

CLIMATE ALERT

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Protecting the Balance between Climate and Life on Earth

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IN SPANISH p. 8

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Celebrating the 20th Anniversary of the Montreal Protocol: Spotlight on Mexico

Ten years ago, at the Montreal Protocol on Substances that Deplete the Ozone Layer conference of the parties, participants called the Protocol a "qualified success." As the Montreal Protocol celebrates its twentieth year, it is hailed as "[p]erhaps the single most successful international environmental agreement to date." Evolving from the 1985 Vienna Convention for the Protection of the Ozone Layer, the Montreal Protocol and its amendments mandate phase out schedules for ozone depleting substances (ODSs), along with significant trade restrictions on these substances, as well as technology sharing measures and financing mechanisms for

developing countries. Developing countries, or Article 5 countries, are additionally permitted more lenient timelines under the Protocol for phasing out ODSs than developed countries. Mexico, categorized in the Montreal Protocol as an Article 5 country, and thus permitted a longer time period for ODSs reduction, has been exemplary in its commitment to the Montreal Protocol and implementation of cutbacks of ODSs production and usage. Knowledge of the ozone depletion problem can be credited to Mexican scientist Mario Molina, who posited with Sherwood Rowland in 1974 that chlorofluorocarbons (CFCs) were harming the ozone layer.

Despite skepticism by many scientists at the time on the ill effect of CFCs, Molina and Rowland came to a different conclusion. Instead, they argued that CFCs released into the atmosphere caused a reaction that resulted in the destruction of ozone molecules. Not only was action on the ozone problem was spurred by this seminal study, but also by initial industry support for banning the CFC aerosol propellants and the discovery of the "ozone hole." Mexico, as a developing country with high levels of ODS usage, has strongly committed itself to taking serious action to address the ozone layer depletion problem.

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Sir Crispin Tickell: Chairman Emeritus of the Climate Institute



British diplomat, environmentalist and academic, Sir Crispin Tickell was one of the first to put climate change at the top of the world's political agenda.

His book, *Climatic Change and World Affairs*, first published in 1977, highlighted climate change as an emerging concern more than a decade before the IPCC was created. A few years later while British Ambassador to Mexico he gave a lecture on Climate Change at the National University of Mexico (UNAM). As a diplomat he was Chef de Cabinet to the President of the European Commission (1977-1980), British Ambassador to Mexico (1981-1983), Permanent Secretary of the Official Development Assistance

(now Department for International Development) between 1984 and 1987, British Ambassador to the United Nations and Permanent Representative on the UN Security Council (1987-1990). Now Director of the Policy Foresight Program of the James Martin Institute for Science and Civilization at Oxford University, he is Chairman Emeritus of the Climate Institute of Washington DC. Sir Crispin has headed the UK

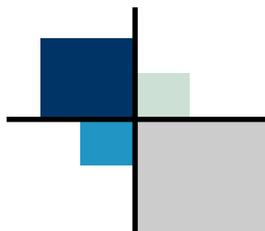


Montreal Protocol 20th Anniversary (continued)

It was the first country to ratify the Montreal Protocol and has been a champion in promoting the Protocol's objectives. With assistance from the Multilateral Fund for the Implementation of the Montreal Protocol, as well as other international organizations' and private sector support, Mexico has been a leader to other Article 5 countries in meeting and surpassing its ODS reduction goals.

The Multilateral Fund, a mechanism set up by the Montreal Protocol, contributed U.S. \$76 million over seven years to Mexico to aid it in its abolition of CFC production and usage. In 1992, Mexico committed to an accelerated phase-out of CFCs in which it would close down most of its CFC production by 2000. By 1999, Mexico had eliminated 90% of its CFC usage. In 2005, Mexico ceased all production of CFCs, ahead of its mandated schedule under the Montreal Protocol for CFC production stoppage by 2010. Mexico has also made significant strides in stemming the unlawful trafficking of CFCs through a program designed to detect and identify illegal trade of this ODS. Mexico, in its dedication to the elimination of ODSs and to the protection of the ozone layer, should be regarded as a model for other Article 5 countries in meeting their Montreal Protocol commitments over the next few years.

The Montreal Protocol, in its twentieth year, serves as an example of what an international environmental agreement can achieve. Through its combination of strict deadlines, technology transfers, and assistance to developing countries, damage to the ozone layer is on a trajectory to reverse. Mexico's experience shows that a developing country can meet and exceed commitments for international environmental agreements.



chlorofluorocarbons (CFCs)

Invisible radiation, namely ultraviolet radiation (UV) emanating from the sun can be harmful for individuals. Above the earth's surface, a thin layer of ozone floats, protecting us from the UV radiation. Developed in 1928, CFCs at first seemed to present no human health hazards. However, CFCs have since been shown to adversely affect the ozone layer. If much of the ozone is destroyed, a dramatic increase in cases of skin cancer and other health problems could arise.

A Mexican Scientist Sounds the Alarm

Born in 1943, **Mario José Molina Henríquez** became in 1995 the first Mexican to receive a Nobel Prize for Chemistry for his role in elucidating the threat to the Earth's ozone layer from chlorofluorocarbon gases (CFCs). In 1973, a young post-doctoral researcher working in the laboratory of F. Sherwood Rowland at the University of California at Irvine, just south of Los Angeles, Molina made an unsettling discovery. He had been investigating a class of compounds called chlorofluorocarbons. CFCs were used as refrigerants, in aerosol sprays, and in making plastic foams. At the outset, Molina and Rowland were voices crying in the wilderness, alerting the world to the danger of CFCs and ozone depletion. Bans on CFCs in aerosol sprays went into effect first in the United States in 1978, and later in Canada, Norway, and Sweden. For many years he was an Institute Professor in the Department of Earth, Atmospheric, and Planetary Sciences at MIT. Molina in 2004 became a professor in University of California San Diego's Department of Chemistry and Biochemistry and in the Center for Atmospheric Sciences at Scripps Institution of Oceanography. Not forgetting his roots, he has also been involved in the research of strategies to reduce urban air pollution. Mexico City has been the case study for this project. In 1999 he received the Climate Institute Scientific Achievement Award during a Mexico City North American Symposium on Coordinated Strategies for Climate and Air Quality Protection. The great regard in which Mario Molina is held in Mexico was evident when President Felipe Calderon spoke September 5, 2007 at the Inauguration of the Mario Molina Center for Energy and Environmental Studies.

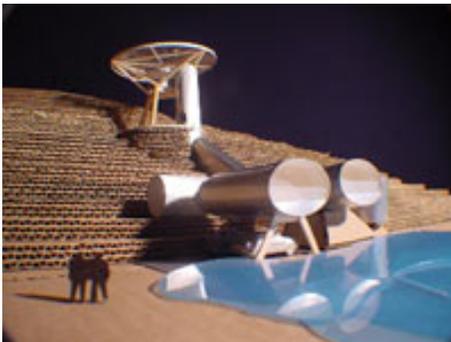
OBSERVATORY : High altitude Center in Pico de Orizaba

The High Altitude Center construction is expected to become operational by June 2008 with the generous participation of:

- National Oceanic Atmospheric Administration (NOAA)
- Instituto Nacional de Astrofísica Óptica y Electrónica (INAOE)
- National Aeronautics and Space Administration (NASA)
- Sistema Internacional de Monitoreo Ambiental (SIMA)
- Meteorological Services of Mexico
- Climate Institute
- CICEANA



Sierra Negra– Pico de Orizaba (site of the Climate Observatory)



High Altitude Center (model)

This first National High Altitude Global Climate -Observation Center Climate will:

- Provide means to ensure that global investments for Climate protection and the reduction of greenhouse gases emissions are effective
- Fill the gap and enhance the Earth Observing Systems - Global Climate Observing Systems and Global Atmospheric Watch (EOS-GCOS)
- Enable Mexico and Latin America to participate in Global Earth Observation now led by G-8 countries

Sir Crispin Tickell (continued)

Panel on Sustainable Development and has for over a decade served as a senior advisor to the Chinese Government on such issues. After leaving the diplomatic service, Sir Crispin worked within numerous national and international scientific academic and professional organizations. On February 9th, 2007, Sir Richard Branson and Former US Vice President Al Gore launched an Earth Challenge

with a \$25 million prize for the first one to come up with the best way of removing significant amounts of carbon dioxide from the atmosphere. Among the prestigious members of the panel overseeing Earth Challenge's competition: Sir Crispin Tickell, along with renowned scientists James Hansen, Director, NASA's Goddard Institute for Space Studies);and Australian mammalogist and

palaeontologist Tim Flannery. On September 24th, Sir Crispin has been invited by the Miguel Alemán Foundation to deliver a lecture entitled "Planet Vulnerability and Climate Change" at the Mexican Library, Rubén Darío 197, Colonia Chapultepec Morales. The presentation is scheduled for 12 noon.



DuPont: the eco-friendly “global science company”

Since 1802 and throughout its existence, DuPont has been associated with innovation in many fields. At its inception, the company was known for its contribution to the military industry, with products ranging from gunpowder and other explosives to the discovery of neoprene (the first synthetic rubber) and ballistic nylon that were used to make highly protective FLAK jackets for soldiers. This research ultimately led to the bullet-resistant vests that are the mainstay of police and military units in the industrialized world.

Today, DuPont businesses are scattered in more than 70 countries and offer a wide array of products and services that are organized into 5 marketing “platforms” including: electronic and communication technologies, performance materials, coatings and color technologies, safety and protection, and agriculture and nutrition. Often heralded as a “science company,” DuPont has been awarded patents for more than 34,000 inventions. It currently employs more than 60,000 people worldwide and is ranked 66th in the Fortune 500 on the strength of nearly \$28 billion in revenues and \$1.8 billion in profits (in 2005). Its annual R&D budget is \$1.3 billion.

For the past 20 years, DuPont has pledged to reduce the environmental footprint of its operations and to design products and processes that are safer, less toxic, more energy efficient, use less water, and produce fewer greenhouse gases. Starting in the early stages of product development, their products are designed to meet rigorous environmental standards through the use of renewable resources, in order

to protect human health and safety. In 2005, DuPont was ranked as the No. 1 “Top Green Companies” by *BusinessWeek* magazine, in conjunction with the Climate Group and a panel of judges based on its leadership and efforts in greenhouses reduction.

Thomas Midgley, a DuPont engineer, invented chlorofluorocarbons (CFCs) in 1928, that were to primarily be used in aerosol sprays and refrigerants. Over the years, DuPont became the world’s leading producer of these very versatile substances. For years DuPont was a driving force behind the Alliance for Responsible CFC Policy that had lobbied hard against further regulation of CFCs. Soon after the discovery in 1985 of the Antarctic ozone hole DuPont was instrumental in the Alliance’s decision in June 1986 to call for a cap on CFC production. This decision startled chemical companies in Europe and Japan, yet was key to the negotiation of the Montreal Protocol 15 months later. As evidence mounted that CFCs were depleting the earth’s stratospheric ozone layer, DuPont announced that it would end its CFC-based products by the turn of the 20th century. This was perhaps unprecedented—the spearheading of a worldwide phase-out of a product by the firm that invented substances that provided a significant portion of its revenues.

By the end of 1989 DuPont researchers had filed 20 patents for non-CFC refrigerants. DuPont introduced Suva® refrigerants and Dymel® propellants in 1990 as replacements for CFCs. In 1993 the company advanced its CFC phase-out deadline to the end of 1994, one year ahead of the timetables established by the 1987 Montreal Protocol and by

the 1990 Clean Air Act Amendments. In 2003, it was awarded the National Medal of Technology for its role in the phaseout and replacement of chlorofluorocarbons with compounds such as HCFCs and HFCs.

DuPont’s Sustainability Goals are ambitious: having reduced global greenhouse gas emissions measured as CO₂ equivalents by 72% since 1990, the company has committed to reduce water consumption by at least 30% over the next 10 years. It also expects by 2015, to double its investment in R&D programs with “direct, quantifiable environmental benefits” for its customers.

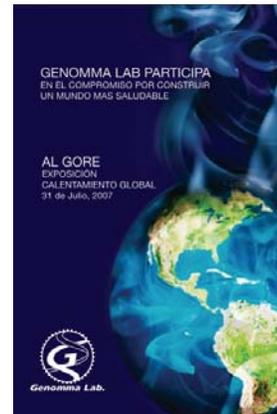
Genomma Lab Committed to a Better Planet

Genomma Lab is a newly-formed innovative Mexican pharmaceutical company whose mission is to provide high-quality products and technology. The firm has successfully developed a range of around 30 medicines, which include laxatives, wound treatments, and remedies for obesity, acne and other conditions. With a strategy that is based on strong advertising campaigns, including television spots, Genomma Lab has been rapidly growing from efficient channel distribution including Sanborns, a department store chain owned by

Carlos Slim. It has developed over four thousand distribution centers, including direct delivery to their clients and has formed connections and alliances with leading laboratories that are part of the pharmaceutical and cosmetics industry such as Apotex, NBTY, Biofarma, Olnatura, and Francobel. Recently, Genomma Lab became a leader in Mexico's climate protection efforts and joined the fight against global warming. On July 31st, Genomma Lab, along with Mexican businessmen and the mayor of Mexico City, brought to

Mexico City one of the leading figures in the efforts to raise awareness on climate change, former U.S. Vice President Al Gore.

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Luis Roberto Acosta's Presentation of "An Inconvenient Truth"

On July 31st when Vice President Al Gore lectured in Mexico City, Director for Latin American Regional Activities Luis Roberto Acosta, Carlos Diaz Leal and Dr. Aurora Elena Ramos of the Climate Institute met with him. They discussed the high Altitude Climate Observatory and the Climate Awareness campaign the Institute is organizing.

On September 8th Luis Roberto Acosta, CECADESU Director, Luis Manuel Guerra and Carlos Gay conducted a presentation based on the Former Vice-President Al Gore's book and movie "An Inconvenient Truth." The event took place in the Museum of Anthropology in Mexico City.



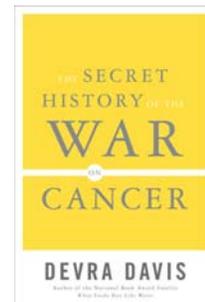
Luis Roberto Acosta and Al Gore

Devra Davis' Upcoming Book: "The Secret War on Cancer"

As the author of the widely acclaimed book, *When Smoke Ran Like Water: Tales of Environmental Deception and the Battle Against Pollution* (Basic Books, 2002), a finalist for the National Book Award, Epidemiologist Devra Davis is one of the world's most visible and outspoken advocates for improving the environment to protect public health. In her new book, to be published in the fall (October '07): *The Secret History of the War on Cancer*, writer Davis, Director of the

Center on Environmental Oncology of University of Pittsburgh Medical Center, draws on rarely viewed research files to chronicle the tortuous tale of the "war on cancer" in which political hype and maneuvering by interests such as tobacco companies and polluters often served to discourage research on prevention. Published by Basic, her new, "fascinating" book received early praise by John Topping, President of the Climate Institute, who described it as the

"blockbuster". "I have read it in galleys and found it to be one of the most gripping books on health ever written." Dr. Davis, a long-time Climate Institute Board member, has already agreed to make a donation of 100 autographed books to the Climate Institute. An October 9th Event has been set up for a presentation of the book at the Climate Institute Ballroom Conference Room at noon on the first floor in the National Trust for Historic Preservation Building.





PROFILE : LEADING ENVIRONMENTAL FOUNDATIONS

Mexico has seen the flourishing of many organizations engaged in the protection and conservation of planet resources....

SELVA NEGRA



Mexican band : Mana

Three-time Grammy-Award and five-time Latin Grammy Award-winning, Maná, a Mexican rock band from Guadalajara whose successful career has spanned almost three decades, created in 1995 an organization: Selva Negra, known for its involvement in the rescue of endangered turtles and whales off the coast of Mexico. Set up to conduct environmental and educational campaigns mostly tailored for a young demographic, its large scope would eventually encompass all of Latin America. The group's popularity and clout was also used to disseminate ecological messages. Throughout its existence, Selva Negra has also financed activities that aim at protecting or studying diverse biological species. It has been very active in the state of Guadalajara (Cerros del Cuatro), working hand in hand with private corporations and local municipalities. The group has also conducted an ambitious reforestation plan in Mexico, Colombia and Venezuela. More recently, it has pledged to help rebuild houses in the state of Chiapas after the devastation caused by Hurricane Wilma (2005).

MIGUEL ALEMAN FOUNDATION

Created in 1984 by Mexico's former president, Miguel Aleman Valdés (1946-1952), the Miguel Aleman Foundation's A.C. mission has been to carry out social and economic projects. The Foundation's mandate is inspired by the same dedication Aleman Showed throughout his presidency, which included pursuing industrial development, extending the national's rail network, improving highways and buildings and a number of major schools' and touristic infrastructures.

Aside from its commitment to a broad diversity of institutional programs linked with rural development, medical research, and cultural activities, the Foundation provides support for the protection of the environment and natural resources.

The Foundation conducts research related to ecotourism and nurtures collaboration with some centers providing technical assistance with universities and other private associations mainly in the States of Coahuila and Quintana Roo.

The Miguel Aleman Foundation also organizes conferences, lectures and fora on environmental themes. On September 24th, for the celebration of the 20th anniversary of the Montreal Protocol, the foundation will welcome Chairman Emeritus of the Climate Institute, Sir Crispin Tickell for an annual lecture entitled "Planetary Vulnerability and Climate Change."

Founded in 2002, the Pedro Y ELENA HERNANDEZ FOUNDATION

y Elena Hernández Foundation A.C. is a non-profit organization devoted to recovering and conserving the enormous natural wealth of Mexico by focusing on the role of human beings and their communities. The young organization was created to support and operate environmental conservation and recovery projects, as well as those devoted to community development, with three main focuses: conservation, biodiversity and restoration of natural ecosystems. The foundation shares the vision that "protecting nature is protecting life itself," and strives to take action to preserve the habitat of all species for the present and the future.

The foundation operates either directly or through associated organizations in the spheres of influence of natural areas. It has notably cooperated with RARE, a U.S.-based conservation organization that works globally to equip people in the world's most threatened natural areas with the tools and motivation they need to care for their natural resources.

Pedro Y Elena Hernandez Foundation operated mainly in the States of Veracruz and Yucatan. For instance, in Veracruz, it has supported the recovery of the Tuxpan River Watershed and help build a comprehensive conservation program including components, such as the Ecological Land Use Planning Program (POET). It has also spearheaded discussions on "Integrated Management and Conservation of the River Tuxpan" In addition, the foundation has sponsored environmental awareness campaigns organized by Niños y Crias, A.C.



Barbara Hernandez
President of the Hernandez
Foundation

Mexico City's "Plan Verde"

In Mexico City, whose population of 20 million makes it the world's second-largest metropolitan area, traffic moves at under 10 km an hour on average at rush hour, which further aggravates the already severe air pollution. In addition, close to four million vehicles circulate in the capital, and the number increases by more than 300,000 a year, while only 30,000 are retired annually.

The situation is chaotic: at 18 million people, Mexico City and its suburbs make up the second-largest metropolis in the world after Tokyo. Studies show that it takes local residents between 1 and 1.5 hours to make a trip within the city, whereas 25 years ago one would be outside the city after driving for an hour. There are more than 5 million cases of acute respiratory disease reported both in Mexico City and its surrounding areas each year. Inspired by drastic green policies – such as the one deployed by London Mayor Ken Livingston or his counterpart in Bogota, Colombia—Mexico City Mayor Marcelo Ebrard unveiled “Plan Verde” (Green Plan) as an attempt to lay the foundation for a more sustainable development in the City of Mexico. The program also includes an expansion of the city's green areas, measures to preserve the city, improvements in the distribution

The "Plan Verde" is divided into seven thematic actions:

- land conservation
- public space
- water
- mobility
- air
- waste
- climate change and energy

and administration of piped water, and new garbage disposal regulations, which will oblige city residents to separate organic from inorganic waste.

Other initiatives include focusing on expanding public transport systems, creating new parks and green areas in the city and threatening to cut off water services for those who fail to pay their water bills. One of the best known elements of the plan is known as: "Hoy No Circula" (Today Don't Drive) plan, a program in which drivers are prohibited from using their vehicles one weekday a week based on their license plate numbers to reduce pollution. Beginning in 2008, *Hoy No Circula* will be extended to Saturday. One fifth of the city's 2.5 million registered vehicles will be restricted from circulating between 10 am and 6 pm.

Leading by example, Ebrard has pledged to travel to work by bike on the first Monday of every month, in order to inspire the city's 9 million residents to cut gas consumption and use bicycles or public transportation. This symbolic act is aimed at lowering congestion and significantly reducing traffic jam in a city where vehicle emissions account

Clinton Climate Initiative (CCI) and Mexico

In August 2006, former-President Clinton launched the Clinton Foundation's Climate Initiative (CCI) whose mission was to apply the Foundation's business-oriented approach to the fight against climate change in practical, measurable and significant ways. Cities are said to contribute approximately 75 percent of all heat-trapping greenhouse gas emissions to our atmosphere.

CCI is providing direct assistance to individual cities and facilitating the sharing of best practices. CCI is also working to organize a purchasing consortium that will help cities buy energy efficient technologies at lower prices and create a measurement and information tool to help cities take an inventory of energy use to help direct future activities. It has worked with the C40 Large Cities Climate Leadership Group; an association of large cities dedicated to tackling climate change—to develop and implement a range of actions that will accelerate greenhouse gas emissions reductions. Mexico City, represented by Rafael Ramos, is a member of this group.

The C40 Large Cities Climate Summits are designed to help mayors deliver action in combating climate change. Each summit brings together an unprecedented number of mayors from major cities, their senior staff and business leaders. Through a comprehensive program of interactive sessions, delegates can share best practices and identify collaborative projects all aimed at tackling climate change. A C40 cities workshop on the theme of transport and congestion will be co-hosted by London and Stockholm from 3 to 5 December 2007.

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SPANISH SUPPLEMENT

El Camino Exemplar de México: El XX Aniversario del Protocolo de Montreal



En 1987, 24 naciones firmaron el Protocolo de Montreal. Así se comprometieron a reducir el uso y la producción y el consumo de clorofluorocarbonos (CFCs) y otras sustancias que agotan la capa de ozono en la estratosfera en 20% a mediados de 1994 y en 50% a mediados de 1999. Ahora, más de ciento cincuenta naciones son parte del protocolo que reconoce una responsabilidad limitada para los países menos desarrollados en el agotamiento de la capa de ozono. Los Estados Unidos y otros países industrializados han instaurado un fondo voluntario especial para ayudar a las naciones en desarrollo durante la transición a tecnologías sin CFC. Desde el principio, México ha sido un miembro del protocolo.

Para ilustrar mejor el papel de México en la reducción del uso de CFCs, podemos mirar hacia su esfuerzo para terminar la producción de CFCs. México, como el resto del mundo en desarrollo, está obligado a eliminar el consumo y la producción de CFC en 2010. Consciente de la problemática del agotamiento de la capa de ozono, el país estipuló firmemente sus compromisos ante la comunidad internacional y ha participado intensamente en el tema con una actuación a nivel mundial. Es el único país en desarrollo de alto consumo, que indicó en 1992 que seguiría un calendario acelerado para eliminar el uso de CFC y halones (agentes extintores de fuego), logrando las metas

10 años antes que el resto de los países en desarrollo. Hace poco, con el apoyo del Fondo Multilateral del Protocolo de Montreal, el gobierno de México cerró *Quimobásicos*, una industria que fabrica CFCs en México. Este cierre histórico tiene como resultado la eliminación total de la producción de CFCs en México. Este solo acto también contribuye a bajar la producción de CFCs en el continente americano por 60%, en el nivel mundial, producción de CFCs bajo entre 12% y 13%.

Agustín Sánchez, coordinador de la Unidad de Protección del Ozono bajo el gobierno de Vicente Fox, dijo que con la ayuda del Fondo Multilateral del Protocolo de Montreal, el país (México) es ahora "el más avanzado del mundo en desarrollo en cumplir la meta de acabar con los CFC". El gobierno de México, al anunciar una meta rápida de dejar de usar clorofluorocarbono, motivó a las compañías multinacionales para concentrarse en modernizando sus centros de fabricación mexicanos. Poco después de anunciar el proyecto, AT&T construyó su primera fábrica libre de CFC en el mundo. Luego, Nortel construyó una nueva fábrica que elimina la necesidad de limpiar con clorofluorocarbonos. Conforme al Protocolo de Montreal, los países son cometidos a reducir su uso de bromuro de metilo por 20% antes de 2007 y eliminándolo completamente por 1 enero 2015

porque es una sustancia considerada peligrosa a la capa de ozono. Eliminando el uso de Bromuro de Metilo es otra manera en la que México consigue una ventaja en su compro-

miso para eliminar sustancias perjudiciales. Con su compromiso y grande esfuerzo a eliminar clorofluorocarbonos y sustancias semejantes, México puede inspirar a países miembros por su acción a favor del tratamiento del problema de ozono.

Hoy en día, los clorofluorocarbonos y otros concentrados perjudiciales encontrados una vez en cantidades altas en la atmósfera han disminuido apreciablemente o se han estabilizado. En 1988, el consumo global de CFCs era aproximadamente 1.3 billones de kilogramos. Cinco años después, ese número cayó a 510 millones de kilogramos.



La capa de ozono

La capa de ozono de la estratósfera, es un filtro atmosférico esencial para contener la radiación ultravioleta. Los efectos que causa en la salud el aumento de la exposición a la radiación ultravioleta, produce daños al sistema inmunológico del ser humano y una mayor incidencia de cáncer en la piel, además de sus consecuencias negativas para la vida de la flora y fauna, tanto terrestre como acuática.

El deterioro de la capa de la capa de ozono puede traer como consecuencia efectos adversos tanto en el medio ambiente como en la salud humana, como:

- Daño a la flora y fauna
- Deterioro de los ecosistemas acuáticos (plancton oceánico)
 - Cataratas en los ojos
 - Cáncer de piel (melanomas)
 - Alteración del ADN genético
- Supresión del sistema inmunológico
- Indirectamente el fenómeno de cambio climático

APEC: Se distingue México por sus propuestas ambientales

Tras llegar en Sídney el 8 de Septiembre para atender la XV Reunión de Líderes de Foro de Cooperación Económica Asia Pacífico (APEC), presidente Felipe Calderón invitó a los 21 países participantes a trabajar de manera coordinada para impulsar políticas públicas que combatan ese problema y la pobreza. También propuso, establecer parámetros que obliguen a todos a reducir las emisiones contaminantes que agravan el cambio climático. del escepticismo generalizado sobre el tema (ambiental), me parece positivo que reconozcamos la existencia del fenómeno y la necesidad de hacerle frente de manera coordinada

El Presidente de México indicó que todos los países tienen que hacer un esfuerzo proporcional y cambiar el enfoque a lo que llamó “incentivos correctos” sobre comunidades y empresas, por medio de estímulos económicos aportados por todos de manera proporcional. El jefe del Estado aseguró que su gobierno había asumido de manera muy seria la agenda ecológica y los retos que presenta el cambio climático como lo demuestran las medidas adoptadas por México en materia de reducción de contaminantes para producir energía y el compromiso del país por sembrar en 2007, 250 millones de árboles – lo que representa

un cuarto de la meta de mil millones que tiene la ONU para este año (programa Proárbol). Reconoce el Presidente Calderón la necesidad de apoyar los objetivos de la Convención Marco de las Naciones Unidas en materia del cambio climático: reconociendo que el problema mayor radica en la falta de incentivos para asumir compromisos con metas realizables, que es el propósito no plenamente cumplido del Protocolo de Kioto. Presentando su propuesta al secretario de la ONU, Ban Ki-moon, en la que sugiere que se establezca un catálogo claro “de medidas deseables y que los países realicen informes sobre sería

la reducción de emisiones” México se congratuló que en este encuentro se haya tomado de manera seria el tema del cambio climático.



CICEANA & Margie Simon de Ortiz

The Centre for Information and Environmental Communication of North America, CICEANA, is a non-profit association whose mission is to promote an environmental culture for sustainable development and to stimulate individual and collective initiatives to solve and prevent environmental crises. CICEANA, through its extensive collaboration with government, civilian and academic organizations, national and international institutions, as well as with private and public sectors, is committed to providing alternatives for sustainable development.

To fulfill its mission, CICEANA develops information, communication, and environmental education strategies. These informative strategies seek to generate an analytical decision-making process, resulting in alternative solutions that foment cultural changes thus giving rise to new better practices among the different actors in society.

Based in the Coyoacán Nurseries (Viveros de Coyoacán) covering 38 hectares in a privileged location in Mexico City, CICEANA has developed key environmental education programs that take advantage of its setting. The designing and maintaining of a Roof Botanical assets have been two-fold:

First, it has been envisioned as a way to expand natural parks (green spaces) in Mexico City, where the green spaces are decreasing due to environmental degradation and urban development. One of the opportunities that has been contemplated is the "renaturalization" of urban areas which, can play a counter-effect on the city's polluted air.

Second, it has been seen as a tool to present innovative agricultural techniques thus promoting organic crops and protecting the country's biologically diverse heritage.

CICEANA's botanical garden is open to public and has been used to organize training sessions and workshops in an effort to familiarize citizens with sustainable agricultural practices. CICEANA's Roof Botanical Garden is a 750m² laboratory located on top of a two-story building where researchers from various Mexican and international universities (UNAM, UAM, Universidad de Humboldt in Germany) can conduct research and develop alternative technologies such as urban agriculture.

CICEANA has designated rooms within its building, with multimedia tools that are open to the public interested in doing research on the Internet or accessing the organization's large database of articles, reports and investigating studies. Since June 2004, CICEANA's team of scientists has posted interesting pieces available to the public on a new Web hosting page: <http://noticias.prodigy.msn.com/Ciencia>. The website is dedicated to the enhancement of knowledge on environmental topics including climate change, endangered species and conservation.

Margie Simon de Ortiz

CICEANA's Director General, Margie Ortiz de Simon is an expert at creating bridging between cultures.

Margie Ortiz was born in the U.S., where she obtained her education at Stanford University. As CICEANA's Director,

Margie has expanded the group's outreach to the corporate community and to international institutions.

On June 15th, she signed an agreement with the Climate Institute to collaborate climate awareness. She has worked with MIDE (Museo Interactivo de Economía) to develop a sustainability Hall.



CECADESU & Luis Manuel Guerra

Strengthening environmental education programs in Mexico with a focus on the challenge posed by climate change will be the new mission of recently-appointed Luis Manuel Guerra as General Coordinator of CECADESU (Center for Education Capacity Building for Sustainable Development), which is the Environment Ministry's environmental education program.

CECADESU, a branch of the Secretary of Environment and Natural Resources (SEMARNAT) is aimed at designing environmental educational programs and projects throughout the country's states to seek to build an environmental conscience to preserve the country's fragile ecosystems. One crucial element in the federal system architecture, is that CECADESU has worked in tandem with the Secretary of Public Education (SEP- Secretaría de Educación Pública).

With 20 years of experience, a solid background in the field of chemistry and engineering, Luis Manuel Guerra, the founder and long-time president of INAINE (Instituto Autónomo de Investigaciones Ecológicas, AC.) and Board member of the Climate Institute, has accumulated extensive knowledge through his multi-faced engagement in the fields of air quality management and climate protection.

Under his leadership, INAINE ran a van throughout the city neighborhood collecting air and water samples and phoning these results to radio stations. In March 1991, he managed the Climate Institute's briefing led by Sir Crispin Tickell at Los Pinos.

He has held many positions; including member of the Technical Council of the Federal Public Prosecutor of Environmental Protection for Mexico, advisor for the Quality of Air and of the Switzerland-based Promotional Council for Sustainable Development, as well as founding member of the "Leadership Development Program" of the Rockefeller Foundation. In addition, Guerra collaborated for many years with respected newspaper "La Reforma" and other specialized magazines. In addition, he conducted his own radio program called ECOCIDIO, the first program about the environment and ecology aired on Radio RED.

He continues to believe in the necessity of reforming the country's legal framework, being recently quoted as saying: "we have to invent a new jurisprudence; as we begin to understand the outlines and limits of the growth of modern humanity over the past 10 million years." "We have to delineate new game rules" to guarantee a future that will be ecologically and environmentally-friendly, capable of sustain a world for the future generations."





Genomma Lab (continued)

Over 3,000 people came to hear Gore's presentation based on the Oscar-winning film, "*An Inconvenient Truth*" at the Metropolitan Theater. With slides and visuals, Gore demonstrated how humans are making an environmental impact on Earth.

Gore warned the people present that we should all seriously change our way of thinking when it comes to protecting the environment. During the event, to echo Gore's warning, Genomma Lab offered seeds to plant trees and leaflets containing sustainable measures and recommendations to reduce our individual's carbon footprint.

In addition, Genomma Lab and SEMARNAT signed a convention, according to which the former vowed to donate a million trees that will be planted in the course of a year around the country to support public reforestation efforts, thus clarifying Genomma Lab's determination to remain in the forefront of the climate protection effort.

Genomma Lab is a major sponsor of Sir Crispin Tickell's September 2007 visit to Mexico and will bring its marketing and health expertise to the climate awareness efforts being mounted by CICEANA, CECADESU, and the Climate Institute.



Mexico City's "Plan Verde" (continued)

for 85 percent of the city's smog-forming emissions and where approximately 44.4 million liters of gasoline and other fuels are consumed daily. Entrenching clean transportation habits will certainly prove challenging; among the 40% of the metropolitan residents who own bikes (essentially cheaper), 0.7 percent have been reported to use them regularly.

Therefore, the government has planned to build 186 miles of bike lanes and install bike racks at metro stations as well as instituting a loan program that make it easier for people to rent or purchase bikes. Martha Delgado, Secretary of the environment for the City of Mexico, admitted that the Green Plan will be "ambitious and expensive" An investment of nearly 6 billion

pesos will be necessary to fund the project in 2008; this represents five times the entire environmental budget this year.

Mexico City is not the first city in the nation to promote the idea. Guadalajara, the country's second-largest city (5 million people), launched a similar program in September 2004 after citizens groups pushed for a place where families could gather for a leisure Sunday morning of cycling.



Martha Delgado, Secretary of Environment in Mexico City

Native American at the Forefront of Climate Protection

“Our people are being first and foremost affected by climate change. We have the knowledge as indigenous peoples, we understand the caretaking we need to do, we need to share that with the rest of the world.”

Wahela Johns - member of the Dine' tribe

In recent months, the Climate Institute has fortified its relationships with prominent leaders among the Native American community, laying the foundation for a new program aimed at enhancing the role of Native Americans as a real force in the climate protection arena through effective partnering with academic institutions and other organizations. The strong echo of ecological concerns resonating among the Native American community should be seen as no surprise. Tribal lands are disproportionately situated in water-parched areas, which make tribes more likely to be severely affected by climate change. Over the past years, strong voices have advocated the rich value of Indigenous people's cultural and spiritual perspectives on climate disruption issues, and the lessons that should be learned from their ancestral traditions of adaptation or survival. The Climate Institute is working with NASA to ensure that the know how accumulated generation after generation could – if put into practice– not only increase tribes' resilience to climate change but also offer a source of inspiration for alternative and sustainable responses to today's environmental challenges

The Plight Affecting Tribes in North America

More than the scientific projections of possible future impacts, it is likely that increased interest in climate change has been driven by facts on the ground- signs of profound disruptions in the way of life of Alaskan Natives and Arctic peoples including the Inuit. Perhaps nothing reached the general public as well as the three part series for the *New Yorker* by Elizabeth Kolbert that in part describes the plight of an Inupiat village five miles off the Alaska Coast that will soon be forced to relocate to the mainland because declining sea ice is making the island more vulnerable to storm surge.

A more recent article by William Yardley in *The New York Times* chronicles a similar quandary faced by the Alaskan Native village of Newtok where melting permafrost and declining sea ice are allowing fall storms to pound away at the shoreline. The erosion has already turned Newtok into an island and due to permafrost thaw it is sinking and becoming barely habitable.

Similar observations have been seen in the United States, with remarkable growth of interest in climate protection among Native Americans in the contiguous 48 states. This has been facilitated by actions of environmental groups such as the National Wildlife Federation that organized a Tribal Lands Climate Conference in December 2006 with the Copopah Indian Tribe drawing leaders from more than 50 tribes to the Copopah homeland on the Lower Colorado River, to discuss challenges climate change posed to Native American communities.

Most of the impetus on climate change, however, has come from scientists and activists within the Native American Community. Several months before the Tribal Lands Conference, a group of scientists and activists, many with links to the tribal colleges, formed an American Indian Alaskan Native Climate Change Working Group

The catalyst in this effort has been Dr. Daniel Wildcat, who heads the Environmental Research Studies Center at Haskell Indian Nations University in Lawrence, Kansas. A member of the Muskogee tribe, Dan Wildcat is a remarkably effective speaker and group leader. Haskell enjoys a virtually unique position among the roughly three dozen tribal colleges. Its student body of just over 800 students comes from about 130 tribes;



Dr. Daniel R. Wilcat, Director of the American Indian Studies Program at Haskell Indian Nations University in Lawrence, Kansas

most tribal colleges draw from a single tribe or a few geographically close tribes.

On July 7, the Live Earth Concert organized by Al Gore provided Dan Wildcat a chance to reach an audience of hundreds of millions around the world about the implications of climate change for the Native American community. The Washington Concert was organized next to the Smithsonian's National Museum of the American Indian and speakers included Dan Wildcat, Dr. Nancy Maynard, a respected program leader and scientist who heads NASA's Tribal Colleges Program, and Dr Anthony Socci of the American Meteorological Society.

(continued on page 14)



Native American at the Forefront of Climate Protection (continued)

“Native American youth in science and the environment can be heightened by showing how scientific methods could give them leverage to protect a revered but threatened cultural heritage.”

Emerging Tribal College Climate Initiative

Administered and largely funded by the Department of Education, a Tribal College Initiative has sought to make tribal colleges an effective force to encourage education and economic development in Native American communities, including many reservations. The Tribal Colleges have collaborated informally through the American Indian Higher Education Consortium (AIHEC). Set up in 1972 by six Tribal College Presidents, this group has grown to become an effective vehicle to leverage federal agency support, obtain favorable legislative action and stimulate private sector support of these colleges that now serve over 30,000 students. Many of these schools have evolved from an initial start as vocational schools to become fully accredited four-year colleges. Some like Haskell Indian Nations University in Kansas, Salish Kootenai College in Montana, and Northwest Indian College in Washington State have developed pioneering work on climate or energy issues.

One of the most promising developments is the move by the American Indian Alaskan Native Climate Change Working Group to make the tribal colleges the mainstay in an effort to empower individual tribes to be pro-active in responding to climate change. There are now about 32 Tribal Colleges, mostly in the Midwest and Southwest, recognized under the White House Initiative on Tribal Colleges and Universities.

Three main ideas have emerged from the discussions and conferences organized throughout the country:

- (1) There is much folk wisdom in Native American culture and traditional knowledge that may be useful in climate response. Most of the efforts have been concentrated on its combination with modern science and technologies.
- (2) Stimulation of interest of Native American youth in science and the environment can be heightened by showing how scientific methods could give them leverage to protect a revered but threatened cultural heritage, e.g. using satellite imagery to protect traditional habitat
- (3) Climate mitigation measures, e.g. generation of wind resources from reservation land, should be used for more than export to the power grid; they should also seek to stimulate a job base and industrial enterprise on tribal land, enabling young people to make a decent living without abandoning tribal roots

Partnering with other Universities and Institutions

A much more ambitious objective the group agreed on was strengthening the ability of Tribal Colleges to become a focal point for climate protection planning for the respective tribes they serve.

NASA has on quite modest resources already developed an innovative effort to train Native American undergraduate and graduate student interns in use of Geographic Information Systems (GIS) and other techniques to use NASA data and to link them with operational NASA Program centers. Nancy Maynard, a top earth systems scientist who served as the principal liaison to Native American Communities during the US National Climate Change Assessment and fulfilled a similar role with indigenous communities during the Arctic Climate Impact Assessment, recently assumed the lead in NASA's Tribal Colleges Program where she has brought her climate know how to fashion a high leverage program on badly crimped resources.

Efforts are underway to generate additional resources to enhance the role of Tribal Colleges in Climate Response. The Center for Remote Sensing of Ice Sheets at the University of Kansas has been in the forefront in efforts to secure federal funding support for a consortium-like effort. Meanwhile the Climate Institute has taken the lead in efforts to link other colleges and universities that have both strong science programs and demonstrated commitment to educational advancement of Native Americans to partner in a climate protection effort with Tribal Colleges. This effort to date has focused on three institutions: Dartmouth College in New Hampshire, Stanford University in California and American University in Washington, DC

Interns at the Climate Institute — Summer 2007

The Climate Institute would like to thank the Spring 2007 Interns for all their hard work and dedication that contributed greatly to the Institute's operations. We wish them all the best in their future endeavors.



Sarah Reed (United States)

School: Wesleyan University

Major: History and Environmental Studies

At the Climate Institute:

Assisted organizing a fundraising event, created a section on Environmental refugees on climate.org

Jedediah Van Der Klok (United States)

School: University of Michigan

Major: Environmental Studies and Public Policy

At the Climate Institute:

Edited the Climate Alert and did research on geothermal energy

Hazen Kazaks (United States)

School: Brown University

Major: International Development

At the Climate Institute:

Worked on pieces related to biofuel/ ethanol

Rebecca Mc Cullough (United States)

School: Stanford University

Major: Earth System

At the Climate Institute:

Wrote an article on Reindeer and researched on water, the Dominican Republic and Mexico

Lindsay Sanders (United States)

School: Mercersburg Academy

At the Climate Institute:

Established Institute knowledge base through cataloging references books

Ben Beckerman (United States)

School: Dartmouth College

At the Climate Institute:

Worked on membership development, digitized Climate Alert's publications

Meredith Taylor (United States)

School: George Mason Law School

At the Climate Institute: Assisted with Corporate programs, Florida Coastal Program and event preparation.

Hallie Damon (United States)

School: Dartmouth College

Major: Government

At the Climate Institute:

Research related to the Tribal College program, and Marshall Islands Initiative.



Special Announcement: Green Gala Fundraising Event at the Climate Institute

The Climate Institute is hosting its
First Annual Green Gala Fundraising Event

The event , scheduled on October 18th, 2007 at 6pm will be held at
the Climate Institute Ballroom, at 1785 Massachusetts Ave., N.W.

It will feature chef tastings from local restaurants and a silent auction
with items from local green businesses in the D.C area.

To participate or get further information, visit our website:
www.climate.org



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The Climate Institute is a private non-profit organization formed to advance public understanding of climate change including the greenhouse effect and of strategies to avert stratospheric ozone depletion.

