



Canadian
Electricity
Association

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canadienne
de l'électricité



THE **POWER** FROM WITHIN

SUSTAINABLE ELECTRICITY:
INAUGURAL ANNUAL REPORT, 2008

SustainableElectricity
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Table of Contents

2	Joint Message from the Executives
4	Overview of Sustainable Electricity
5	A Policy for Sustainable Development – Corporate Responsibility
6	Sustainable Electricity Public Advisory Panel
8	Letter from the Public Advisory Panel
11	2008 Sustainable Development Performance: Executive Summary
13	Building a Sustainable Electricity Future
21	CEA Member Performance: Environment
22	Principle 1: Environment
28	Principle 2: Stewardship and Biodiversity
32	Principle 3: Climate Change
37	CEA Member Performance: Social
38	Principle 4: Health and Safety
42	Principle 5: Workplace
46	Principle 6: Communication and Engagement
50	Principle 7: Aboriginal Relations
53	CEA Member Performance: Economic
54	Principle 8: Economic Value
56	Principle 9: Energy Efficiency
60	Principle 10: Security of Supply
65	Industry at a Glance
67	Sustainable Electricity Steering Committee Members

ABOUT THE SUSTAINABLE ELECTRICITY REPORT AND PERFORMANCE DATA

Under the Sustainable Electricity program, CEA member utilities report their environmental, social and economic performance each year. This report is the first under the Sustainable Electricity program and provides an overview of CEA member utility performance from January 1, 2008 through December 31, 2008. CEA member utilities have been reporting environmental indicators to CEA for over a decade, but with the establishment of the Sustainable Electricity program, a number of new social and economic indicators were introduced. For those indicators, members were requested to report historical data from 2004–2007 wherever possible. However, while members were able to provide complete data for the new indicators for 2008, some were unable to report for previous years; thus, CEA was not able to provide trend analysis where historical data was not fully available.



ABOUT THE CANADIAN ELECTRICITY ASSOCIATION

Canadian Electricity Association (CEA) members generate, transmit and distribute electrical energy to industrial, commercial, residential, and institutional customers across Canada on a daily basis. A national industry association, CEA includes all facets of the electricity industry from vertically integrated electric utilities and power marketers, to manufacturers and suppliers of materials, technology and services. CEA represents the broad interests of this pivotal industry, whose role in assuring safe, reliable, and competitively-priced energy is essential to the prosperity of present and future generations. In order to address the industry's most significant issues, the CEA Board of Directors has endorsed the following six strategic goals:

Infrastructure: CEA works to overcome the barriers to timely investment in infrastructure.

Energy Efficiency: CEA and member companies will adopt a leadership role in providing energy efficiency information and programs and work with government and stakeholders in support of energy efficiency.

Technology: CEA advocates and catalyzes a strong market-based framework (including tax and financial incentives and regulatory reform) that will advance investment in commercial Best Available Technology Economically Available (BATEA) that better serve customer needs and meet expectations for sustainability.

Regulation: CEA seeks more coordinated, effective and efficient regulatory regimes within and between governments, and more timely decisions to provide greater certainty for customers and shareholders.

Environment: CEA seeks a holistic approach and greater regulatory coherence on environmental issues, in a manner that is results-focused and preserves the widest range of options in a sustainable manner.

Security: CEA takes a risk-based all-hazards approach and provides members with coordination and programs to protect the Canadian electricity system from physical and cyber threats.

These strategic goals reflect the key issues facing the electricity industry. CEA is committed to advancing these goals so that its members can continue to maintain and enhance the reliability of the electricity system, while providing cost-effective and sustainable electricity to Canadians.

JOINT MESSAGE FROM THE EXECUTIVES



▲ Mr. Pierre A. Guimond
President & CEO
Canadian Electricity Association

▲ Ms. Pat Youzwa
President & CEO, SaskPower
Chair, Sustainable Electricity

The Canadian Electricity Association (CEA) and its member utilities are proud to present the first Sustainable Electricity annual report. The Sustainable Electricity program, launched in February 2009, commits CEA members to pursuing business activities in a sustainable manner so they can meet the needs of present and future generations. This report provides an overview of sustainable development performance in 2008.

The Sustainable Electricity program is guided by a Public Advisory Panel chaired by the Honourable Mike Harcourt, 30th premier of British Columbia. The panel includes distinguished Canadians with diverse experience in government, academia, environmental non-governmental organizations, industry, and the Aboriginal community. CEA member utilities look forward to working closely with the Panel in the years ahead to improve the Sustainable Electricity program and to enhance their overall sustainable development performance.

Environmental Performance

The environmental performance of CEA member utilities continues to improve, though challenges remain. In 2008, CEA members had zero environmental non-compliance fines. CEA members were also proactive in protecting species at risk (both aquatic and terrestrial) and their habitat through conservation programs, avian protection plans, and bird identification surveys in company service areas. However, given the large scale of electricity operations, challenges persist. CEA members are working collectively to develop quantifiable metrics on biodiversity to better track and communicate efforts on biodiversity and ecosystem management. In addition, air emissions continue to be a priority for CEA members. In 2008, absolute air emissions of nitrogen oxides (NO_x), sulphur dioxide (SO₂), and carbon dioxide (CO₂) declined due to a combination of reasons, including increased generation from hydroelectric, nuclear, and other renewable sources and a decrease in fossil generation. The emissions

intensity of the fossil fleet either stabilized or showed modest improvement. While impending capital stock turnover and new technology developments will be key for reaching air emission mitigation goals, clear government policy directions are also required.

Social Performance

2008 marks the first full year during which social performance of CEA members was tracked. Social performance trends indicate that CEA members are performing well in several areas, including health and safety, engagement of Aboriginal peoples and stakeholder groups, and workplace diversity. For example, safety performance of CEA member utilities improved overall, except in regards to injury severities. The All Injury/Illness Frequency rate and Lost-Time Injury Frequency rate declined 4.3 percent and 10 percent respectively in 2008. Due to a few major incidents, however, the injury severity rate increased by 30 percent compared to 2007. CEA members take this issue seriously and will continue working to reduce injuries to employees, contractors, and the public at large.

Economic Performance

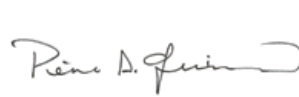
In 2008, CEA tracked economic performance of member utilities through indicators such as internal energy efficiency measures, demand side management, donations to registered charities, and investments in new infrastructure. While results show promise in all of these areas, members will need to continue to excel in order to

maintain and enhance performance going forward. Energy efficiency, for example, remains a major priority for the industry, both in its own operations and in programs offered to customers. Members continue to work with governments and other energy partners to explore best practices and deploy new technologies to maximize the potential of existing capacity.

Much has been accomplished in the last year and this report demonstrates how the industry is working together to improve its overall sustainable development performance. Nevertheless, there are significant challenges ahead as the industry strives to maintain a viable electricity future for Canadians. Demand for electricity continues to grow and companies are working to ensure this increasing demand is met with sustainability in mind.

Collectively, CEA member utilities are committed to continually improving overall sustainable development performance, and will investigate further measures to benchmark performance in all three areas of sustainability going forward. A sustainable electricity future for Canada is the common goal of CEA members and the customers they serve. Working together will ensure success.

Yours Sincerely,



Mr. Pierre A. Guimond
President & CEO
Canadian Electricity Association



Ms. Pat Youzwa
President & CEO, SaskPower
Chair, Sustainable Electricity

Overview of Sustainable Electricity

Launched February 19, 2009, Sustainable Electricity is an industry-wide sustainability initiative developed and implemented by the electric utility members of CEA. Sustainable Electricity is CEA's response to the challenge of creating a sustainable tomorrow. The program, implemented under the strategic guidance of the CEA Board of Directors, addresses the three components of sustainability — environment, society, and the economy — enabling the electricity industry to take a holistic approach to managing its impacts and securing its collective future.

The Sustainable Electricity program will further accelerate the long-term transformation of how CEA members do business. Many CEA member companies already engage in sustainable development practices; an industry-wide initiative helps solidify that commitment. CEA and its member utilities consider sustainable development to be so important that participation in this program is a condition of CEA membership. With Sustainable Electricity, CEA members have made a commitment to continuously improve their overall sustainable development performance and report progress in a transparent and timely manner.

Sustainable Electricity is comprised of the following four elements:

- 1) CEA utilities must commit to the Policy for Sustainable Development — Corporate Responsibility



▲ From Left to Right: Pierre Guimond, Pat Youzwa, Karl Smith and Mike Harcourt.

- 2) CEA utilities must report annually on environmental, social, and economic performance indicators
- 3) The program will be guided by an external Public Advisory Panel
- 4) Each utility must undergo independent external verification as part of its commitment to the program

Through the Sustainable Electricity program, CEA member companies will pursue practices and innovative business strategies and activities to meet the needs of members, Aboriginal peoples, stakeholders, and the communities in which they operate, while ensuring that they enhance the legacy they leave for future generations.

SUSTAINABLE ELECTRICITY ONLINE

The Sustainable Electricity program website will provide current information on the industry's overall sustainable development performance. Although printed copies of the Sustainable Electricity Annual Report will be made available to stakeholders, the report will also be available online in both official languages. While the printed report will provide a comprehensive overview of overall sustainable development performance, the website will provide additional program information about the industry's sustainable development performance on a regular basis. Visit online at: www.SustainableElectricity.ca



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Sustainable Electricity:

A Policy for Sustainable Development — Corporate Responsibility

The Canadian Electricity Association (CEA) and its member utilities are committed to sustainable development, which for us means **“pursuing innovative business strategies and activities that meet the needs of members, stakeholders and the communities in which we operate today, while protecting and enhancing the human and natural resources that will be needed in the future.”**

CEA member utilities will continue to improve their overall sustainable development performance by committing to the following principles:

Environment: Minimize the adverse environmental impacts of our facilities, operations and businesses

Stewardship and Biodiversity: Manage the environmental resources and ecosystems that we affect to prevent or minimize loss and support recovery

Climate Change: Manage greenhouse gas emissions to mitigate the impact of operations on climate change, while adapting to its effects

Health and Safety: Provide a safe and healthy workplace for our employees and contractors

Workplace: Support a fair, respectful and diverse workplace for our employees and contractors

Approved by:

Karl Smith
Chair, CEA Board of Directors

Communications and Engagement: Communicate with and engage our stakeholders in a transparent and timely manner

Aboriginal Relations: Communicate with and engage Aboriginal people in a manner that respects their culture and traditions

Economic Value: Provide economic benefits to shareholders, communities and regions in which we operate

Energy Efficiency: Produce, deliver and use electricity in an efficient manner while promoting conservation and demand side management

Security of Supply: Provide electricity to customers in a safe, reliable and cost effective manner to meet current and future needs

Participation in the Sustainable Electricity program is a condition of CEA membership. The CEA Sustainable Electricity program’s Executive Council Chair is accountable for monitoring and reporting progress in implementing this policy on behalf of the CEA Board of Directors.

The CEA member utilities are accountable for implementing this policy within their organizations.

February 19, 2009

Sustainable Electricity Public Advisory Panel

Panel Mandate

The core mandate of the Public Advisory Panel is to present an informed point of view on the economic, social, and environmental performance of the electricity industry in Canada vis à vis the principles and indicators enshrined in the Sustainable Electricity program. The panel also provides input on the overall implementation of the program and highlights new areas of focus to ensure that the program continues to evolve in line with stakeholder expectations.

Panel Members



**THE HONOURABLE
MIKE HARCOURT,
CHAIR**

Mike Harcourt is a former mayor of Vancouver and served as the 30th premier of British Columbia. Following his term as premier, he became chair of the Urban Sustainability Program of the National Roundtable on the Environment and the Economy, remaining there for eight years. He chaired the Prime Minister's External Advisory Committee on Cities and Communities from 2003–2006. Mr. Harcourt also served as a Federally Appointed Commissioner on the BC Treaty Commission from 2003–2007, facilitating treaty negotiations between government and BC First Nations.



**DR. FRANK
FRANTISAK**

Dr. Frank Frantisak is a former Sr. Vice President of Noranda Inc., and has extensive experience on sustainability issues. He is a former Director of the World Business Council on Sustainable Development, Canadian Pulp and Paper Association, and the Canadian Council for International Business. He was awarded the Order of Canada in 2002 for his work on the environment, and was recently awarded a Lifetime Achievement Award from Corporate Knights Magazine. He is also a recipient of The Golden Jubilee Medal on the 50th Anniversary of the accession of Her Majesty the Queen to the Throne.



**PROFESSOR
YVES
LE BOUTHILLIER**

Professor Bouthillier is a member of the Law Faculty at the University of Ottawa and specializes in international law, including international environmental law. Formerly Chair of the Law Commission of Canada, he is currently the Director of the IUCN Academy of Environmental Law, a worldwide network of more than 105 universities and other institutions pursuing research and teaching in environmental law. The Secretariat of the Academy is located at the University of Ottawa. He is co-editor of a book that will soon be released on climate change and developing countries.



MR. KEN OGILVIE

Mr. Ogilvie is a former Executive Director at Pollution Probe. He joined Pollution Probe in 1995 after serving for almost two years as the Executive Coordinator of the Ontario Round Table on Environment and Economy. He also worked for the Ontario Ministry of Environment and Energy, Environment Canada, and the Manitoba Department of Environment. He sits on various Boards and is currently the vice-chair of Sustainable Development Technology Canada and the Institute for Environmental Innovation. Mr. Ogilvie was a member of the National Round Table on the Environment and the Economy. He has a Bachelors of Applied Science (Civil Engineering), University of Waterloo, and a Masters of Business Administration, York University.



MR. DAVID OULTON

David Oulton is a former senior official in the Federal public service. He started his career with the Department of External Affairs, and served as an Assistant Deputy Minister at various Federal departments including Natural Resources Canada and Agriculture and Agri-Food Canada. Mr. Oulton also served as Head of the Federal Climate Change Secretariat in the 1990s, spearheading the development of Canada's approach to climate change. He has a B.A. in Economics from Bishop's University.



DR. JUDITH SAYERS

Dr. Judith Sayers is a member of the Hupacasath First Nation, where she served as Chief from 1995–2009. She is currently the Chief Negotiator for the Hupacasath First Nation and has been for 15 years. As Chief, she focused on capacity building, sustainable development and restoring and rehabilitating Hupacasath territory, including the development of a 6.5 MW run of the river hydro project and a community Energy Plan. Her educational background includes a business degree, a law degree from the University of British Columbia and an honorary Doctor of Laws from Queen's University.

LETTER FROM THE PUBLIC ADVISORY PANEL



▲ Hon. Mike Harcourt
Chair, Public Advisory Panel

Mr. Karl Smith

President & CEO, Fortis Alberta
Chair, Board of Directors
Canadian Electricity Association

Dear Mr. Smith,

As the Public Advisory Panel of the Sustainable Electricity program, we are pleased to provide our first letter of advice to the Board of Directors of the Canadian Electricity Association (CEA).

The Panel welcomed the launch of the Sustainable Electricity program in February 2009, which is a major step in the right direction for the electricity industry in Canada. We commend you for showing leadership and corporate responsibility and demonstrating the industry's willingness to protect the environment and shared ecosystems, to engage local communities and Aboriginal peoples, to provide economic value to local communities, and to respect workplace diversity — all important elements of any sustainable development program.

A well qualified Public Advisory Panel with diverse experience and background is assisting the industry in making sound business decisions that meet the test of sustainability. The role of the Panel is not only to be

critical, but also to be constructive in helping CEA to achieve the desired industry goals and objectives. The Panel provides advice to industry on the implementation of the Sustainable Electricity program and works to ensure that the program continues to evolve in line with expectations of stakeholders, Aboriginal peoples and the public at large. Working with member utilities of CEA, the Public Advisory Panel ensures that CEA members have independent advice on how to deliver on their commitment to sustainable development in a transparent manner.

This Annual Report provides a good overview of CEA member achievements in 2008. We are pleased to see proactive initiatives being taken to protect biodiversity and ecosystems, to reduce air emissions, to effectively engage stakeholders and Aboriginal peoples, coupled with solid performance on health and safety, and continuing investments in building new infrastructure to meet the demands of current and future generations. However, under the Sustainable Electricity program, CEA members now have an opportunity to raise the bar on their overall sustainable development performance during the next five years. We provide the following observations in that context.

Setting Targets and Benchmarking Performance: As part of the commitment to continuous improvement, we suggest that CEA member utilities collectively set performance targets and establish benchmarks on key issues, including, but not limited to, air pollutants, climate change, and the integration of emerging renewable energy. Without meaningful targets and benchmarks, it will be difficult for the Panel and CEA members to assess the rate of improvement and the achievement of overall sustainability objectives. We note that on many indicators, CEA member performance shows modest improvement from previous years. Benchmarks and targets will allow the electricity industry to continually improve and develop an innovative culture, which is essential for meeting the sustainable development goals of CEA members. We recognize that the target and benchmark setting exercise at the industry level cannot happen overnight, but we would propose that the CEA Board of Directors set the direction and initiate action prior to publishing the next annual report.

Addressing Climate Change Mitigation and Adaptation: Mitigating the industry's contribution to climate change while working to adapt to its impacts must be key priorities as part of the Sustainable Electricity program. The Federal government has significant responsibility on this issue and must provide guidance to industry in terms of a long-term framework. However, CEA members have a responsibility to develop a collective vision on how to achieve climate change mitigation and adaptation goals. As part of this vision, CEA members should develop a clear and concise industry plan of action to integrate emerging renewable and other alternative forms of energy into the energy mix. Any action plan should also include further measures on energy conservation, as well as opportunities for promoting technologies such as cleaner coal, new generation of nuclear, and more efficient gas. It is equally important that CEA members outline their objectives and action plans for adaptation, given the potential impact of low water

levels and increased occurrence of extreme weather events on electricity generation, transmission, and distribution infrastructure.

Infrastructure Renewal and Engagement of Stakeholders: CEA member companies have emphasized the need for new infrastructure development and we commend you for making this a key priority. This is a challenge that CEA member utilities must address in a sustainable manner to ensure Canadians retain and enhance their quality of life through efficient energy use and access to reliable and sustainable electricity. Part of the infrastructure renewal process requires CEA members to engage stakeholders to ensure that proposed projects reflect community views. Where Aboriginal communities are affected by proposed projects, partnerships are an effective option for engagement. The Panel recognizes the positive relationships that have already been developed with local communities and Aboriginal peoples by CEA members, and would like to see more proactive CEA and member company actions to promote public input to and greater acceptance of new electricity infrastructure projects.

It is also important to note that the electricity infrastructure built today will determine the environmental footprint of the electricity industry in the decades ahead. Most of Canada's future population growth will continue to be focused in and around our largest cities. Integrating energy systems at the community level, through more effective use of energy grids and increased use of diverse local energy sources — such as solar, district energy systems, waste heat utilization, and geothermal — has the potential to reduce the industry's overall environmental impact. This is already recognized through initiatives such as Quality Urban Energy Systems of Tomorrow (QUEST). These opportunities should be considered by CEA member utilities in order to help meet the energy needs of a growing economy while moving toward an integrated and sustainable electricity future.

Public Reporting and Transparency: A major sector in Canada, the electricity industry should be as transparent as possible regarding its activities. While we are pleased with the proactive disclosure of environmental, social, and economic initiatives being undertaken by CEA members, we would like to see even greater transparency in the future, including full disclosure of relevant data. The CEA should continue to identify and improve sustainable development indicators, including the creation of a Sustainable Development Management System (SD-MS) and a Sustainable Development Index (SDI) to track overall sustainable development performance. The Panel also recommends that CEA member utilities identify specific actions to improve performance pertaining to indicators that remain constant or show modest improvement.

Innovation Culture: Continuous improvement is likewise vital to the successful implementation of Sustainable Development — Corporate Responsibility (SD-CR). In the future, industry and business will face significant change in respect to every aspect of their activities.

Change means opportunity to do better for the shareholders, employees, communities and public at large. Corporations with an innovation culture will excel. Corporations with command/control or similar structures will lag behind. The Panel therefore recommends that the CEA undertake a study of the innovation culture change processes and select the most suitable one for implementation by its members.

The Panel wishes to acknowledge the work of CEA and member utilities in the development of the new Sustainable Electricity program. We look forward to meeting with the Executive Council for the Sustainable Electricity program and the CEA Board of Directors to discuss our recommendations and their implementation.

Yours sincerely,



Hon. Mike Harcourt
Chair, Public Advisory Panel