



Advice to Council No: 10-02

Re: North America's Energy Market: Aligning Policies and Managing Carbon

The Joint Public Advisory Committee (JPAC) of the Commission for Environmental Cooperation (CEC) of North America;

IN ACCORDANCE with Article 16(4) of the North American Agreement on Environmental Cooperation (NAAEC) which states that JPAC ‘may provide advice to Council on any matter within the scope of this agreement (...) and on the implementation and further elaboration of this agreement, and may perform such functions as the Council may direct;’ and

HAVING conducted a public meeting on North America's Energy Market: Aligning Policies and Managing Carbon, held on Wednesday, 24 March 2010, in Vancouver, Canada, which featured sessions with invited experts from Canada, Mexico and the United States, and local public participation, including a live webcast;

SUBMITS the following observations and comments for Council's consideration as it relates to the Council's priority of *Climate Change—Low-Carbon Economy*:

Energy Policy in North America

JPAC chose to focus on the energy sector in North America, as it represents a significant sector of the economy of all three countries and contributes approximately 30% of North America's total greenhouse gas emissions. Electricity is a highly valued commodity (US\$325 billion) vital to the quality of life for nearly every citizen. The production of electricity is highly complex, involving capital-intensive infrastructure, energy markets, regulatory oversight and environmental impacts.

The energy sector provides a good example of how trade policies can affect the environment and the environment can affect trade. The increased focus on the environment has had a profound impact on the energy sector particularly as it relates to the production of ‘clean energy.’ The extent to which each country is able to coordinate its efforts with respect to climate change and energy production with the other jurisdictions, the more likely these strategies will be successful.

In developing energy policies, common definitions and terminology are essential to promote a North American clean energy strategy (i.e., definitions such as what constitutes *sustainable* and *renewable* sources and technologies).

Employment of terminology such as ‘harmonization’ may be too restrictive, as it implies a need for identical policies, standards, and regulations, for example, whereas the development of ‘compatible’ policies is a more attainable objective and more likely to maximize success in North America.

As an example, jurisdictions are not always in agreement about whether hydroelectric facilities constitute ‘renewable energy.’ The development of government policy at the provincial and state level, such as renewable portfolio standards to promote new technology, may create artificial trade barriers and could inadvertently slow down North America’s ability to reduce its carbon footprint. Should policies allow the maximum use of emerging renewable technologies, such as run-of-river hydro production, in order to accelerate development of clean energy resources and facilitate climate change mitigation efforts in North America?

JPAC strongly supports the CEC Council’s desire to promote the use of clean, renewable, and sustainable energy, as well as to develop an overall strategy to address climate change, and therefore recommends that the Council:

- *Develop a cooperative collaborative approach to energy policy in North America as it relates to climate change, while promoting equitable economic development, global competitiveness, incenting new technologies and maximizing the use of existing renewable energy technology.*

Examples of collaboration include:

- *common definitions for what constitutes clean, renewable, and sustainable technology;*
 - *standardized accounting systems;*
 - *agreed upon emission allowances and inventories as well as environmental impact and life cycle assessment procedures; and*
 - *recognition of the impact on regional economics, and the benefits thereof.*
- *Identify potential negative impacts (unintended consequences) in the development of energy and climate change policies to ensure that initiatives in one area do not negatively impact initiatives in another.*
 - *Identify the cumulative impacts of smaller renewable energy projects in order to better evaluate the overall contribution to the achievement of climate change goals (i.e., what is the cumulative effect of major wind and a large number of run-of- river projects versus larger individual sites?)*

Carbon Capture and Storage

In jurisdictions where electricity production relies significantly on hydrocarbons, the reduction in greenhouse gas emissions is unlikely to be achieved without the use of carbon capture and storage technologies.

In Canada, 25% of all electricity is produced by hydrocarbon-fueled technologies, 75% in the United States, and 80% in Mexico. Substantial funding has been allocated both by governments and industry to stimulate the development of carbon capture and storage research.

The successful implementation of carbon capture and storage technology will require significant private investment that will not occur without a high degree of certainty around carbon pricing.

The stronger and more compatible the policies in each country in support of a clear and appropriate carbon price signal, the more likely a North American solution will be effective.

In addition to the coordination of policy, there are likely to be practical opportunities for shared solutions. For example, in some cases, the generation of carbon in one jurisdiction may be close to storage areas (sinks) across the border. Through the collaboration of government agencies in Canada, Mexico, and the United States, and the CEC, the North American Environmental Atlas was created to harmonize geographic information across North America so that significant environmental issues can be depicted at a continental scale. Continued enhancements of the Atlas that will facilitate collaboration among jurisdictions with regard to carbon mitigation should include CO₂ equivalents such as methane and black carbon.

Forest management is well positioned to contribute to carbon mitigation, as forests naturally sequester significant amounts of carbon from the air. While mature forests don't absorb as much carbon as younger forests, carbon can constitute up to fifty percent of the dry weight of wood. An integrated and sustainable forest management system which makes use of forest products and stimulates new forest growth should be considered part of a North American strategy to reduce carbon. Managing forest landscapes for carbon sequestration benefits will also achieve important co-benefits in terms of the conservation of biodiversity and ecosystem services vital to all three of our countries. It should be noted that such approaches are particularly important to Mexico, as the site of North America's tropical and subtropical forest resources.

JPAC supports the CEC Council's desire to establish a low-carbon economy and therefore recommends the CEC Council:

- *Endorse continued funding of carbon capture and storage research, as well as pursuing ongoing development of compatible rules and standards, in light of the considerable amount of power produced by hydrocarbons in North America.*
- *Recognize that all efforts to mitigate the production of greenhouse gas emissions in the energy sector will be significantly affected by the approach taken to the carbon market. To the extent possible, develop carbon market decisions in each country that are compatible, in order to ensure that a North American carbon market functions effectively and is characterized by a clear price signal for carbon.*
- *Pursue efforts to enhance the North America Environmental Atlas with a view to including CO₂ equivalents and black carbon. The CEC should also collaborate with the US Department of Energy to support its work related to the development of a North American Carbon Atlas.*
- *Support forest management practices in each of our three countries that will optimize natural carbon sequestration.*
- *Encourage co-operation at technical and official levels to support continent-wide sustainable forest management, focusing particularly on North America's important forest resources, including boreal, tropical and subtropical.*

**Approved by the JPAC members
19 April 2010**