of results. This would integrate metrics and productivity.
- *Response from Odon Debuën:* My proposal would be to build or increase capacities to implement specific energy efficiency projects, coordinating and integrating standards for fuel consumption and energy efficiency.
- *Response from Gustavo Alanís (JPAC Member from Mexico):* I propose to revisit the North American Common Energy Plan, including adaptation and mitigation issues, especially adaptive management for priority vulnerable ecosystems.

To finalize the session, it is proposed to take the conclusions and issued addressed at the roundtable as the basis to begin discussion on specific action points before the next meeting, scheduled to be held in the United States in the coming year.

Adjournment of healthy communities and ecosystems group

Proposals (presented by *Adriana Nelly Correa Sandoval*)

- Better understanding and release of information illustrating the linkages between human health and ecosystem health

- Identifying priority ecosystems, particular for the performance of ecological services
- Identifying particularly vulnerable ecosystems
- Fostering the adaptive management of vulnerable priority ecosystems
- Promoting ecological services markets to ensure the conservation of ecosystems and thus communities
- Providing and assuring connectivity among priority ecosystems

David Brackett proposes to complement the above services with:

- Complementing the West Coast marine ecosystem network
- Improving our ability to manage grasslands

He further proposes to use the CEC as a clearinghouse, particularly with respect to the inventory of polluting products.

Chris Ganson proposes that the CEC act as a clearinghouse for the transfer of transportation knowledge and capacities, particularly the modeling of transportation networks.

Glenn Wright (JPAC Member from Canada) proposes that the CEC act as facilitator for the exchange of ideas, such as organizing international conferences.

Martin Gutiérrez proposes to add the creation of a working group of experts on vulnerability, adaptation and mitigation strategies with respect to climate change threats, in order to generate a North American regional adaptation policy.

Gustavo Alanís proposes that the children's health and the environment program be restarted.

JPAC Follow-Up Session and Administrative Matters

Adriana Nelly Correa Sandoval, as outgoing JPAC Chair, announces the nomination of *Glenn Wright* as new JPAC Chair for 2010. Mr. Wright appreciates the trust and hopes to keep working with everyone in the performance of his duties.

He then asks certain members who were participating in meetings representing JPAC to give a brief summary:

- *Dinker Dessai*, JPAC member from the United States, reported on his participation at the NAC-GAC (National and Governmental Advisory Committees) Meetings held in the U.S. state of Vermont last month. Issues addressed included ecosystems and basin management, and the energy impact on communities. He also notes that the U.S. is still debating the Commission's operating program for 2010.
- *Gustavo Alanís*, JPAC member from Mexico, represented JPAC on 9-10 November at a Monterrey, Mexico workshop on environmental enforcement along trade corridors. He notes the difficulties faced by governments to coordinate efforts among countries. The purpose of the workshop was for governments to share information and enforcement strategies. Specific issues included ports and airports, compliance incentives and enforcement opportunities, wildlife, technologies to locate air pollution (linkage of law and technology), infrastructure needs, training, and the involvement of groups and civil society in these issues. Marco Heredia will submit an extensive report in the near future.

Next *Adriana Nelly Correa Sandoval* presents a summary of her actions representing JPAC:

- She acted as an observer with *Martín Gutiérrez* at the Biodiversity Working Group meeting.
- She also participated at the 17th ENVIROPRO Environmental Congress in September 2009 in Mexico City. The Congress also featured exhibits from environmental service providers. The theme was Green Economy, with various ambassadors and many other personalities attending. JPAC's participation consisted of an introduction to the Commission, how it was created, what programs it has, who its members are, its outlook, etc., and was wrapped up with the conclusions and recommendations of the North American Leaders' Declaration.
- Mexico very recently held a Commission-organized event on citizen submissions. *Evan Lloyd*, Submission on Enforcement Matters (SEM) Director Dane Ratliff, and members of the sustainable development advisory boards attended.

The JPAC Chair announced that there will be discussions on the following day regarding the dates and topics for the next year's meetings, starting with a meeting likely to be held somewhere yet to be defined in the United States, with topics deriving from this session. There may also be a workshop on citizen submissions.

Gustavo Alanís (JPAC member from Mexico) mentions that the pending issues for this year include comprehensive water management. That workshop has been held over since March of this year. Pending issues should be prioritized, along with those already in place.

Adriana Nelly Correa Sandoval (outgoing JPAC chair) thanks all those present and participants who have participated virtually, as well as the logistics team, translators, technicians, etc., thereby adjourning the session.



Commission for Environmental Cooperation of North America

**Joint Public Advisory Committee Regular Session 09-03
Roundtable Discussion on the CEC's Priorities for 2010 and Beyond**

Sheraton Hacienda del Mar
Corredor Turístico KM 10, Lote D, Cabo Del Sol
Cabo San Lucas, Baja California Sur 23410, México
Ph. (52) (624) 14 58000 • Fax (52) (624) 14 58002

The main objective of the meeting will be to develop a common vision around the new priorities outlined by the CEC's Council of Ministers last June and to identify potential key elements to be included in the 2010–2015 Strategic Plan

Draft Provisional Agenda

Tuesday, 1 December 2009

Location: *Hacienda 2 & 3*

8:30–8:40 Welcome and opening remarks by the **JPAC Chair, Adriana Nelly Correa**

8:40–8:50 Introductory remarks by the **CEC Acting Executive Director, Evan Lloyd**

8:50–10:50 **Healthy Communities and Ecosystems**

Moderator: Adriana Nelly Correa, JPAC member for Mexico

Facilitator: Thierry Conraud, C3 International

David Brackett, President of D. Brackett Consulting Inc.

Silvia Manzanilla Naim, Institute of Ecology, National Autonomous University of Mexico (UNAM)

Chris Ganson, Senior Research Associate, EMBARQ: World Resources Institute, Center for Sustainable Transport and Cities

8:50–9:20 Opening remarks by invited experts

9:20–10:50 Facilitated discussion with JPAC members, experts and the public

10:50–11:00 Break

11:00–13:00 **Climate Change–Low-Carbon Economy**

Moderator: Jane Gardner, JPAC member for the United States

Facilitator: Thierry Conraud, C3 International

Michal Moore, Senior Fellow, Institute for Sustainable Energy, Environment and Economy, University of Calgary in Alberta ISEEE

Odón de Buen, President of Energía, Tecnología y Educación (ENTE)

Jeff Schott, Senior Fellow, Peterson Institute for International Economics

11:00–11:30 Opening remarks by invited experts

11:30–13:00 Facilitated discussion with JPAC members, experts and the public

13:00–14:00 Lunch [provided] - *Foyer Hacienda 2 & 3*

14:00–16:00 **Greening the Economy in North America**

Moderator: Laurent Benarrous, JPAC member for Canada

Facilitator: Thierry Conraud, C3 International

Michal Moore, Senior Fellow, Institute for Sustainable Energy, Environment and Economy, University of Calgary in Alberta ISEEE

Carlos Muñoz Piña, Director General for Research in Environmental Politics and Economics, Instituto Nacional de Ecología (INE)

Gretchen Daily, Senior Fellow, Woods Institute for the Environment, Stanford University (*TBC*)

14:00–14:30 Opening remarks by invited experts

14:30–16:00 Facilitated discussion with JPAC members, experts and the public

16:00–17:00 **Synthesis and Wrap-up**

17:00-17:30 **JPAC Follow-up and administrative matters**

- a) Election of the 2010 JPAC Chair
- b) JPAC report on participation at CEC meetings
- c) JPAC priorities for 2010 and next meetings

17:30 **End of session**

Joint Public Advisory Committee Regular Session 09-03
 Roundtable Discussion meeting on the CEC's priorities for 2010 and beyond
 Cabo San Lucas, Baja California, Mexico
 1 December 2009

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