

CLIMATE CHANGE AND ENERGY

Through the [North American Agreement on Environmental Cooperation](#) (NAAEC), Canada, Mexico and the United States recognized the interrelationship of their environments and committed to high levels of environmental protection, as well as to increasing cooperation among themselves to foster the protection and improvement of the environment in their territories for the well-being of present and future generations (Preamble, Articles 1 (a), (j)).

NAAEC does not explicitly mention climate change, but in 1995 the Parties identified climate change as an environmental issue on which cooperation would be mutually beneficial, and the Commission for Environmental Cooperation (CEC) as an appropriate forum to facilitate such cooperation, as detailed in the [Statement of Intent to Cooperate on Climate Change and Joint Implementation](#). Until 2010 when the CEC Council identified “Climate Change—Low-Carbon Economy” as one of three trilateral priorities for the 2010–2015 period, climate change and energy were not a major focus of the work of the CEC. However, the CEC conducted several projects related to greenhouse gases (GHGs) and renewable energy over the past two decades, as summarized below.

Tracking and Reducing GHG Emissions in North America

Tracking GHG emissions, with a focus on emissions from electricity-generating facilities, has been a component of the CEC’s ongoing work on air quality management. In [1996](#) and in 2001, under [Resolution 01-05](#), the CEC Council agreed to work towards promoting comparability of air emissions inventory information in North America, including GHGs.

The CEC produced [Enhancing the Comparability of the Air Emission Inventories in Canada, Mexico and the United States](#) in 2001, followed in 2003 by the sector-specific report [Availability and Infrastructure of North American Electric Generating Utility Emission Inventories and Opportunities for Future Coordination](#).

In [2004](#) and [2011](#), the CEC published separate reports regarding North American Power Plant Air Emissions. However, only the 2011 report includes information on GHGs, while the 2004 report contains data on CO₂ emissions.

Also in 2004, the CEC produced the report [North American Air Quality and Climate Change Standards, Regulations, Planning and Enforcement at the National, State/Provincial and Local Levels](#).

The CEC Pollutant Release and Transfer Registry (PRTR) *Taking Stock* report, which brings together existing national public information about emissions in North America, does not include greenhouse gases (GHGs). Instead, the CEC *Taking Stock* website facilitates access to other sources of [information on GHG emissions in all three countries](#).

As detailed in the final section of this backgrounder, the CEC continues to work on tracking GHG emissions, with a focus on data-gathering, methodologies, and inventories.

Market Mechanism for Reducing GHG Emissions

“Regional Action on Global Issues” was one of the priorities of the [Shared Agenda for Action](#) adopted in 1998. Under this item, the CEC Council agreed that “within the framework of the Kyoto Protocol, the CEC will work with the three nations and the private sector to develop North American opportunities for the Clean Development Mechanism.”

In 2001, the JPAC provided [Advice 01-04](#) to Council recommending that the CEC work in support of the development of market mechanisms within the North American context to reduce greenhouse gas emissions.

In 2001 the CEC published a report identifying potential financing opportunities in Mexico related to the climate agenda: [Mexico and Emerging Carbon Markets](#).

In a 2003 paper, the CEC examined the different market-based mechanisms that could be used to mitigate climate change: [Market-Based Mechanisms for Carbon Sequestration, Energy Efficiency and Renewable Energy in North America](#).

Electricity, Energy Efficiency and Renewable Energy in North America

In regard to electricity generation, in 2001, the CEC convened a [Symposium](#) on the evolving electricity market in North America, leading to the publication in June 2002, of the Secretariat’s independent report [Environmental Challenges and Opportunities of the Evolving North American Electricity Market](#). [Other reports](#) related to this report are also available.

This work was followed in 2003 by the previously-referenced report [Availability and Infrastructure of North American Electric Generating Utility Emission Inventories and Opportunities for Future Coordination](#).

Renewable energy was also the focus of two public meetings and JPAC Advice to Council, before 2010:

- Following the CEC workshop “Building the Renewable Energy Market in North America” in October 2004, JPAC urged “Council to aggressively promote the use of renewable energy and energy conservation to achieve our objectives for environmental protection and improved human health and the well-being of citizens of North America” ([Advice 04-05](#)).
- In June 2006, JPAC held the public workshop “Renewable Energy Alternatives: Bio-fuels, Solar Energy and Wind Power,” and provided [Advice 06-01](#) to Council on that topic, including recommendations to develop region-based guidance for identifying sustainable bio-fuels, and working to set national targets for solar energy and wind power.

In 2007, the CEC published [Fostering Renewable Electricity Markets in North America](#), which provides an overview of the key market demand and supply-side drivers for renewable electricity in each of the three North American countries and concludes with a series of brief recommendations for the market overall and for the Parties of NAAEC to help foster a North American renewable electricity future.

Other [papers on renewable energy](#) are available on the CEC website.

Climate Change in North America

NAAEC requires the CEC Secretariat to “periodically address the state of the environment in the territories of the Parties.” Climate change was discussed in the first of these reports, published in [2001](#). In 2008, the CEC published [The North American Mosaic](#), which also addresses [climate change](#), among other issues. Likewise in 2008, the CEC held a conference on the future of the North American environment, including discussions on energy use and accelerated warming: [North American Environmental Outlook to 2030](#).

In addition, the online [North American Environmental Atlas](#) provides access to maps with environmental information, including climate change–related topics like CO₂ emissions in major transportation corridors, carbon stored within particular protected areas and renewable energy.

CEC’s 2010–2015 Priorities: Climate Change—Low-Carbon Economy

As noted earlier, in [2009](#), the Council identified “Climate Change—Low-Carbon Economy” as one of three trilateral priorities the organization would focus on during the 2010–2015 period. That same year, JPAC held a [Workshop on Climate Policy Coherence in North America](#) and provided advice to the Council on ways in which the CEC could foster cooperation to establish a North American climate-change agenda or regime ([Advice 09-01](#)).

Under the Strategic Plan 2010–2015, the objectives of the “Climate Change—Low-Carbon Economy” priority are:

- improving the comparability of our greenhouse gas emissions data-gathering, methodologies, and inventories; and
- building stronger networks of experts and systems to share climate change information.

Ongoing projects include the following:

- [Improving the comparability of our greenhouse gas emissions data gathering, methodologies, and inventories](#)—As a first step of this project, in 2012, the CEC published [Assessment of the Comparability of Greenhouse Gas and Black Carbon Emissions Inventories in North America](#). The second step is to identify areas where improvements in comparability and structure can advance North American climate change mitigation objectives, and the third is the formulation of recommendations to the CEC Council concerning future cooperative actions, for the period 2011–2015.
- [Ecosystem Carbon Sources and Storage: Information to Quantify and Manage for Greenhouse Gas Emissions Reductions](#)—This project brought together experts to solidify a North American approach to measure and track land cover changes over time, and to help report on the amount of [carbon stored in ecosystems](#), and changes associated with that.
- [North American Online, Interactive Informational Platform on Climate Change](#)—This project will develop a new, dynamic approach to enable data and information exchange, in part through the incorporation of emerging social media tools. The platform will provide access to information that is comparable and compatible and in a form that is useful at a North American scale.

- In addition, in 2011, the CEC published [North American Power Plant Air Emissions](#), including information on [GHG emissions](#). This report builds upon the [2004 CEC assessment](#) that compiled information on emissions of criteria air pollutants mercury and carbon dioxide from power plants in North America for the year 2002.

In March 2010, JPAC held a public meeting on “North America’s Energy Market: Aligning Policies and Managing Carbon” and provided [Advice 10-02](#) to Council, recommending the CEC help to develop a cooperative collaborative approach to energy policy in North America as it relates to climate change, and support work to better manage carbon.

In April 2012, JPAC held the public forum [North America’s Energy Future: Powering a Low-carbon Economy for 2030 and Beyond](#).

The [2012 CEC Regular Council Session](#), held in New Orleans, focused on Community and Ecosystem Resilience in North America. As part of the meeting, JPAC held a workshop on resilient communities, which produced the document [Resilient Future](#), and organized another workshop in Mérida (December 2012) on [Reducing Ecosystem Vulnerability in North America](#). JPAC then encouraged Council to use the input gathered at these workshops to inform the development of CEC projects to promote healthy communities and ecosystems ([Advice 13-01](#)).

The [2013–14 Cooperative Work Plan for the CEC](#) foresees work in the following areas, under the theme of “tackling climate change and improving air quality:”

- quantifying and modeling reduced carbon in the atmosphere from protection of coastal and forest ecosystems,
- avoiding black carbon emissions,
- collecting and disseminating reliable and comparable data on greenhouse gas emissions and other pollutants, and
- promoting green building construction.

Following a public meeting in April 2013 on [Greening North America's Energy Economy](#), JPAC provided Advice to Council on “[The urgent need to shift to a sustainable energy economy in North America](#).” It recommended the Council undertake an ambitious dialogue, including to “determine the amount of fossil fuel energy that can be developed in North America without contributing to climate change that will exceed the 2°C threshold, based on a fair share of the total global fossil fuel energy that can be developed without exceeding this threshold, and including the possibility that known reserves may be excluded from development.”