



# CALLING ALL FUNDERS: THE ROLE OF PHILANTHROPY IN FIGHTING CLIMATE CHANGE

This is the fourth in a series of CEGN briefing papers providing an overview of key Canadian environmental issues, intended to provide background information on the issue and serve as a starting point for discussion on strategic approaches and collaboration on environmental grantmaking.

Many thanks on behalf of CEGN to the members of the project's Review Committee who generously contributed their time and expertise and provided valuable comments and on this briefing paper: Bruce Lourie (Ivey Foundation), Tim Morris (Walter & Duncan Gordon Foundation), Amy Panek (Henry P. Kendall Foundation) and Mary Pickering (Toronto Atmospheric Fund).

CEGN would like to acknowledge the generous support of the Walter & Duncan Gordon Foundation, and the Ivey Foundation, which made possible the development of this briefing paper.



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## INTRODUCTION

Most grantmakers would agree that global warming is among the most severe challenges the world faces. Grantmakers understand the importance of the issue and know that something must be done, and quickly. But the reality is that climate and energy receive a very small proportion of environmental philanthropy in Canada, and environmental philanthropy is itself a very small fraction of the philanthropic total.

Part of the difficulty for many funders is that climate change falls outside of the perceived boundaries of their traditional funding areas and guidelines. Recently, however, grantmakers have been exploring how they can engage on climate change in recognition of the pervasive impacts that global warming will have on the environment and human lives. Despite this increasing interest, climate change is such a large and complex issue that it can be hard for philanthropists and foundations to know where to start.

This brief provides grantmakers in Canada with a simple overview of how they may participate effectively in the fight against global warming. It shows how climate change is already affecting existing funding areas, identifies opportunities for philanthropic action, suggests how funders can work individually and in collaboration to move the climate change agenda forward in Canada, and looks at how funders can orient their organizations internally to operate effectively in the climate era. The brief also includes an appendix with recommended resources for learning more and moving forward.



## GLOBAL WARMING: WHERE DO THINGS STAND?

The science on climate change is clear – a key conclusion of the International Panel on Climate Change (IPCC) is that human-caused warming of the climate system is unequivocal. In other words – global warming is real, it's happening, and we're causing it.

The build up of carbon dioxide and other greenhouse gases (GHGs) in the atmosphere is creating a heat-trapping blanket that is altering conditions across the planet. Millions of people around the world are threatened with life-or-death crises in the upcoming years and decades. Drought, food crises and evacuations of low-lying areas are already underway.

Here in Canada, the Arctic is melting and northern ecosystems are in turmoil. As climatologists predicted, the higher latitudes are the first to experience dramatic impacts but the federal government has identified global warming impacts in every region of Canada from coastal storms to prairie droughts, the pine beetle infestation chomping its way East from British Columbia and the drying of the Great Lakes. As we must keep reminding ourselves, these are only the very earliest impacts of global warming: much more warming is already inevitable and GHG emissions are still rising markedly.

Even more sobering, it now appears that climatologists grossly underestimated the scale and immediacy of the danger. Summer 2007 saw a melting of sea ice in the Arctic that occurred almost 100 years ahead of projections. Melting of polar and Greenland ice exceeds worst case scenarios of the IPCC as does acidification of the oceans. Emissions from fast growing economies such as China and India are outpacing even the high scenario projections. These and other indicators have prompted a re-evaluation of the projected pace of climate change. Many of the world's foremost climatologists are now warning that we may have already exceeded "safe" levels of GHGs.

All of this is widely known in scientific circles as well as by international experts and policy-makers and it is increasingly understood by the public. Yet despite the fact that we have got the knowledge and the technology to address climate change, meaningful action is lacking. Many countries – including Canada – do not have basic domestic programs in place to reduce emissions. The programs that do exist are primarily exhortative and voluntary. Both domestically and globally, actions-to-date have been negligible in their reduction of GHG emissions. There is an enormous gap between the scale of the problem and the scale of the response.

### MITIGATION AND ADAPTATION

Strategies to address climate change focus on mitigation (reducing GHG emissions) or adaptation (adjusting to the negative impacts of climate change, and taking advantage of the positive impacts). The consensus is that neither adaptation nor mitigation alone is enough – both are needed and together may significantly reduce the risks of climate change.



## FEDERAL, PROVINCIAL AND MUNICIPAL GOVERNMENTS AND CLIMATE CHANGE: AN OVERVIEW

### FEDERAL GOVERNMENT

Most observers agree that Canada's current approach to climate change is inadequate – lacking an effective regulatory framework and meaningful policies for GHG emission reductions. Criticisms include the government's failure to establish a price for carbon, its focus on intensity targets rather than targets for absolute reductions in emissions, its history of poorly targeted subsidies, a reliance on voluntary rather than mandatory programs, and an emphasis on questionably effective public education. Far from its traditional role as an international leader, Canada is now among the world's largest emitters of greenhouse gases on a per capita basis.

### PROVINCIAL/TERRITORIAL GOVERNMENTS

Provinces and territories are taking the lead on climate change – notably Quebec, British Columbia and Manitoba. For example, in October 2007 Quebec became the first province or state in North America to charge a carbon tax – a modest tax on energy producers, distributors and refiners. In February 2008 BC became the first North American province or state to announce a comprehensive carbon tax (in its 2008 Budget). BC and Manitoba, along with five western US states, are members of the Western Climate Initiative (WCI), which is developing a regional cap and trade system for large industrial emitters. As part of its WCI involvement, BC will institute a hard cap on emissions – and Manitoba is expected to set stronger targets as well. Saskatchewan, Ontario and Quebec are official observers of the process. Quebec and the Atlantic Provinces are active partners in the Conference of New England Governors and Eastern Canadian Premiers Climate Change Action Plan, which aims to reduce GHG emissions by 10 percent under 1990 levels by 2020. Both BC and Manitoba have committed to adopting the California tailpipe emissions standards. Manitoba has recently proposed new legislation that requires it to meet Canada's Kyoto target for 2012 and set long-term goals for 2020 and 2025.

### MUNICIPAL GOVERNMENTS

Municipal governments have also proven to be leaders on climate action. Over 150 municipalities, representing a majority of Canadians, have joined Partners for Climate Protection (PCP) – committing to a performance-based program to reduce GHGs in municipal operations by specific targets. PCP is a partnership between the Federation of Canadian Municipalities and Local Governments for Sustainability (ICLEI). Municipal initiatives include investment in building energy efficiency retrofits, water conservation, landfill gas capture, fleet management, public transit, waste reduction, renewable energy generation and urban planning. Participating municipalities range from initiatives taken in large cities such as the Toronto Atmospheric Fund to small towns undertaking ambitious programs to become entirely carbon neutral such as Eden Mills, Ontario.



## THE ROLE OF PHILANTHROPY

So what does this mean for philanthropy in Canada? Philanthropy can play a meaningful role in helping Canada move forward to address climate change. But to do so, we need to break the silo of global warming as an “energy issue” or even as an “environmental issue.” Global warming impacts everything. Whether we are water funders, health funders, forest funders, biodiversity/conservation funders, community funders, children and youth funders, agriculture and food funders, international development funders, northern funders – climate change is our issue too as it will radically affect our ability to achieve our goals in each of these areas. Indeed, global warming is a quintessential “environmental” issue in the original sense of environment being foundational to all life on Earth.

Grantmakers have many options for engagement: from revising ongoing funding strategies in response to the implications of climate change for existing funding areas; prioritizing support to organizations that focus on the needed global warming policies and strategies; supporting “breakthrough” efforts at universities; to considering the potential role of philanthropists as change agents in the policy arena.



## CALLING ALL FUNDERS: WHY GLOBAL WARMING IS ALREADY YOUR ISSUE

This section shows how climate change is already impacting funders' missions across a wide range of issue areas. We've included examples of impacts on some of the key funding areas. See Appendix A for a list of resources that provide further detail on sector-specific impacts of climate change in Canada.

Please note that the brief does not define impacts for energy and transportation funders as the links with climate change and this sector are clear, these grantmakers are already heavily invested in funding climate change solutions and good resources exist to help funders engage effectively in this sector. (See Appendix A, especially *Taking Action on Climate Change* by the Hewlett Foundation.)

### WATER FUNDERS

Impacts:

- The Prairie Provinces are already suffering serious water scarcity. New allocations of water from the Bow River have been capped due to lack of water and the Athabasca River's summer flows have declined 30 percent since 1970. Glaciers and snow packs that serve as the Prairies' "water towers" are retreating.
- The Great Lakes are already drying – Lake Superior reached a record low in 2007 and Lake Huron has been near record lows for several years.
- Canada can expect more extreme weather events, including longer droughts and more intense flooding.
- Rivers and lake systems will be fundamentally altered through changes to runoff timing and higher evaporation rates. In turn, these impacts will impair drinking water supplies, fisheries, irrigation, hydroelectricity production and other freshwater services.
- Global warming impacts combined with greater demands on water will generate increasing conflicts between various uses and values (e.g. urban needs vs. habitat vs. irrigation vs. hydroelectricity).
- Energy production has a major impact on water resources. For example, the oil sands are having major impacts on the Athabasca watershed due to large-scale withdrawals and water pollution in the form of tailings ponds.



# CALLING ALL FUNDERS: WHY GLOBAL WARMING IS ALREADY YOUR ISSUE (CON'D)

## SMART GROWTH AND URBAN ISSUES FUNDERS

Impacts:

- Our poorly designed urban areas (notably sprawl with its attendant longer commutes, reduced greenspace and higher energy consumption) are enormous sources of greenhouse gas emissions and simultaneously the locus of many important solutions.
- Many classic urban issues (e.g. transportation, air pollution, sprawl, infrastructure, etc.) fit clearly within a global warming frame and solutions in these areas are among the most important mitigation measures.
- Since cities are where most people live they have significant leverage over lifestyle and behavioural change – and so present an opportunity for positive impact.

## BIODIVERSITY/TERRESTRIAL ECOSYSTEM PROTECTION FUNDERS

Impacts:

- Canada has begun to undergo dramatic ecosystem changes. Forested areas are turning to savannah, permafrost is melting. Ecosystems are migrating North (and to higher altitudes where possible) at an accelerating rate. Even conservative analyses project that fully 45 percent of species habitat is projected to be lost in the coming decades.
- Climate-induced habitat changes will cause widespread species extinction, migration and behaviour changes. For example, most plant species will not be able to migrate fast enough to keep up with these ecosystem shifts.
- Canada has enormous undeveloped storehouses of biological carbon in trees, soils, peats and permafrost that the planet cannot afford to see emitted.

## FOREST FUNDERS

Impacts:

- Canada's forests are already suffering severe impacts. The pine beetle infestation in Western Canada may be the single largest economic disaster to have occurred in Canada with a direct link to global warming. The infestation has already killed 50 percent of BC's mature pine trees, is predicted to kill 80 percent by 2013 and has begun its march eastward over the Rockies.
- Forests are expected to continue to suffer increased impacts from droughts, wildfires, disease outbreaks, extreme weather and ecosystem migration. Boreal forest fires have increased from 1 million to over 3 million hectares in the past decade.
- Forests are a major carbon storehouse – it's estimated that forests store half of the world's carbon (and the boreal forest alone stores 23 percent). While deforestation is a major contributor to carbon dioxide emissions globally, in Canada the largest potential source of emissions is the disturbance of forested peat lands and hydrological changes (higher water table, flooding, loss of wetlands).

## CALLING ALL FUNDERS: WHY GLOBAL WARMING IS ALREADY YOUR ISSUE (CON'D)

### COASTAL/MARINE FUNDERS

Impacts:

- Coastal areas and low-lying deltas face impacts due to sea level rise, more frequent and intense storms, storm-surge flooding and coastal erosion – affecting coastal communities, ecosystems and industries.
- Carbon is being absorbed by the oceans resulting in “ocean acidification” and this is progressing more rapidly than worst-case scenarios had projected. Acidification is of particular concern as a positive feedback loop – it not only hurts sea life but it reduces the ocean’s ability to continue to absorb carbon thereby increasing atmospheric levels of GHGs.

### AGRICULTURE AND FOOD SYSTEM FUNDERS

Impacts:

- Agriculture is very vulnerable to climatic changes. Of particular concern is the projected trend to long-term drought situations across the prairies and indeed throughout the Great Plains of North America.
- Just as all ecosystems are migrating, growing zones are moving north. Some experts believe Canadian agriculture will be positively affected by longer growing seasons and a larger area conducive to agriculture. Others argue that water scarcity and the migration to lower quality soils will offset gains.
- Agriculture itself is increasingly recognized as a source of greenhouse gas emissions as a result of tilling and livestock emissions.
- Food production is increasingly in conflict with climate mitigation strategies most notably the use of corn in ethanol production, which diverts land and crops from food production.

## CALLING ALL FUNDERS: WHY GLOBAL WARMING IS ALREADY YOUR ISSUE (CON'D)

### HEALTH FUNDERS

Impacts:

- Increased illness and death from extreme weather are predicted; heat waves are of particular concern. Heat stress is already a serious health concern in Canada and heat waves have proven deadly to thousands in Europe with disproportionate impact on the elderly and other vulnerable populations.
- Impacts from other types of extreme weather such as ice storms are also public health concerns, especially for vulnerable populations and the socially isolated.
- The indirect effects of a shifting climate include the introduction of diseases new to Canada or the extension of the range of diseases such as West Nile virus.
- Global warming is worsening air quality leading to increased rates of asthma, other respiratory and cardiovascular diseases.
- Diminution in quality and quantity of freshwater supplies may exacerbate problems and create disease vectors/agents in impacted areas.

### COMMUNITY FUNDERS

Impacts:

- The impacts of global warming come to bear on communities at several levels. Physical impacts such as heat waves, reduced water supplies, infrastructure, and others covered above are obvious examples.
- Less obvious are the psychological and social impacts to quality of life. People are becoming increasingly apprehensive of the looming impacts yet feel alone and incapable of affecting the situation.

## CALLING ALL FUNDERS: WHY GLOBAL WARMING IS ALREADY YOUR ISSUE (CON'D)

### EDUCATION, CHILDREN AND YOUTH FUNDERS

Impacts:

- The people most affected by climate change will be our children, grandchildren and the generations to come – they will have to cope with the full consequences of climate change impacts.
- Children are considered to be especially vulnerable to the health impacts of climate change.
- Educators and child psychologists are increasingly worried about the psychological stress on young people exposed to dire warnings and with little power to affect the situation. The psychological dynamic is compared to last century's concern over nuclear war but with even less scope for individual action against "the climate" or "the weather."

### SPORTS AND RECREATION FUNDERS

Impacts:

- Global warming is already causing serious restrictions for professional and amateur outdoor winter sports. Ski hills are increasingly reliant on snow-making and non-winter sports. Summer heat and droughts will also result in restrictions. Impacts will be economic, as well as reduced recreation/fitness opportunities.
- Nature-based tourism (park visitors, fishing, etc.) will suffer from global warming impacts on freshwater, marine and terrestrial ecosystems as noted above. However, some experts at Natural Resources Canada anticipate that a gentle warming would have positive impacts on Canadian tourism since the country could become a more desirable destination.

## CALLING ALL FUNDERS: WHY GLOBAL WARMING IS ALREADY YOUR ISSUE (CON'D)

### INTERNATIONAL DEVELOPMENT FUNDERS

#### Impacts:

- Climate change-induced environmental stress and food and water shortages may lead to increased political, social and territorial conflicts, and de-stablizing population movements.
- For example, global food supplies are endangered by global warming and climate-driven food riots over costs and shortages have begun in many parts of the globe.
- As noted, food production is increasingly in conflict with climate mitigation strategies most notably the use of corn in ethanol production, which diverts land and crops from food production.
- Expected increases in the frequency of disasters related to extreme climate events will increase the need for disaster relief.

### NORTHERN AND INDIGENOUS PEOPLES FUNDERS

#### Impacts:

- Rates of warming in Arctic regions have been, and are projected to be, the greatest in the world.
- Access to traditional food supplies is already being affected by ecosystem effects and changes in snow cover and sea-ice. Traditional ways of life will be severely impacted.
- Community infrastructure maintenance and design is being affected by permafrost degradation and coastal erosion.
- Increased navigability of Arctic marine waters will create both economic opportunities and challenges to security, culture and the environment. The expansion of land-based networks will present similar opportunities and challenges. For example, mining and other developments are expected to increase due to easier/more cost-effective access and transportation.
- As pressure on existing sources increase, the development of northern oil and gas will cause direct ecosystem degradation.



## NEEDS AND OPPORTUNITIES BY SECTOR

Much more detailed work needs to be done to identify the key needs and priorities for action on climate change across the various sectors. As a starting point – here's a sampling of needs and opportunity areas for grantmakers.

### GENERAL

- Grantmakers can use a “climate change filter” by giving priority to projects that integrate climate change and/or requesting that prospective recipients articulate how they are adapting their projects and strategies to account for climate change.

### WATER

- Grantmakers can support programs that help communities better prepare for climate change impacts on water such as planning for more frequent and intense droughts and floods, and mechanisms for managing increasing competition among water users.
- Support strategies that integrate mitigation and adaptation into freshwater management (called “mainstreaming”). For example, progressive water conservation programs and policies can be viewed as both an adaptation to declining water supplies and a mitigation strategy that reduces the energy required to deliver water.
- Grantmakers can support programs that ensure that energy developments consider freshwater ecosystems – such as caps on water use in the oil sands, or accounting for the impacts of water use in ethanol production.

### SMART GROWTH AND URBAN ISSUES

- Grantmakers can support programs to advance changes in the areas of public transit, urban form, land use planning, waste management and low-carbon distributed energy systems.
- Support activities that promote green building design, construction, renovation and operations.

### BIODIVERSITY/TERRESTRIAL ECOSYSTEM PROTECTION

- Continue to support existing conservation work, as it will help address adaptation to climate change – for example habitat corridors, species at risk recovery, control of invasive species, protecting habitat from oil and gas development, etc.
- Grantmakers can ask grantee organizations how they will account/plan for climate change in their habitat restoration and other biodiversity projects.
- Support research into new ways to support resilient species and ecosystems.

## NEEDS AND OPPORTUNITIES BY SECTOR (con'd)

### FORESTS

- Canada's forests and soils are globally important carbon storehouses. Grantmakers can support programs to ensure that large intact and undisturbed forest ecosystems such as the Boreal forest become largely off limits to logging and other industrial degradation.
- In managed areas, there is very large synergy between forest management practices that maintain biodiversity and those needed to maintain carbon stores. Funders can support grantees that are pursuing changes to industrial practices and policies on those fronts.
- Grantmakers can support policy research in order to guide the wood-based biomass industry towards benign rather than destructive forest management practices. Wood-based biomass is a growing industry in parts of the country and has proven to be an integral part of emissions reduction strategies in countries like Sweden.
- Canada plays a critical international role in defining rules and methodologies in the area referred to as "land use, land use change and forestry" – or LULUCF. As a result, there are important opportunities to support Canadian NGO's that work on the establishment of domestic and international forest and land use climate policies.

### COASTAL/MARINE

- Grantmakers can support adaptation strategies that focus on the need for conservation management to maintain fish and shellfish stocks that will come under increasing stress from global warming.
- Similarly, where aquatic biota are under threat from agricultural run-off and other human impacts (e.g. causing "dead zones") grantmakers can support activities relieving those ecosystem stressors.
- Grant making can encourage and support community groups to insist coastal cities' institutions and planning processes begin to incorporate global warming scenarios using risk-management methods. There are already examples of community organizations catalyzing such action by local governments.

### AGRICULTURE AND FOOD

- Important mitigation strategies include supporting grantees focused on policies and practices that minimize soil disturbance and petroleum-based fertilizers.
- The issue of GHG emissions resulting from food production would benefit from much more public education and policy attention.
- Funders can support public debate and policy addressing global warming's impacts on food supply and agriculture and the resulting human consequences – including the issue of biofuel agriculture displacing food.
- Funders can support programs focused on regional food security and protective regional zoning for farmland.

## NEEDS AND OPPORTUNITIES BY SECTOR (con'd)

### PUBLIC HEALTH

- Funders can support positive partnerships between environmental and health agencies focused on the overlapping issues that are causes of both global warming and human health problems – most notably fossil fuel use in energy and transportation.
- Support grantees' capacity to use education and mobilization strategically: health care professionals are powerful messengers and rank with climate scientists as the most credible advocates to deliver public messages about hazards and policy solutions.
- Funders can support strategies that involve and reflect the needs of vulnerable communities. Climate-vulnerable populations such as seniors, or low income communities often do not have the capacity to advocate for their interests in energy or disaster preparedness decisions.
- Adaptation has led to a new field of philanthropy and environmental programming known as resilience funding. In this arena, grantmakers and grantees identify opportunities and processes for building resilience into social, public health and disaster preparedness systems. There are already case studies of local organizations in Canada successfully catalyzing changes to disaster response plans. Two examples are Pointe-du-Chene, NB and Annapolis Royal, NS.

### COMMUNITIES

- Philanthropy that is focused on specific regions or communities has very important opportunities to generate citizen engagement oriented towards both individual lifestyle changes and collective action on public policy. Bottom-up or grassroots mobilization is key to achieving breakthroughs in broad public policy. The Vancouver-based VTACC (Voters Taking Action on Climate Change) is an interesting example of a neighbourhood organization that has successfully bridged individuals into public policy and has already had an impact as high as the provincial level.
- Public opinion research shows that people are very worried about global warming but feel alone. Funders can support organizations that connect concerned citizens in their neighbourhoods and communities either through programs delivered by existing NGOs or newly emerging neighbourhood climate organizations.
- Community foundations are ideally suited to bringing together non-traditional environmentalists and local opinion-leaders from faith, business and other sectors. Communities have been successful at convening these actors to focus on what the community can do (e.g. municipal action plans to become carbon neutral such as Eden Mills). Increasingly communities will need to develop community-based adaptation responses targeting regional threats or focusing on system resiliency.



## NEEDS AND OPPORTUNITIES BY SECTOR (con'd)

### EDUCATION, CHILDREN AND YOUTH

- Fund curriculum development and environmental education initiatives about global warming that integrate climate science with solutions will engage youth and support action.
- Green school programs are an important means to address the impacts of schools on climate change – transportation to schools, school buildings (energy, water, and materials), and consumption (paper, food) – as well as making the whole school a learning environment about climate change solutions.
- As with adult programming, it is important that funders support programs in which youth are directed towards engagement as future citizens as opposed to focusing only on behavioural and lifestyle changes.

### RECREATION AND TOURISM

- Recreation and tourism values lend weight to some adaptation strategies covered above such as migration zones, corridors and other expansions for protected areas (e.g. National Parks).
- Funders focused on recreation may want to consider supporting educational programs for health impacts such as summer heat waves.

### INTERNATIONAL DEVELOPMENT

- Support the integration of climate change considerations into development priorities and planning.
- Support adaptation measures in the global south including planning for emergency response. Reducing vulnerability to climate change (e.g. through policy measures supporting small scale farmers, etc.).
- Support public debate on the issue of biofuel agriculture displacing. Cellulosic ethanol could be non-competitive with food production, but this will require new policies and practices to bring it to commercial scale.

### NORTHERN AND INDIGENOUS PEOPLES

- Support the engagement of Aboriginal peoples and northern communities in Canada's climate change strategy, and in community climate change planning.
- Support work that builds the knowledge, capacity and tools to adapt to climate change impacts among Aboriginal peoples and northern communities.



## WHAT ELSE NEEDS TO BE DONE? ENGAGING ON PUBLIC POLICY

Taking action to address climate change within individual funding areas is helpful, but it is not enough. Most grantmakers and analysts already active in the climate change area agree that a focus on policy reform is essential for real progress on global warming, and that broader strategic grantmaker engagement is needed to move the climate issue forward at the public policy level in Canada.

Advancing policy in Canada has enormous potential for grantmakers interested in making a difference on climate change. And, while more work needs to be done by Canadian funders in thinking and talking about ways they can appropriately and effectively engage in policy on climate change, there are a few clear pathways to move forward. Here are some examples:

- First and foremost there is a clear consensus on the need to put a price on carbon using carbon taxes and/or a cap and trade system. Organizations as disparate as the Conference Board of Canada, the Canadian Association of Petroleum Producers, and Canada's major environmental organizations are generally agreed on the need for a price on carbon, along with a suite of related policies such as those itemized by the National Round Table on the Environment and the Economy (NRTEE).
- There is also broad consensus on the need for regulated emissions standards for vehicles, "green" building codes, efficiency standards for industrial and consumer products, and policy targeting the largest emitters and sectors (including conventional coal). Other promising policies include "Renewable Portfolio Standards" that require utilities to increase electricity supply from renewable energy sources, and "feed-in tariffs" that guarantee renewable energy producers a fixed price in order to encourage investment in green energy.
- Technology development and deployment are key needs and Canada is well-positioned to pursue technological breakthroughs in areas such as carbon sequestration, energy storage and clean energy production. Funders can support programs that spur the advancement of emissions-free energy sources such as wind and solar, so they are adopted more widely and quickly. Carbon capture and sequestration is a technology of particular relevance to Canada that deserves a critical push from philanthropy so that it is a proven approach. Funders can support colleges and universities to play their role in mobilizing research and development.
- Grantmakers can support public policy research and refinements. Work at the federal level is the most necessary for setting economic policy and cooperating with global treaties but, as noted, provinces have been active leaders and so are important policy players as well. Grantmaking can give priority to programs with clear pathways to policy wins at the national and provincial levels (i.e. those that demonstrate clear understanding of the real obstacles and those decision-makers with authority to resolve them).

## WHAT ELSE NEEDS TO BE DONE? ENGAGING ON PUBLIC POLICY (con'd)

- Much of the communications on climate change remains focused on behaviour change or what Canadians can do as individuals, householders and consumers. In one school of thought, this individual behaviour change approach is a way to connect people to climate change as an actionable issue and is also an effective first step towards engaging citizens in seeking broader policy change. Others feel that focusing communications on individual behaviour change is already overemphasized and shifts responsibility away from major emitters and deflects pressure on governments to regulate. Both schools of thought, however, see the need to move citizens beyond individual behaviour change to support of policy goals. There are good examples of well designed programs that both engage individuals and catalyze civil society: The Big Ask in the U.K. was a specific, relatively short-term effort; 1Sky in the United States is seeking to activate a similar process in a more sustained fashion.
- The public needs to better understand the solutions to climate change in order to act themselves. Furthermore, it is not clear to most Canadians what the government ought to be doing. In response, funders can support strategic educational programs and work with grantee organizations to build their skills in communications. Grantmakers can also support organizations that are effectively translating policy into common language and popularizing the issue through cross-sectoral organizing and opinion-leaders in all regions of the country.
- Canada's largest and wealthiest industries are among the key players in the field of climate change policy – notably, the oil and gas industry and vehicle manufacturers. Funders can support efforts to build civil society capacity to participate in the public policy process on a more equal basis with industrial interests that have much larger budgets and more direct access to the ear of government. Building effective citizen engagement requires investments at the person-to-person communication level, backed up by systematic programming and modern data management. It is expensive, labour intensive and rarely sexy or high-profile. Canadian ENGOs generally lack experience in this field and will likely require collaborative processes with grantmakers to prioritize this kind of work and then concerted support to build capacity.
- The oil sands are a focal point of discussion on climate change in Canada. According to the Pembina Institute, the oil sands are the single largest contributor to greenhouse gas emissions growth in Canada – with additional environmental impacts on forests, air, land and water. However, industry and governments see the oil sands as an important source of crude oil and a key contributor to economic growth. Grantmakers can engage in supporting debate and action dealing with the issues raised by the oil sands.



# HOW DO WE GET THERE? INTERNAL CHANGE PROCESS WITHIN FOUNDATIONS

## 1. START WITH SIMPLE EDUCATION

Several members of CEGN have undertaken or are in the process of undertaking organizational change processes around climate change. Participants agree that catalyzing internal conversations is an important early step. This can be achieved by setting up briefings for board and staff members. Most effective is to do these using a combination of respected external experts and internal expertise. Organizational leaders then use meetings and team building moments to sustain a living dialogue.

## 2. ADAPT EXISTING FUNDING

Since climate change impacts so many funding areas, philanthropy can almost immediately incorporate global warming as an element of their existing grant making. For example, funders can include global warming within the grant making criteria for existing funding areas. Decision-makers can use a “filter” approach in which projects and potential recipients are screened to see which best advance climate action. In some cases work in an issue area can be adapted as a way for the organization to join the collective effort to mitigate global warming such as biodiversity or water funders supporting programs on the oil sands. In other cases global warming impacts existing efforts and funders can focus on adaptation.

The Ivey Foundation is successfully integrating global warming into its existing grant making on forest conservation. Highlights of the initiative include concerted briefings and discussions by board and staff members; commissioning briefs by external advisors; initiating and funding learning processes among grantees; steadily integrating global warming threats and strategies into grant making criteria; hosting and funding conferences that bring together opinion-leaders and environmental professionals to focus explicitly on forest-climate interactions; funding projects that pursue strategic opportunities arising from the forest-climate nexus such as funding representatives to gain expertise and then lobby international negotiations, or funding NGOs to produce and publicize reports on the climate impact of logging in B.C. and Ontario.

## 3. INTEGRATION INTO STRATEGIC PLANNING AND ORGANIZATIONAL PRIORITIES

Foundations may want to prioritize global warming action as a strategic objective in its own right, independently of existing funding areas. This could mean simply identifying climate change as one specific priority for funding or it could even mean making climate change your sole focus. In order to accomplish such reorientation, organizations typically use tried and true strategic planning processes which begin with a situation analysis and then facilitate the organization finding its best pathways to address the threats.

## HOW DO WE GET THERE? INTERNAL CHANGE PROCESS WITHIN FOUNDATIONS (CON'D)

The Henry P. Kendall Foundation has completed a strategic reorientation in which global warming emerged as the foundation's core mandate. Key elements of this internal process are the importance of internal champions; the systematic education of board and staff; the use of professional process facilitation; the use of pre-existing planning processes and timely leadership initiating customized strategic development processes.

### 4. ENDOWMENT MANAGEMENT

In addition to grant making, philanthropists can leverage their endowments to catalyze action on climate change. This leveraging can take place along a spectrum from socially responsible investment in low carbon funds that “screen” their holdings based on their global warming impact to shareholder activism to catalyze emissions reductions and the development of products and practices that decarbonize the economy.

### 5. BECOMING A CARBON-FRIENDLY ORGANIZATION

Funding organizations can take steps towards calculating and reducing their own carbon footprint that may result in actions such as reducing travel where possible, offsetting the carbon from their own operations or buying from renewable energy suppliers. Grantmakers should be leaders that not only make voluntary behavioural changes but also push for necessary public policy changes. However when an organization takes some tangible climate actions and encourages others (grantees and fellow funders) it can have a strong influence in overall organizational alignment toward addressing global warming.

### 6. CATALYZING CHANGE AND CONNECTIONS AMONG GRANTEES

Philanthropy can play an important role in catalyzing and encouraging strategic planning by grantees to orient their organizations to the climate era. Many of the principles outlined in this brief can be adapted for grantees. Incorporating global warming as an element of existing work, steadily building towards a focus on policy, and pursuing the internal change processes will reorient grantees to operate more effectively in the climate era.



## HOW DO WE GET THERE? INTERNAL CHANGE PROCESS WITHIN FOUNDATIONS (CON'D)

### 7. ALLIANCE BUILDING

Even if wildly successful, no individual foundations are large enough to “solve” Canada’s contribution to global warming or blunt its impacts. But it is possible for well-coordinated strategic efforts to have a major influence on public support for policy action and in assisting governments with the adoption of meaningful policy measures. Foundations can address this problem by acting in consortia to increase the available funding and by creating vehicles dedicated to Canadian climate funding to which non-traditional environmental funders can contribute.

Funders may need to join up with other funders, influential organizations, and individuals to develop new streams of funding and support policy advocacy. These can be relatively informal coalitions to support a particular initiative; campaigns to build dedicated funds such as those at Tides Canada Foundation; or more formal endeavours such as the US-based Energy Foundation, which is a collective effort of traditional foundations and individuals focused entirely on regrating towards renewable energy and energy efficiency.

## CONCLUSION

Global warming can seem overwhelming, and for good reason. But the upside is that there are so many entry points for grantmakers to begin to make a difference, to scale up efforts to mitigate global warming and to prepare Canadian society to deal with the unavoidable impacts. This brief is intended as a starting point for funders for discussion and action that can move Canada from a laggard to a leader on this most important issue of our age. As Canadian environmental funders increasingly engage to support climate mitigation and adaptation, other funders will join the effort. By learning from one another and acting together where possible, Canadian environmental grantmakers can provide leadership and direction for philanthropy of all kinds, as it awakens to the threat we all face from global warming.

## APPENDIX A. SELECTED RESOURCES

### CLIMATE CHANGE: WHERE DO THINGS STAND?

The most authoritative scientific reports are those prepared by the Intergovernmental Panel on Climate Change (IPCC) every 5 years. The most recent (*Fourth Assessment Report or AR4*) was released in 2007 and consists of 3 reports by specific working groups and a *Synthesis Report*. The most accessible document is the *Synthesis Report: Summary for Policy Makers*

You can find all the reports at:  
<http://www.ipcc.ch/>

The *Synthesis Report's Summary for Policy Makers* is at:  
[http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4\\_syr\\_spm.pdf](http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr_spm.pdf)

The most authoritative study on the economics of climate change is the report by former World Bank Chief Economist Sir Nicholas Stern, which was published by the British Parliament. Titled *Stern Review on the Economics of Climate Change*, you can find it at:  
[http://www.hm-treasury.gov.uk/independent\\_reviews/stern\\_review\\_economics\\_climate\\_change/stern\\_review\\_report.cfm](http://www.hm-treasury.gov.uk/independent_reviews/stern_review_economics_climate_change/stern_review_report.cfm)

### THINGS ARE WORSE THAN WE REALIZED

A comprehensive survey of the science that warming is outpacing the IPCC projections is *Climate Code Red*:  
<http://www.climatecodedred.net/>

A more technical paper looking at the need to re-evaluate “safe” GHG levels by NASA scientist James Hansen and others:  
[http://www.columbia.edu/~jeh1/2008/TargetCO2\\_20080331.pdf](http://www.columbia.edu/~jeh1/2008/TargetCO2_20080331.pdf)

A survey of climate change’s intensification of burgeoning global crises from a leading Canadian public intellectual:  
Homer-Dixon, T. 2006, *The Upside of Down: Catastrophe, Creativity, and the Renewal of Civilization*. Knopf Canada.

### GENERAL RESOURCES FOR FUNDERS ON CLIMATE CHANGE

A good quick snapshot of options for grantmakers:  
Rockefeller Philanthropy Advisors Winter 2007. *Linkages: Climate Change*  
<http://www.rockpa.org/wp-content/uploads/2007/12/climate-change.pdf>

*Alliance Magazine*, September 2007. *Focus on... Tackling climate change*. This issue has a special section on climate change with a variety of articles intended to “sound an urgent alarm” for philanthropy to engage directly with global warming. Available to subscribers at: <http://www.alliancemagazine.org>

*Design to Win: Philanthropy's role in the fight against global warming* (Hewlett Foundation et al)  
<http://www.hewlett.org/Programs/Environment/Energy/Publications/Design+to+Win.htm>



## APPENDIX A. SELECTED RESOURCES (CON'D)

The Hewlett Foundation has mapped out the specific energy/transportation policies needed to address climate change and the role philanthropists can play (including in energy efficiency, renewables, coal, cars, fuels for transportation and technology).

*Taking Action on Climate Change: A Guide for Grantmakers*, December 2007

[http://www.hewlett.org/NR/rdonlyres/5DB1D7A5-0ADA-4575-90DC-6A3B3127725F/0/Hewlett\\_Climate\\_Change\\_Guide\\_for\\_Grantmakers.pdf](http://www.hewlett.org/NR/rdonlyres/5DB1D7A5-0ADA-4575-90DC-6A3B3127725F/0/Hewlett_Climate_Change_Guide_for_Grantmakers.pdf)

### PUBLIC POLICY SOLUTIONS TO GLOBAL WARMING

By the National Round Table on Environment and Economy

*Getting to 2050: Canada's Transition to a Low-emission Future*

<http://www.nrtee-trnee.ca/eng/publications/getting-to-2050/Getting-to-2050-low-res-eng.pdf>

From CEGN's Thoughtleader Series:

Sarner, Mark. 2007. *Winning The Race Against Time: How to make environmental grantmaking work better right now.* CEGN Thoughtleader Series #5

[http://www.cegn.org/thought\\_main.html](http://www.cegn.org/thought_main.html)

and

Heintzman, Andrew. 2006. *New Strategies to Confront Climate Change.* CEGN Thoughtleader Series.

[http://www.cegn.org/thought\\_main.html](http://www.cegn.org/thought_main.html)

This book presents the authors' analysis of the failure of Canadian climate policy and public education efforts to-date and the kinds of policies they feel are needed to tackle climate change:

Simpson, J; Jaccard, M., Rivers. N., 2007. *Hot Air: Meeting Canada's Climate Change Challenge.*

Conference Board of Canada's briefing paper

*Use Green Taxes and Market Instruments to Reduce Greenhouse Gas Emissions*, February 2008

<http://www.conferenceboard.ca/documents.asp?rnext=2426>

A "report card" on the actions of the Canadian, provincial and municipal governments on climate change

*Lead, Follow or Get Out of the Way: Sierra Club of Canada's Kyoto Report Card 2008* (Sierra Club of Canada, February 2008) <http://www.sierraclub.ca/national/kyoto/kyoto-report-card-2008.pdf>

### COMMUNICATING GLOBAL WARMING

Moser, S.C. and Dilling, L., 2007. *Creating a Climate For Change: Communicating Climate Change and Facilitating Social Change.* Cambridge University Press.

## APPENDIX A. SELECTED RESOURCES (CON'D)

### IMPACTS OF CLIMATE CHANGE IN CANADA

#### GENERAL:

Natural Resources Canada has recently completed a major survey of impacts to in *From Impacts to Adaptation*, 2008. It is organized by region, and within regions by sector.

[http://adaptation.nrcan.gc.ca/assess/2007/index\\_e.php](http://adaptation.nrcan.gc.ca/assess/2007/index_e.php)

A brief summary of projected impacts can be found on the David Suzuki Foundation's website at:  
[http://www.davidsuzuki.org/climate\\_change/impacts/](http://www.davidsuzuki.org/climate_change/impacts/)

Field, CB, Mortsch, L.D et al. *North America. Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge University Press, Cambridge UK, 617-652)  
An analysis of the impacts of climate change in North America prepared as part of the IPCC report process.

<http://www.gtp89.dial.pipex.com/14.pdf>

#### WATER:

*Changing the Flow: A Blueprint for Federal Action on Freshwater* (2007) The Gordon Water Group of Concerned Scientists and Citizens.

<http://www.gordonwatergroup.ca/>

#### HEALTH:

*Climate Change is a Health Problem*, by Grantmakers in Health:

[http://www.gih.org/usr\\_doc/Climate\\_Health\\_Is\\_A\\_Problem\\_12-10-07.pdf](http://www.gih.org/usr_doc/Climate_Health_Is_A_Problem_12-10-07.pdf)

#### BIODIVERSITY:

*Biodiversity and Climate Change* (UNEP Secretariat of the Convention on Biological Diversity, 2007)

<http://www.cbd.int/doc/bioday/2007/ubd-2007-booklet-01-en.pdf>

#### FORESTS:

Proceedings and other materials from Ivey & CBI's Forests and Climate Change Forum

<http://www.forestsandclimate.org>

#### COMMUNITIES, SMART GROWTH:

The Funder's Network for Smart Growth and Livable Communities has published a series of documents.

*Global Warming, Climate Change and Smart Growth*:

[http://www.fundersnetwork.org/usr\\_doc/Statement\\_on\\_Climate\\_Change\\_and\\_Smarter\\_Growth-Final.pdf](http://www.fundersnetwork.org/usr_doc/Statement_on_Climate_Change_and_Smarter_Growth-Final.pdf)

*Ten Things Community Foundations Can Do to Address Climate Change through Local Action*:

[http://www.fundersnetwork.org/usr\\_doc/TenThings.pdf](http://www.fundersnetwork.org/usr_doc/TenThings.pdf)