# Progress June 2002



#### A message from the Executive Director

Dear friends and colleagues,

As we approach the ninth Council session, it seems an appropriate time to look back at what the CEC has accomplished in the last twelve months. It has been an incredibly active time for the organization, with our research staff, external partners and stakeholders working hard in our four major project areas—Environment, Economy and Trade; Conservation of Biodiversity; Pollutants and Health; and Law and Policy. The CEC has also broken new ground in areas such as the sustainable use of freshwater and the impact of electricity restructuring on the North American environment.

As always, promoting regional cooperation and facilitating public involvement have been major areas of activity. The last year has seen both the forging of new partnerships and the strengthening of old ones. We have heard from thousands of people who have attended meetings or given us their comments on dozens of working documents and reports. Interest in our activities continues to increase such that over a half a million users now visit our web site every month. And our reports continue to be in high demand: as an example, more than 78,000 people have downloaded copies of our first-ever State of the Environment report since its release in January 2002.

This report profiles just a few of the highlights of the past year. It is clear as we look back that we have much as an organization to celebrate. At the same time, we have many challenges before us. We invite you to continue to work with us to protect and enhance the natural environment of North America.

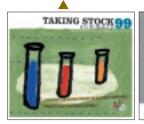
## Taking Stock again: Updating North American pollutant releases

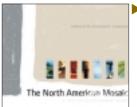
In May 2002, the CEC released the sixth report in our "Taking Stock" series, which provides information on pollutant releases and transfers in North America using 1999 data. *Taking Stock* 1999 quantifies the amounts of chemicals that were released to the air, water and land and transferred off-site for recycling or treatment. The information is analyzed by substance, by facility, by industry and by geographic area (state or province).

This year the study presents the first fiveyear analysis of pollution releases and management. The five-year trend shows a slight overall change in the total of toxic chemicals generated, but big changes in how those pollutants are handled. The North American manufacturing sector's 25-percent (153,000 tonnes) reduction in releases to air was largely

offset by a 25-percent (33,000 tonnes) increase in on-site releases to land and a 35-percent (58,000 tonnes) increase in off-site releases (mostly to landfills). Releases to lakes, rivers and streams also increased during this period by 26 percent (24,000 tonnes).

The CEC's ability to develop Taking Stock reports for North America depends on the availability of public information collected from generators through pollutant release and transfer registers (PRTRs). These provide detailed information on the types, locations and amounts of chemicals that are released by facilities. To date, the Taking Stock reports have relied on data from the US and Canadian PRTRs, both of which are mandatory. Mexico has recently introduced legislation that will make its PRTR—previously voluntary mandatory for industries operating in the country. When this additional data becomes available, it will be incorporated into future editions of Taking Stock and will improve our understanding of how chemicals are used, managed and disposed of in North America.









Janine Ferretti
Executive Director

#### Our first SOE report: Taking the pulse of the North American environment

In January, the CEC released *The North American Mosaic: A State of the Environment Report.* The report examines, in a comprehensive way, the environmental challenges facing our wildlife, forests, water resources, air, climate and much else. Through the efforts of dozens of experts from Canada, Mexico and the United States, information was gathered and analyzed to provide the first environmental "snapshot" of North America in its entirety.

The findings contained in *The North American Mosaic* are mixed. Among the positive signs are the implementation of better forestry practices, a reduction in soil erosion due to improved farm practices, and an expansion in the amount of protected areas to about 15 percent of the North American land base. Alongside these, however, are issues such as worsening air quality in many urban centers (largely due to increased numbers and size of automobiles), continuing losses in biodiversity, increasing numbers of threatened species, and the high dependence on burning nonrenewable fossil fuels.

The CEC has initiated work on the next edition of the report. Work has already begun to adapt OECD's environmental indicators for use in the 2003 report. This will allow us to more precisely track environmental issues and the progress being made towards sustainability.

## The environment and the North American electricity market

The electricity sector across North America is in the midst of unprecedented change, with some markets opening to competition, and cross-border trade in electricity growing. It was within this context that the CEC launched its Electricity and Environment project in 2000. This Article 13 initiative addresses a vitally important question: How can we ensure that North Americans have an adequate, affordable and accessible supply of electricity without compromising environmental and health objectives?

We created a multi-stakeholder Electricity Advisory Board made up of experts from Canada, Mexico and the United States. A number of working, background and discussion papers were developed to focus and elicit discussion on key issues. Three workshops were held to explore the potential environmental impacts of the emerging North American electricity market, emissions trading, and opportunities for increased cooperation in renewable energy.



The final Article 13 report, Environmental Challenges and Opportunities of the Evolving North American Electricity Market, was transmitted to Council on 15 April 2002. In brief, the report states that we can realize the economic opportunities offered by the evolving North American electricity market and at the same time protect human health and the environment if there is increased cooperation and collaboration among the NAFTA partners. Cooperation needs to encompass not only environmental protection policies, but also the collection of emission information, improved impact assessment, the promotion of renewable energy and energy efficiency, increased technology transfer, and other matters. By working together to a common end, Canada, Mexico and the United States can help ensure that the transformation of the North American electricity market contributes to sustainable development by generating economic, social and environmental benefits.

## Eliminating DDT: A regional approach

One of the most successful outcomes of the Sound Management of Chemicals initiative is its phase out of DDT use in Mexico. Now, the innovative Regional Program of Action and Demonstration of Sustainable Alternatives to DDT for Malaria Control in Mexico and Central America (PRADDT) seeks to control malaria without using DDT. Worldwide, malaria remains the most important insecttransmitted disease, being responsible for 300 to 500 million clinical cases a year and over a million deaths, mostly in sub-Saharan Africa. Despite progress made in fighting the disease, malaria remains a significant health concern in Mexico and Central America, with over 145,000 clinical cases reported in 1994.

Mexico stopped using DDT for malaria control in 2000, replacing it with an integrated vector control strategy. As part of a joint undertaking between the CEC and the Pan American Health Organization, with support from the Global Environment Facility, Mexico will share the lessons it has learned with Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama.

The focus of the program is threefold: to implement and evaluate alternative strategies for controlling the mosquitoes that carry malaria, to strengthen national capacities to control malaria without using DDT, and to eliminate existing stockpiles of DDT.



#### Building capacity for pollution prevention

As a strategy, pollution prevention has demonstrated the potential to reduce pollution emissions while at the same time improving productivity and competitiveness. However, when the CEC examined the capacity for pollution prevention in North America in 1995, we found that while pollution prevention institutions were well developed in Canada and reasonably well developed in the United States, they were just beginning to be developed in Mexico. The result—six years and ten pilot projects later—was the creation of the CEC-initiated Fund for Pollution Prevention (Fiprev, its abbreviation in Spanish). Fiprev was developed through a partnership with the Council of Mexican Industrial Chambers and its Foundation for Innovation and Technology. It is a mechanism for financing pollution prevention projects in Mexico and is a unique and exciting success story.

Fiprev provides loans to small and medium-size businesses to implement pollution prevention strategies. As of the end of 2001, 35 loans totalling some US\$957,000 had been made, mainly to tanneries, foundries, dry cleaning, metal plating and metalwork firms. By the same date, repayment of grants according to schedules was complete, and most importantly, the companies had collectively avoided the use of 2,100 tons of chemicals and 113,500 cubic metres of water a year. Through pollution prevention, the participating companies saved an estimated US\$992,000 a year collectively.

As is often the case, success breeds success. Fiprev is now in the process of granting pollution prevention loans to additional businesses, the Mexican Ministry of Economy is contributing US\$265,000 to the fund, and negotiations are underway with Mexico's *Nacional Financiera* for an additional US\$1 million in funding.

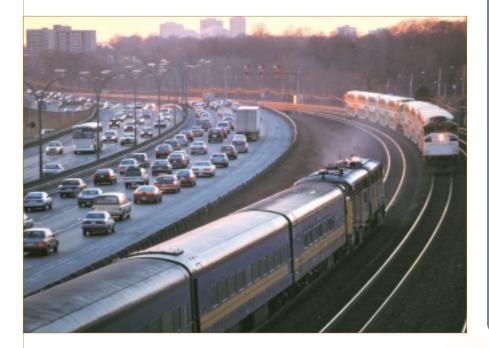
#### Environment, Economy and Trade

With the leadership of the CEC, environment and economic policy makers have acquired a new set of analytic tools to better assess the link between trade and the environment. In February, the proceedings of the first North American Symposium on Assessing the Linkages between Trade and Environment were published—culminating seven years of collaborative work. This ground-breaking policy work serves to broaden the application of the CEC experience beyond NAFTA issues to include environmental issues arising from ongoing negotiations at the WTO and FTAA.

To support the market for green goods and services a number of important publications were released: the first lessons learned for green goods and services was released; the

first-ever industry survey on sustainable coffee in North America; and the first-ever survey of the largest commercial electricity consumers in Mexico, measuring interest in, and willingness to pay for, renewable electricity.

The CEC also worked with the financial services sector in North America and Europe in support of the North American Sustainable Agricultural Fund. At the same time, the CEC is undertaking preliminary analysis comparing security exchange rules in the three countries regarding the disclosure of environmental information and recently released Mexico and Emerging Carbon Markets: Investment Opportunities for Small and Medium-size Companies and the Global Climate Agenda.



### Tracking transboundary hazardous waste



Like thousands of other commodities, hazardous waste moves from country to country in North America en route to recycling and disposal facilities. However, hazardous waste can have serious health and environmental consequences if it is not shipped safely and managed and disposed of properly. This is why the CEC is examining the transboundary movement of hazardous waste in North America as part of its Environmentally Sound Management of Hazardous Waste (ESM) project.

An ESM Task Force has been created to provide guidance to Council on the issue. It will focus on examining the existing information requirements for importing and exporting hazardous waste. The key outcome of the Task Force's work will be a report on the legal requirements, operations, procedures and processes for importing and exporting hazardous waste, and the monitoring systems currently in place in Canada, Mexico and the United States. As a strategic tool, the report will be useful to the NAFTA partners to help improve current monitoring systems and move towards a compatible electronic tracking process for the region.

## Air Quality: Developing a trinational emissions inventory

Building on its success with *Taking Stock*, the CEC has begun development of a trinational inventory of air emissions. In accordance with the Council resolution passed at the June 2001 meeting in Guadalajara, the CEC will focus its efforts initially on common air pollutants including sulfur dioxide, nitrogen dioxides, carbon monoxide, volatile organic compounds, particulate aerosols, and greenhouse gases.

Tackling air pollution requires having a good understanding of what is being emitted into the air from all known sources. Because air pollution problems tend to be regional and transboundary in scope (as opposed to local), managers need to know what is being emitted over large areas that can often cross state, provincial and national borders. With a project team made up of inventory experts from Canada, Mexico and the United States, the CEC has started to examine the compatibility and accessibility of air emissions information in the three countries with a view to ensuring that data collected is of comparable quality. Ultimately, a trinational inventory should allow the NAFTA partners and the public to track trends in emissions of air pollutants and greenhouse gases, monitor the effectiveness of control measures, track compliance with emissions trading programs, and provide information on local pollutant emissions.



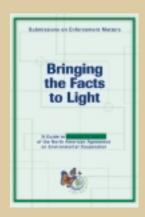
#### Citizen Submission Process

The CEC's Citizen Submission process is a unique and important part of our mandate under the North American Agreement on Environmental Cooperation (NAAEC). Under Articles 14 and 15 of NAAEC, any citizen in North America can make a submission to the CEC if they believe that a government is failing to enforce its environmental laws effectively. Once a submission is received and reviewed, the CEC may investigate the matter and publish a "factual record" of its findings, subject to approval by the Council.

In February 2002, the CEC released its factual record for the *Metales y Derivados* case that deals with an abandoned lead smelter in Tijuana, Mexico. The information gathered indicates that soils at the site are contaminated with industrial wastes left by the com-

pany, including antimony, arsenic, cadmium and lead. Measures taken to date have not restricted public access to the site, stopped pollutants from migrating, or restored the site to a suitable condition. Although a comprehensive assessment of the risk to human health and the environment has not been done, experts concurred that remediation of the site is badly needed. "Given the volume of contaminated material and the lead concentrations present at the site," the factual record states that "it is urgent to forestall the dispersal of the pollutants and limit access to the site so as to prevent adverse health effects in people living or working in its proximity."

Other factual records currently under development include: Oldman River II, Aquanova, Migratory Birds, BC Mining, BC Logging, Río Magdalena, and Molymex II. See <a href="http://www.cec.org/citizen">http://www.cec.org/citizen</a> for more information.



#### Linking North American Biodiversity Information

NABIN continues to facilitate the coordination of major biodiversity information initiatives in North America. Currently, NABIN is fostering the combination of the functionalities and the strengths of the two major distributed biodiversity information search engines: The Species Analyst and REMIB (Red Mundial de Información de Biodiversidad) include more than 50 million specimen records and they link 75 institutional scientific databases. Scientific names for species, and their common names in three languages are now integrated in the ITIS (Integrated Taxonomic Information System). ITIS- North America was introduced in the June 2001 Council session and this system is now closely linked with the above search engines.

The challenge of integrating CEC program information is a complex one, mainly because of the great diversity of environmental issues at the North American scale.

The Marine Protected Areas Network (MPA) and Species of Common Conservation Concern (SCCC) projects are pilot areas in the portal, and a project on sustainable coffee and bird conservation has been initiated with Environment Economy and Trade. The NABIN portal workshop provided a forum of discussion on improved access and understanding of biodiversity information to support MPA's, SCCC, and the bird conservation program in the Northern Rockies linking NABIN and NABCI (http://www.rockies.ca/birds/). While making biodiversity information more widely and easily accessible, the CEC is promoting the participation of individuals and communities wishing to take greater responsibility for the stewardship of their biological resources.

www.rockies.ca/birds/

## NAFEC: Funding community-based environmental projects

Since the creation of the organization, the CEC has administered the North American Fund for Environmental Cooperation (NAFEC). The fund is intended to support community-based environmental projects that emphasize capacity-building, develop partnerships across borders and across sectors, complement the CEC's programs, and contribute to sustainability. Last year, NAFEC grants totalling US\$400,000 were shared among 17 community-based projects across North America.

Seven of the grants went to innovative projects that focus on conserving biodiversity in Marine Protected Areas. These include community stewardship of a bowhead whale sanctuary in the Canadian arctic, linking efforts from Baja, California to the Bering Sea to protect gray whales, and developing a community strategy on fisheries and tourism management in Mexico's Parque Nacional Arrecifes de Xcalak Protected Natural Area. The remaining ten grants went to projects related to children's health and the environment. These include a project in which children monitor groundwater in Canada, a project to reduce the use of pesticides in US schools, and a project to reduce lead exposure in Mexico by developing alternatives to lead-based glazes used by potters.

In January, NAFEC issued a call for proposals for the 2002–2003 round of grants. Grants will be awarded for projects focusing on renewable energy, energy conservation and energy efficiency.





