Palais des congrès de Montréal, Canada, October 24-26, 2007

The Veolia Environment Institute (France), the Pew Center on Global Climate Change (USA), and the National Round Table on the Environment and the Economy (Canada) will host the Climate 2050 conference in Montréal on October 24-26, 2007. The conference will explore technology pathways and innovative policies to deliver effective climate action over the next half century. Unisféra International Centre serves as the event's on-site partner and secretariat.

Conference Concept

With current trends in emissions, greenhouse gas (GHG) concentrations in the atmosphere will continue to increase over the current century and beyond, leading to dangerous climate disruptions. Preventing such outcomes will require a 60% to 80% reduction in global emissions over the next half century to stabilise atmospheric GHG concentrations in the range of 450-550 ppm. Around the world, countries and corporations are pursuing a wide range of strategies to begin reducing GHG emissions while maintaining or strengthening economic growth. Many governments also are setting longer-term goals to achieve much greater reductions over the coming decades. Meeting these goals will require sweeping technological advances driven by effective government policies and private sector leadership. Climate 2050 will bring together notable speakers from government, business and academia to explore the critical technology and policy challenges. In sessions focused on key sectors, the conference will highlight technology potentials and gaps, innovative action in the public and private sectors, and critical policy needs. In cross-cutting sessions, the conference also will examine the broader policies and strategies needed at the national and international levels to mobilize action across economies and the globe. Through this combination of sectoral and cross-cutting perspectives, the conference will help to identify essential technology and policy pathways between now and 2050 as well as concrete lines of immediate action.

Objectives and Outcomes

The objective of the conference is to generate substantive, multidisciplinary and cross-sectoral discussions to improve understanding of long-term climate change strategies that will lead to meeting the 2050 targets. The conference program will be designed to connect research, business and policy in order to identify solutions to the various sectoral and regional climate change challenges. A summary of the conference discussions will be produced and disseminated.

Audience

In order to generate an action-oriented and cross-sectoral discussion, Climate 2050 will draw representation from a balance of experts, practitioners and decision-makers from the private, public, academic and NGO sectors. The conference will gather high-level experts in climate change policy from across North America and around the world. It is expected that it will attract a majority of participants from North America, with strong representation from Europe and developing countries.





 Table ronde nationale sur l'environnement et l'économie
 National Round Table on the Environment and the Economy



Climate 2050 Technology and Policy Solutions

CONFERENCE PROGRAM

24 OCTOBER 2007

18:00 - 22:00 OPENING CEREMONY - Public Event

18:00 - 19:00 Welcome Cocktail

Jean CHAREST, Quebec Premier Thierry VANDAL, President and CEO, Hydro-Québec, Canada Sheila WATT CLOUTIER, Former Chair, Circumpolar Inuit Conference

25 OCTOBER 2007

8:30 - 10:30 Plenary SETTING THE CONTEXT 2050

Around the world, countries and corporations are pursuing a wide range of strategies to begin reducing greenhouse gas emissions while maintaining or strengthening economic growth. To stabilize greenhouse gas concentrations and prevent dangerous climate disruptions, however, will require a 60% to 80% reduction in global emissions by 2050. Achieving this goal will involve sweeping technological advances driven by effective government policies. The opening plenary will present an overview of the technology and policy contexts today, setting the stage for a deeper exploration of key sectors and challenges over the course of the conference.

Eileen CLAUSSEN, President, Pew Center on Global Climate Change, USA

John HOLDREN, Chairman of the Board of Directors of the American Association for the Advancement of Science; Director of the Woods Hole Research Institute; Director, Science, Technology & Public Policy Program, John F. Kennedy School of Government, Harvard University (USA)

Pierre Marc JOHNSON, Counsel, Heenan Blaikie and former Premier of Québec, Canada

Robert PAGE, Vice Chair, National Round Table on the Environment and the Economy, Canada, and TransAlta Professor of Environmental Management and Sustainability, Institute for Sustainable Energy, Environment and Economy, University of Calgary

Henri PROGLIO, President and CEO, Veolia Environnement, France

11:00 - 13:00 Parallel Session 1

A. CARBON CAPTURE AND STORAGE

Coal is the largest source of energy-related greenhouse gas emissions and by 2030 is projected to contribute nearly 40% of global emissions. One of the most critical challenges in addressing climate change is wide-scale deployment of technologies to capture carbon emissions from coal-fired power plants and bury them underground.

Michael D. DANCISON, Director, New Generation Development, American Electric Power, USA Mark DEMCHUK, Team lead Weyburn, Encana, Canada Franklin M. ORR, Jr., Director, Global Climate and Energy Project, Stanford University, USA Truman SEMANS, Director of Market and Business, Pew Center on Global Climate Change, USA Brian WILLIAMS, Manager, CO2 geological storage, BP, USA www.climate2050.org

B. GREEN BUILDINGS

Energy use in homes and offices is a large and growing source of greenhouse gas emissions worldwide. Developing environmental management services as well as innovative design and stronger building codes can lead to cleaner on-site energy, greater energy efficiency and a new generation of "smart buildings" that reduce emissions and energy costs without sacrificing comfort or functionality.

Robert S. BENNETT, Clinton Climate Initiative, William J Clinton Foundation, USA Marilyn BROWN, Director, Oak Ridge National Laboratory, USA Simon KNIGHT, President and CEO, Climate Change Central (C3), Canada Bernard SAINT ANDRE, Executive Vice-President, Strategy, Dalkia, France William M. SISSON, Director, Sustainability, UTRC, Co-Chair WBCSD Buildings Project, United Technologies Corporation, Canada

C. BIOFUELS

Following Brazil's dramatic ethanol success, other countries are turning to biofuels to help reduce emissions and dependence on oil imports. As scientists and investors aim for the next generation of biofuel technologies, the key challenge for policymakers will be securing biofuels' energy and climate benefits without driving up food prices or introducing new environmental risks.

Tom BROWNE, Program Manager, Mechanical Pulping and Sustainability, Paprican, Canada Alex FARRELL, Assistant Professor, Energy and Resources Group, University of California, Berkeley, USA Jesse S. FLEMING, Technical Advisor, Fuels Policy and Programs, Natural Resources Canada Timothy R. HAIG, President and CEO, BIOX Corporation, Canada Dennis MAGYAR, Industry Manager North America, DuPont Biofuels, USA

13:00 - 14:30 LUNCHEON ADDRESS

Elyse ALLAN, President and CEO, GE Canada

14:30 - 16:30 Parallel Session 2

A. RENEWABLE ENERGY

From China to Europe to North America, governments are setting aggressive renewable energy targets, driving new investment in wind, solar and other clean energy sources. As technological breakthroughs bring down costs and open new zero-carbon pathways, renewables can play a significant role in addressing climate change while meeting the growing demand for energy.

Claude DEMERS, Science Communicator, Hydro-Quebec, Canada Robert HORNUNG, President, Canadian Wind Energy Association, Canada Daniel KAMMEN, Director, Renewable and Appropriate Energy Laboratory, University of California, Berkeley, USA Kyle KASAWSKI, Managing Director, Conergy Sales Canada Joanna LEWIS, Senior International fellow, Pew Center on Global Climate Change, USA Mahesh VIPRADAS, Head - Regulatory Affairs, Senergy Global Pvt Ltd, India

B. TRANSPORTATION EFFICIENCY

With the number of motor vehicles worldwide projected to top 1 billion by 2025, improved vehicle efficiency is key to raising air quality, strengthening energy security, and reducing greenhouse gas emissions. As automakers introduce hybrid vehicles and explore other new technologies, governments are debating how best to drive quick and dramatic improvements in transportation efficiency.

Richard GILBERT, Consultant on Urban issues, Canada

Huiming GONG, Program Officer, The China Sustainable Energy Program, The Energy Foundation, China **Drew KODJAK**, International Council on Clean Transportation, USA

Reinhard SCHULTE-BRAUCKS, Head of Automotive Industry Unit, Directorate General for Enterprise, European Commission

Tom STRICKER, Manager, Technical & Regulatory Affairs, Toyota, USA

C. FORESTRY

Deforestation is the second largest source of greenhouse gas emissions. Improved forest management can reduce emissions while preserving biodiversity and contributing to sustainable rural economies. New policies and international strategies are needed to support efforts in tropical forest countries and to ensure that the climate benefits are real and sustained.

Ana Cristina BARROS, Country Representative, The Nature Conservancy, Brazil

Federica BIETTA, Deputy Director, Coalition for Rainforest Nations, USA

Werner KURZ, Senior Research Scientist, Global Change and Landscape Ecology, Canadian Forest Services,

Canada

Robert NASI, Senior Scientist, CIFOR, Indonesia

Robert PROLMAN, Director, International Environmental Affairs, Weyerhaeuser, USA

26 OCTOBER 2007

8:30 - 10:30 Parallel Session 3

A. NUCLEAR ENERGY

Climate change is leading to renewed interest in nuclear energy, a proven source of zero-carbon electricity. While some countries plan major increases in nuclear power, others remain strongly opposed. Nuclear power's contribution to meeting future energy needs and addressing climate change will depend on critical issues including cost, safety, waste disposal, and the risk of nuclear proliferation.

Alain BUCAILLE, Senior Vice-President, Research and Innovation, AREVA Group, France Thomas B. COCHRAN, Director, Nuclear Program, Natural Resources Defense Council, USA Elizabeth DOWDESWELL, Special Advisor, Nuclear Waste Management Organization, Canada Ernest J. MONIZ, Professor of Physics and Cecil and Ida Distinguished Professor, Center for Theoretical Physics, MIT, USA

B. URBAN PLANNING AND TRANSPORTATION

With rapid urbanization, integrated planning and innovative "smart growth" strategies can help ease traffic congestion, reduce air and water pollution, and make cities more livable and sustainable. At the same time, these local efforts can make a strong contribution to meeting the global challenge of climate change.

Don CHEN, Founder and Executive Director, Smart Growth America, USA

Johanne GELINAS, Former federal Commissioner for Sustainable Development, Canada

Paul LEWIS, Professor, Université de Montréal and Director, Observatoire SITQ du développement urbain et immobilier, Canada

Sanjivi SUNDAR, Distinguished Fellow, The Energy Resource Institute (TERI), National Thermal Power Corporation Professor, TERI University, India

Steve WINKELMAN, Manager of Transportation Program, Center for Clean Air Policy, USA

C. ADAPTATION

With the early impacts of climate change already being felt, adaptation is a pressing challenge for all nations. Drought, flooding, extreme weather and other climate impacts are projected to fall most heavily on those countries least responsible for climate change and least able to cope. An equitable climate solution must include stronger international support for adaptation in poor and vulnerable countries.

Gary GUZY, Senior Vice-President, Marsh USA Inc. Donald LEMMEN, Science Manager, Climate Change impacts and adaptation division, NRCan Kenrick LESLIE, Director, Caribbean Community Climate Change Center, Belize André MUSY, Director, Ouranos, Canada Youba SOKONA, Executive Secretary, Sahara and Sahel Observatory, Tunisia

11:00 - 13:00 Plenary CLIMATE POLICY: NATIONAL/REGIONAL ACTION

The global climate change challenge requires determined national and regional leadership and vigorous action. Robust national and regional policies will, in large part, define global outcomes. Meanwhile, national governments are confronted with the challenge of striking a delicate balance of growing economies and meeting their energy needs while achieving substantial GHG emissions reductions. Nevertheless, many governments are already setting longer-term goals and taking action to achieve greater reductions over the coming decades. This plenary session will examine existing and potential Canadian, Mexican, US and North American policies and actions towards achieving a favourable global sum of national and regional parts.

Michael GOO, NDRC, USA Israel LAGUNA, Underdirector, Climate Change Program, National Institute of Ecology, Mexico David McLAUGHLIN, President and CEO, National Round Table on the Environment and the Economy, Canada Fernando TUDELA, Under Secretary for Planning and Environmental Policy, Ministry for the Environment, Mexico

David VAN'T HOF, Sustainability Advisor, Office of Governor Ted Kulongoski, USA

13:00 - 14:30 LUNCHEON ADDRESS Dick EVANS, CEO, Alcan, Canada

14:30 - 16:15 Plenary **STRENGTHENING THE MULTILATERAL CLIMATE EFFORT**

As a global challenge, climate change requires a global response. An equitable and effective multilateral framework can ensure that all the world's major economies contribute their fair share to the global climate effort. With the Kyoto Protocol commitments set to expire in 2012, governments and stakeholders are now debating how to strengthen the international climate framework for the years beyond. Critical decisions are due at the upcoming UN climate negotiations in Bali. This plenary session will explore a range of views from government, business, and NGO leaders on how best to advance the global climate effort.

Thierry BERTHOUD, Vice-President, International Relations and Governmental Affairs, Alcan Inc., Canada **Elliot DIRINGER**, Director, International Strategies, Pew Center on Global Climate Change, USA

Jim GREENE, Senior Policy Advisor to the Hon. Joseph R. Biden, Jr., US Senate, USA

Emily Ojoo MASSAWA, Climate Change Enabling Activities, Ministry of Environment and Natural Resources, Kenya

David RUNNALS, President, International Institute for Sustainable Development, Canada

16:15 - 16:30 CLOSING REMARKS



The Organisers

Veolia Environment Institute

A platform for exchange and dialogue

The Veolia Environment Institute is a non-profit organization created in September 2001. The Institute aims to propose a forum for dialogue and interchange with academia, institutions and the different actors in society. Besides its publishing programme to promote the research undertaken by its academic partners, the Veolia Environment Institute has also a programme for a series of Conferences on Future Environmental Trends internationally. These events are jointly organized with qualified partners, with the aim of creating a forum for discussion and raising awareness on the major themes defined by the Institute among university circles, institutional organizations and civil society.

For further information: www.institut.veolia.org/en

The National Round Table on the Environment and the Economy

Achieving a Balance

Canada's National Round Table on the Environment and the Economy (NRTEE) is dedicated to exploring new opportunities to integrate environmental conservation and economic development, in order to sustain Canada's prosperity and secure its future. NRTEE current project focuses include Climate Change Adaptation and Energy and Climate Change. In June 2006, the NRTEE released *Advice on a Long-Term Strategy on Energy and Climate Change*. The strategy was based on a technology-driven scenario developed by the NRTEE that examined how to, by 2050, meet the energy needs of a growing economy, achieve substantial reductions in carbon emissions, and improve the air quality in Canada.

For further information: <u>www.nrtee-trnee.ca</u>

Pew Center on Global Climate Change

Working Together....Because Climate Change is Serious Business

The Pew Center on Global Climate Change is an independent, nonprofit, non-partisan organization dedicated to promoting practical and effective climate change policies in the United States and internationally. The Center produces expert analysis of climate science, economics, solutions, and policy issues; facilitates dialogue among policymakers, stakeholders, and experts; and contributes directly to the policymaking process. The Center's work is closely informed by its Business Environmental Leadership Council, a group of 42 major companies in diverse sectors, with a combined market value exceeding \$2.4 trillion, committed to advancing solutions on climate change. With 10 major companies and three other NGOs, the Center is a founding partner of the US Climate Action Partnership, which supports mandatory national climate policies in the United States. It also is actively engaged with governments and business in exploring options for a post- 2012 international climate framework. The Pew Center was established in May 1998 by The Pew Charitable Trusts, one of the United States' largest philanthropies and an influential voice in efforts to improve the quality of the environment, and is funded entirely by charitable sources.

For further information: www.pewclimate.org

