



Tomorrow Today:

How Canada can make
a world of difference

Canada is one of the world's most prosperous and successful democracies. Thanks to our natural wealth, high levels of education and social harmony, Canada has an unparalleled opportunity to build its future prosperity on a foundation of environmental sustainability and respect for the Earth.

For more information, see TomorrowTodayCanada.ca



David
Suzuki
Foundation

SOLUTIONS ARE IN OUR NATURE



ENVIRONMENTAL | DEFENCE



SIERRA
CLUB
CANADA

© 1986 Panda symbol WWF-World Wide Fund for Nature (also known as World Wildlife Fund)
* "WWF" is a WWF Registered Trademark



As Canadians, we take pride in our vast wild spaces, highly liveable cities and towns, our strong tradition of collective action on issues like health care, and our role in the global community.

But Canadians are increasingly concerned that this tremendous legacy is slipping through our fingers as air and water quality deteriorate, wild places are lost to relentless resource extraction, and our national efforts to address the most critical issue of our time, global warming, sputter even as we race toward the brink of catastrophic climate change.

In a recent Organization for Economic Co-operation and Development (OECD) study that examined 25 key environmental indicators, Canada ranked 28th out of 29 developed nations. During the international climate change negotiations in Bali, Indonesia in December 2007, Canada and the United States jointly received the “Colossal Fossil” award as the countries that garnered the largest number of “fossil of the day” awards – awards presented to the countries that did the most to block progress at the talks.

Clearly, Canada needs to urgently address its failing efforts to protect its massive – and massively important – piece of the planet.

This document sets out a roadmap for restoring a sense of purpose and direction to our environmental protection efforts. It reflects the best thinking of the people who have made it their job to understand how we can live in greater harmony with the Earth. It lists more than 30 important ideas for immediate policy actions that can steer our society toward a more sustainable and healthier future. But most of all, it is a call for a new approach that recognizes that our economic well-being is not at odds with protecting our environment, but is, rather, deeply dependent on our efforts to safeguard our natural advantages and to ensure a stable climate.





Canada is among the world's wealthiest countries, in terms of traditional GDP, natural capital, and individual quality of life. That means we have no excuse for not being among the best in the world when it comes to ensuring that our prosperity does not come at the expense of damaging our planet's life support systems: clean air, clean water and healthy ecosystems. As a country, we need to demonstrate in a much more convincing way that we are up to the challenge posed by global-scale threats like global warming.

Canadians want to see their country live up to its international commitments, whether it is protecting biodiversity or acting to dramatically reduce our greenhouse gas emissions. They want to see their country transformed from a paper tiger – quick to sign agreements, but slow to implement solutions – into an action hero. They want to take pride in a country that has the foresight to protect its globally important forests, oceans and waterways. They want to be able to point to growing innovation and leadership in reducing our climate and air impact. And most of all, they want their children, and their children's grandchildren, to inherit a world they can live with.

This is how we can achieve these goals.

1. Setting the stage for a new approach

Canada has made an international commitment through the Kyoto Protocol to start getting its climate house in order. The simple truth is that Canadians have among the heaviest individual carbon footprints in the world. Canada must act quickly to reduce its climate impact by increasing energy efficiency, conserving valuable resources (including forests and other natural areas), developing new technologies and processes, and by providing individual Canadians and businesses with the regulations, incentives and information they need to reduce their carbon footprint.

A crucial first step is for Canada to put a realistic price on emissions of greenhouse gases (GHGs). A charge of at least \$30 per tonne on

emissions of CO₂ (or equivalent – CO₂e) in 2009 escalating to \$75 per tonne in 2020 is the most efficient way to send a signal across our society about the seriousness of the threat we face and our seriousness in seeking solutions.

Realistic pricing of GHG emissions will assist Canada in creating a clean and competitive economy that will help us further reduce our overall environmental impact. And it will also help to restore Canada's credibility as a constructive participant in international efforts to prevent catastrophic global warming.

2. Principles for Environmental Sustainability

There are five principles that must become the cornerstone of actions and policies for our federal government:

1. **Precaution** – Scientific uncertainty cannot be an excuse for inaction where there is a risk of irreversible damage to the environment. This is especially true when alternatives are readily available or solutions, like increasing energy efficiency, can deliver economic benefits as well.
2. **Polluter pays** – Those who pollute need to be held responsible for their pollution. No one should be allowed to freely dump greenhouse gases, toxics or other waste products into our environment, leaving our climate, our ecosystems and our communities paying the real costs of these actions.
3. **Leaving the world a better place for our children** – Future generations deserve at least the same environmental opportunities as we had. Canadians have accepted this principle for dealing with government debts; now it is time to apply it to our growing environmental deficit by adopting preventative approaches to pollution and putting in place strong protections for irreplaceable ecosystem services.
4. **Make governments accountable for the state of our environment** – We must be able to measure progress against national environmental objectives using clear indicators, and we must make such progress reporting routine and ongoing. Access to factory or facility-level and community-based environmental information collected by government must be readily available to all Canadians. Such access could be ensured through the development of a federal Environmental Bill of Rights.
5. **Good global citizenship** – The wealth and talent of Canadians means there is no excuse for this country not to be a world leader in environmental sustainability. In fact, we should be actively helping developing countries become more environmentally sustainable by demonstrating and sharing best practices. Canada needs to be a constructive contributor to international environmental protection efforts, not a solitary roadblock to progress.

The issues:

- energy
- wild species and spaces
- oceans
- water
- food and agriculture
- human health and toxic chemicals
- economic signals

energy



Tar sands development is a major contributor to global warming.

Global warming is the single biggest challenge facing humanity today. For Canada, leadership on climate change will require changing the way we produce and use energy.

As a northern country, Canada is particularly vulnerable to global warming. Canada's Arctic landscape and people are already being severely affected by rising temperatures. Arctic sea ice, once considered permanent, is melting – the Northwest Passage was ice-free for the first time in the summer of 2007. The animals that depend on Arctic ecosystems, such as polar bears, are in danger of dying out as their living space changes beyond recognition. The sustainability of northern communities is threatened.

Worldwide, unchecked climate change has the potential to devastate human lives through water shortages, famines due to crop failures, and the spread of diseases. These impacts could severely disrupt the world's economy and threaten the security of nations as millions of devastated people migrate in search of better lives. Global warming is a humanitarian crisis as much as it is an environmental catastrophe.

To avoid such catastrophic consequences, we must use less energy to meet our needs through efficiency and conservation and shift to energy sources that do not emit carbon into the atmosphere. We need to decentralize our energy system in order to move away from large wasteful mega-projects to smaller more efficient local generation. Unsustainable and unclean coal and nuclear energy are not the solution in terms of energy supply or carbon emissions. In fact, all of Canada's energy needs can be met through existing technologies that do not result in a toxic legacy.

In Canada, one-quarter of energy-related greenhouse gas emissions every year come from transportation. The technology exists today to double, and even triple, the fuel efficiency of personal vehicles. Imagine the savings on gasoline if the average new car in Canada used four litres to cover 100 kilometres instead of eight. Imagine homes that used 60 percent less energy for heating and cooling than today's homes and provided power to the grid from roof-mounted solar-energy systems. Imagine our industries leading the world in greenhouse gas pollution solutions. Imagine a phase-out of electricity from dirty coal and nuclear fission with its radioactive and toxic wastes. The climate would benefit, our communities would be healthier, and our economy would be more sustainable. All of this is possible if we make the right policy choices.

In fact, Canada can become a "Sustainable Energy Superpower." To do so, Canada must act swiftly to implement a comprehensive package of policy measures, including taxes, incentives, regulations and education programs that will lead to deep national greenhouse gas emission reductions of 25 percent below the 1990 level by 2020 and 80 percent below 1990 levels by 2050.

Canada's Energy Action Agenda:

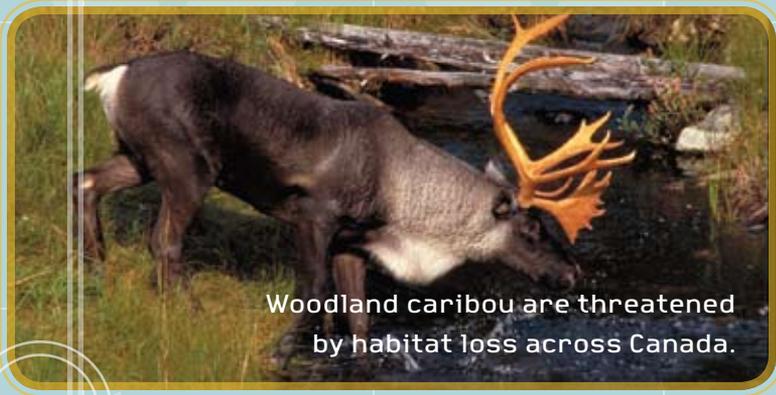
- By 2009, set a price on GHG emissions as the centrepiece of a Climate Action Plan, starting with a price no lower than \$30/tonne CO_{2e} in 2009 and increasing to \$50/tonne by 2015, and to \$75 a tonne by 2020. This price should be applied broadly in the Canadian economy, either through a tax or through a cap-and-trade system with a rapidly increasing proportion of permits auctioned. In either case, the revenues raised should be directed mainly towards investments in further actions to reduce GHG emissions, and also used to offset any related cost increases for low-income Canadians.
- Immediately recommit Canada to making genuine best efforts to meet its legal obligations under the Kyoto Protocol in compliance with the *Kyoto Protocol Implementation Act*, with the understanding that penalties may be imposed on Canada for falling short of its 2008-2012 emissions reduction target.
- Immediately demonstrate Canadian leadership in the post-2012 round of international climate negotiations by committing to, and showing convincing progress towards, a 25 per cent reduction in net GHG emissions from the 1990 level by 2020, and an 80 percent reduction from the 1990 level by 2050. Within six months, publish a Climate Action Plan clearly capable of meeting Canada's 2020 target of a 25 per cent cut in GHG emissions from the 1990 level that includes aggressive objectives and policies, with implementation timelines, for each significant GHG source in Canada.

- Within six months, adopt a Sustainable Energy Strategy that is fully integrated with the Climate Action Plan. The Strategy must aim at a wholesale transformation of Canada's economy to maximize energy conservation, energy efficiency and the use of low-impact renewable energy. The Strategy must include targets to reduce Canada's energy use by 20 percent (relative to the 2005 level) and increase low-impact renewable electricity capacity to 35,000 MW, both by 2020. Key elements of the strategy must include:
 - An Energy Efficiency Action Plan to implement a coordinated package of regulations, financial incentives, capacity-building measures and government procurement for each major energy-using sector;
 - Updated and regulated fuel-efficiency standards for personal vehicles benchmarked against leading jurisdictions around the world and that meet or exceed North American best practice;
 - A Renewable Energy Action Plan that provides financial incentives and capacity-building measures designed to make Canada a world leader in the production of low-impact renewable sources of electricity, heat and fuels by 2020;
 - A Nuclear Accountability Plan that includes legislation requiring full-cost accounting of nuclear energy; fully shifts the liability and cost of insurance for nuclear power and long-term waste disposal facilities onto electricity rates; moves oversight of the Canadian Nuclear Safety Commission from Natural Resources Canada (where the department is in a conflict of interest overseeing sales and safety of reactors) to Environment Canada; and eliminates all direct and indirect taxpayer subsidies to nuclear energy.
- Immediately set a goal to achieve carbon neutrality in the operations of the federal government through improved energy efficiency of buildings and vehicles, renewable energy projects, avoided air travel, and high-quality carbon offset projects.

For further information:

- Pembina Institute (2007) *Analysis of the Government of Canada's April 2007 Greenhouse Gas Policy Announcement*
- Greenpeace (2007) *Energy [r]evolution – a sustainable world energy outlook*
- Greenpeace (2007) *The Economics of Nuclear Power*
- Sierra Club Canada (2007) *Planetary Citizen's Guide to the Global Climate Negotiations*
- Sierra Club Canada (2007) *Stopping Global Warming: Towards a Low-Carbon Canada*
- Pollution Probe (2005) *Greenhouse Gas and Vehicle Fuel Efficiency Standards for Canada*
- David Suzuki Foundation and Climate Action Network, Canada (2002) *Kyoto and Beyond – The Low-Emission Path to Innovation and Efficiency*

wild species and spaces



Woodland caribou are threatened by habitat loss across Canada.

Few places in the world can still boast the kinds of wild spaces – and wild species – that can be found from coast to coast in Canada. But in the face of rapidly accelerating climate change and pressure to expand resource development, we need to move fast to secure this natural legacy. These forests and wild lands have been called “the Fort Knox of carbon storage” thanks to their vast carbon reserves and they must be protected through a strong system of national parks and other protected areas to prevent any further acceleration of global warming.

Canada’s globally important boreal forest is already experiencing the stress of global warming, including thawing permafrost, reduced tree growth and survival, and increased incidence of fire and insect damage. Industrial resource extraction activities like logging and oil-and-gas exploration exacerbate these impacts. Protecting intact forests is an effective way to reduce stress on species and maintain the important ecological services these forests provide, including clean air and water. In fact, one of the best ways to mitigate the impacts of climate change on wild places and species is to protect large networks of intact wilderness areas that can protect a diversity of habitat types and provide opportunities for species movement. Protecting nature is a key adaptation strategy to ensure the survival of Canada’s ecosystems.

Recent federal governments have made important progress in establishing and expanding national parks, including Gulf Islands, Nahanni, and Torngat Mountains, but these areas need full legislated protection as soon as possible. Land withdrawals in the Northwest Territories for a national park on the East Arm of Great Slave Lake and a National Wildlife Area in the Rampart River and Wetlands (Ts’ude niline Tu’eyeta)



Canada's boreal region is one of the largest intact wilderness areas on the planet.

have also helped to demonstrate a farsighted approach to protecting intact wild areas *before* new resource extraction activities are considered. But these areas also require quick legislated follow through and a long-term commitment to proper stewardship.

Most importantly, we need to seize the opportunity to create a “Conservation First” planning framework for the still wild expanses of our northern boreal forests and northern territories, particularly the Mackenzie Valley, while we still can. These places represent our last chance to “get it right” by addressing rights of aboriginal people, community interests, conservation concerns and wildlife survival needs before introducing industrial activities where appropriate.

Another key federal role is protecting species at risk. Enactment of the federal *Species at Risk Act* in 2002 was an important step forward, but implementation has, so far, been ineffective. A reinvigorated effort to effectively protect all listed species by mapping and protecting their habitat and implementing recovery plans is needed.

Canada's rich forests, vast wetlands and other natural habitats are crucial breeding grounds for many migratory birds and the federal government is directly responsible for migratory bird conservation under the *Migratory Bird Convention Act*. Renewed investments in migratory bird conservation are required to reverse recent cuts to these globally important activities. Funding for National Wildlife Areas and Migratory Bird Sanctuaries must be increased substantially. Similarly, the Canadian Wildlife Service needs the resources to properly carry out its job of protecting wildlife from coast to coast.

Invasive alien species are a growing threat to Canadian wildlife and habitats as well as the economy. Examples include purple loosestrife, zebra mussel, brown spruce long-horned beetle, and Asian long-horned beetle. Climate change has the potential to exacerbate invasions of alien species. The federal government needs to take stronger action to block this ongoing invasion.

And with scientific studies now drawing a clear link between mental and physical health and access to green spaces, we need to also protect nature close to home in urban areas and provide more opportunities for time outdoors and contact with nature for children.

Canada's Wild Species and Spaces Action Agenda:

- Immediately announce that Canada will protect its boreal and arctic ecosystems by establishing interconnected networks of protected areas and implementing regional land-use plans in the Northwest Territories before approving any large-scale industrial projects, including the Mackenzie Gas Project. Canada should set a goal of protecting a *minimum* of 50 percent of its intact wild areas as part of comprehensive land-use planning initiatives for intact areas.
- By 2010, complete Canada's system of national parks, and ensure their long-term ecological integrity
- By 2009, implement a pricing mechanism that places an adequate value on carbon stored in intact ecosystems. This will simultaneously strengthen biodiversity conservation and climate protection.
- By 2009 announce a funded plan to complete and manage Canada's network of National Wildlife Areas and Migratory Bird Sanctuaries, including updating its legal and policy framework.
- Immediately accelerate implementation of the *Species at Risk Act* by implementing recovery strategies and action plans in 2008 for all species listed before 2007. Ensure inclusion of critical habitat maps and precautionary management actions in all recovery plans, and amend the Act to require mandatory habitat protection for species at risk on federal lands.
- Immediately reverse funding cuts to the Migratory Birds Program of the Canadian Wildlife Service.
- In 2008, implement, with adequate funding, Canada's Invasive Alien Species Strategy.
- In 2008, announce a federal initiative to reconnect children with nature by providing outdoor natural experiences for all children in grades 4 to 6.

For further information:

- Greenpeace Canada (2007) *Consuming the Boreal Forest: The Chain of Destruction from Logging Companies to Consumers*
- David Suzuki Foundation (2007) *Left off the List: A Profile of Marine and Northern Species Denied Listing under Canada's Species at Risk Act*
- Environmental Defence (2004) *Next Stop, Extinction: A Report Card on the failure of Canadian governments to save endangered species*
- Canadian Parks and Wilderness Society (2007) *Recommendations for a Federal Nature Conservation Action Plan*
- Nature Canada (2006) *Species at Risk Act: Three Years Later*
- Pembina Institute (2005) *Counting Canada's Natural Capital: Assessing the Real Value of Canada's Boreal Ecosystems*
- Nature Canada (2004) *Wildlife in Crisis*

oceans



Ocean habitats need greater protection.

Oceans are a huge storehouse for carbon and exert a huge influence on our climate. We need to ensure the continued health of ocean systems as a buffer against climate change, as an important global food source, and as a biodiversity reservoir. Without action to address climate change, oceans will become increasingly acidified (from increased CO₂), their habitats will likely become less productive, and their water levels will rise – threatening coastal areas and low-lying islands.

For species such as salmon, warming oceans are adding to the stress already caused by over harvesting. In fact, the greatest current threat to marine biodiversity remains over-fishing – recent studies have shown that the majority of large fish in the sea are gone. However, human activities like aquaculture and coastal oil drilling are also expanding and creating serious environmental challenges for ocean species.

We need to stop thinking of oceans as simply water and start seeing them as complex ecosystems that, just like land-based systems, can benefit from intelligent planning and the creation of protected areas.

Unfortunately, Canada's progress on meeting its national and international commitments to protecting marine life has been excruciatingly slow. We will need to turn the current ripples of action into a tidal wave of activity if we are going to meet commitments like completing a national network of marine protected areas by 2012.



A good start for the federal government would be to accelerate the implementation of the Oceans Act with adequate funding.

Canada also needs to address domestic over-fishing in our waters, and the serious impacts of fishing gear on marine habitats and sensitive areas. Bottom trawling is particularly harmful, damaging large areas of marine habitat, catching huge numbers of unwanted fish that are then discarded, and consuming more fossil fuel per tonne of fish captured than any other fishing method.

Canada's Oceans Action Agenda:

- Immediately prohibit bottom trawling and other harmful forms of fishing in sensitive areas, prohibit expansion of bottom trawling into previously untrawled areas, and restrict its use to areas that have already been heavily fished for decades.
- Immediately recommit to the moratorium on offshore oil-and-gas development and the moratorium on oil and liquified natural gas (LNG) tanker traffic on the British Columbia coast.
- Immediately base aquaculture policy on the best internationally recognized scientific information to ensure that local ecosystems and species are not harmed.
- Accelerate implementation of the Oceans Act with adequate funding.
- By 2010, ensure that ecologically significant areas on all of Canada's coasts are given interim protection from industrial practices that threaten their ecological integrity until marine protected areas are put in place.
- By 2011, complete the five marine-use planning initiatives currently underway and identify additional marine regions for future planning initiatives that will lead to comprehensive ocean zoning.
- By 2012, complete a national network of marine protected areas in the Arctic, Atlantic and Pacific Oceans and Great Lakes in collaboration with provincial and territorial governments.

For further information:

- Greenpeace (2008) *Challenging the Aquaculture Industry on Sustainability*
- David Suzuki Foundation (2007) *Dragging our Assets: Toward an Ecosystem Approach to Bottom Trawling in Canada*
- Canadian Parks and Wilderness Society (2007) *Recommendations for a Federal Nature Conservation Action Plan*
- WWF Canada (2007) *Whales in Hot Water? The Impact of a Changing Climate on Whales, Dolphins and Porpoises*
- WWF Canada (2006) *A Policy and Planning Framework for Marine Protected Area Networks in Canada's Oceans*
- WWF Canada (2006) *Marine Ecosystem Conservation for New England and Maritime Canada: A Science-Based Approach to Identifying Priority Areas for Conservation*

water



We need to better protect water supplies in the face of global warming.

Canada has some of the world's most extensive freshwater resources. But we cannot continue to take these resources for granted in the face of global warming. Warmer temperatures may lead to an increase in toxic blooms, for example, and lower seasonal water levels will increase the risk of contamination from urban runoff or rural soil erosion.

In Alberta's mountain ranges, the glaciers and snowpacks that serve as "water towers" for the Prairies are already in retreat, while water levels in the upper Great Lakes have been falling year by year. Expert predictions suggest these changes will accelerate with a hotter, drier climate. Meanwhile, invasive species, persistent organic pollutants, endocrine disruptors and groundwater depletion are all having an impact on our water supplies. The threat of bulk water exports and diversions south of the border has also loomed large in recent years.

Clean and abundant water is essential to ensuring the health of Canadians and the health of our economy: Water is a vital input to industrial production and the energy sector, and is critical for agricultural production, as well as tourism and recreation.

We must ensure that the government's October 2007 Speech from the Throne commitment to engage Canadians in a national discussion of this country's water future leads to a robust and comprehensive national water strategy.

Canada's Water Action Agenda:



- By 2010, develop a comprehensive Canada-wide water strategy in collaboration with provincial, territorial governments, First Nations, and community organizations. Key elements of the strategy should include:
 - A Sustainable Water Act to conserve water through such measures as national appliance water-efficiency standards, enhanced prohibitions on bulk water exports, and protection and restoration of vulnerable waters facing urgent threats, such as the Great Lakes, Arctic Ocean and Bay of Fundy;
 - A Safe Drinking Water Act to ensure safe drinking water for all Canadians, including binding federal standards for drinking-water quality;
 - Action plans to protect groundwater and ensure safe drinking water for all First Nations and Inuit communities;
 - Prevention of inter-jurisdictional water conflicts by re-invigorating the International Joint Commission and creating a federal-provincial-territorial dispute resolution process designed to ensure fair and sustainable agreements.

For further information:

- Canadian Environmental Law Association, Canadian Institute for Environmental Law and Policy, Ecojustice Canada, Environmental Defence Canada, Great Lakes United, Sierra Club Canada (2007) *Great Lakes Blueprint: A Canadian Vision for Protecting and Restoring the Great Lakes and St. Lawrence River Ecosystem*
- Gordon Water Group of Concerned Scientists and Citizens (2007) *Changing the Flow: A Blueprint for Federal Action on Freshwater*
- Ecojustice Canada (2006) *The Great Lakes Sewage Report Card*
- Environmental Defence (2007) *Up to the Gills: Pollution in Great Lakes Fish*
- Pollution Probe (2006) *Towards a Vision and Strategy for Water Management in Canada*
- Ecojustice Canada (2006) *Waterproof 2: Canada's Drinking Water Report Card*
- Ecojustice Canada (2004) *National Sewage Report Card III*

food and agriculture

Canada's farmers can be leaders in providing healthy food choices.



Apples from Chile, lamb from New Zealand, and individually plastic-wrapped peppers from Israel. Globalized agribusiness provides expanded food choices, but also brings with it a big helping of greenhouse gas emissions with every meal.

Industrial agriculture relies on energy-intensive fertilizers and pesticides, often requires long-distance shipping and uses tremendous amounts of water for irrigation. Similarly, intensive livestock operations produce large quantities of greenhouse gases, including methane from livestock and waste, and carbon dioxide from fossil fuel consumption.

Meanwhile, the use of pesticides in Canada is growing rapidly and three-quarters of Canadian croplands are now treated with pesticides. At least 50 pesticide active ingredients registered for use in Canada have been banned in other OECD member countries because of health and environmental concerns.

Today, agricultural operations are increasingly producing both food and energy products. With growing use of corn and sugar cane to produce ethanol, prices for these basic food staples are already rising and shortages loom. However, current ethanol production practices actually produce only marginal net gains in energy. Cellulosic ethanol using agricultural waste products or crops like switchgrass shows more promise, but demand for raw materials and the resulting impact on soils and waters will need to be carefully managed.



Canadians deserve better information on what is in the food they eat.

To reduce agricultural greenhouse gas emissions, the federal government should encourage consumption of locally produced foods, particularly organically grown food that does not require energy-intensive fertilizers and pesticides. One of the simplest ways to support local agriculture is to vigorously support the supply-management system in place for dairy products, eggs, chicken and turkey in international trade negotiations.

Pesticides banned in other OECD countries should be phased out. The federal government should also implement mandatory labelling policies that include comprehensive nutritional information, country of origin, fair-trade, organic standards and genetic modification information.

Canada's Food and Agriculture Action Agenda:

- Immediately begin a phase-out of pesticides already banned in other OECD countries.
- Support Canada's supply-management system for dairy products, eggs, chicken and turkey in international trade negotiations.
- By 2010, implement mandatory labelling policies that include comprehensive nutritional information, country of origin, fair-trade, organic standards and genetic modification content. And amend Canada's Food Guide to provide information about the climate impacts of food choices.
- By 2012, implement a comprehensive program to encourage organic agriculture, the production and consumption of locally produced foods, and to educate Canadians on the health advantages of low-meat diets.

For further information:

- Greenpeace (2008) *Cool Farming: Climate impacts of agriculture and mitigation potential*
- David Suzuki Foundation (2004) *Sustainability within a Generation: A New Vision for Canada*

human health and toxic chemicals



Canada needs to
adopt a precautionary
approach to toxics.

Environmental contaminants in our air, water and food are having an enormous negative impact on the health of Canadians. Exposure to environmental contaminants has been linked to asthma, cancer, Alzheimer's disease, developmental disorders, birth defects, and reproductive problems. Health Canada estimates that the direct health care costs and lost productivity caused by environmental factors add up to between \$46 billion and \$52 billion a year.

Currently, many Canadian health and environment laws and policies are weaker than corresponding laws in other nations. For example:

- Canada does not yet have legally binding national standards for air and drinking water quality;
- Canada permits the use of pesticides that other countries have banned for health and environmental reasons;
- Canada allows higher levels of pesticide residues on our food;
- Canada has failed to regulate effectively toxic substances such as polybrominated diphenyl ethers (PBDEs), phthalates, and polycyclic aromatic hydrocarbons (PAHs);
- Canada has weaker regulations for toxic substances such as radon, lead, mercury, arsenic, and asbestos.

Children are particularly vulnerable to ongoing exposure to air pollutants, contaminants in food, and toxic substances in consumer products. Meanwhile, there is clear evidence of a large and growing problem of respiratory illness in children, including asthma, where known contributors include indoor and outdoor pollution. Lead and mercury are highly toxic to the developing brain, yet Canada has



Companies must prove products are safe.

refused to sign an international treaty to reduce the threat of mercury to the global environment.

The federal government must adopt a precautionary approach that includes the phasing out of substances that have been shown to be harmful and setting legal limits on human exposure to toxic substances found in consumer products. Where a substance has been shown to be harmful and alternatives are available, a ban or phase-out for all non-essential uses should automatically be put in place. This restriction should remain in place until industry can demonstrate the chemical can be safely used or released under rigorous real world conditions.

Finally, it is time to consider an *Environmental Bill of Rights* (EBR) for Canadians. This legislation would recognize the *right* to a clean environment shared by all Canadians. The EBR would be a vehicle for the values of transparency, access to information, accountability, public participation in decision-making and adequate enforcement. It would also provide Canadians with additional tools to demand enforcement when federal actions are lacking.

Canada's Human Health and Toxic Chemicals Action Agenda:

- Immediately implement the precautionary principle by regulating toxic chemicals in the federal Chemicals Management Plan. In particular, implement bans or phase-outs for all non-essential uses of substances known to be harmful where safe alternatives exist and maintain such restrictions until credible evidence is presented that the chemical can be safely used or released.
- Immediately ban chemicals, including polybrominated diphenyl ethers (PBDEs) and Bisphenol A (BPA), for which there is both significant evidence of harm and safe substitutes available. Support companies as they adapt to using lower-risk substitutes with research, information sharing and adjustment programs.

- By 2009, amend the Canadian Environmental Protection Act to implement the recommendations of the April 2007 all-party report of the House of Commons Standing Committee on Environment and Sustainable Development by:
 - Placing the onus on companies to show that chemicals are safe, rather than the current onus on government to demonstrate harm, in a way that is similar to what the European Union has implemented in its recent chemicals legislation;
 - Establishing a disclosure requirement for company data on the health and environmental effects of chemicals;
 - Providing meaningful protection for the Great Lakes Basin through funding for research and monitoring, an expert panel to report to Parliament on Great Lakes clean-up efforts, and regulations for substances identified for virtual elimination by the International Joint Commission; and
 - Requiring prompt and meaningful action to limit human exposure to a particular substance when scientific evidence shows that substance to be toxic,
- By 2008, set national and regional emission reduction targets for harmful pollutants, such as nitrogen oxides, sulphur dioxide, volatile organic compounds and particulate matter, based on stringent air-quality standards that protect both the environment and human health, especially the health of vulnerable populations, such as children, the elderly, and people with respiratory problems.
- By 2010, pass an Environmental Bill of Rights that would:
 - Establish the right of citizens to a healthy environment;
 - Establish a duty of public trust on the part of the federal government to manage and protect the environment for the benefit of current and future generations;
 - Allow Canadians to take action against the federal government for any breach of its public trust duty;
 - Guarantee reasonable access to environmental information so that citizens can make informed decisions about how best to protect their local environment;
 - Establish a right for citizens to participate in environmental decision-making.

For further information:

- Pollution Probe (2007) *Not That Innocent: A Comparative Analysis of Canadian, European Union and United States Policies on Industrial Chemicals*
- David Suzuki Foundation (2007) *Prescription for a Healthy Canada – Towards a National Environmental Health Strategy*
- Greenpeace (2007) *Guide to Greener Electronics – Ranking cell phones, PCs and game consoles*
- Pollution Probe (2005) *Child Health and the Environment – A Primer*
- Environmental Defence Canada (2005) *Toxic Nation: A Report on Pollution in Canadians*

economic signals



Today, Canadians recognize that the economy and the environment are two sides of the same coin. We pay a price when polluted air reduces labour productivity and drives up health care costs. We pay a price when we have to clean up contaminated sites. We waste money when we waste energy.

One reason we have entrenched environmental problems like poor air quality and accelerating climate change is that we do not pay the full environmental and social costs of the products and services we buy: Not paying for the climate impacts of burning fossil fuels gives automobiles an unfair competitive advantage over public transit; not recognizing the environmental costs that pesticides and fertilizers create makes organic foods appear more expensive than they really are; solar and wind power are clean, but must compete with coal whose deadly air emissions are not factored into the price of electricity.

To make matters worse, our tax policies often subsidize economic behaviour that damages the environment and the climate by propping up conventional development – such as in the tar sands – instead of driving investment in more sustainable approaches. Such subsidies are both economically costly and environmentally unsustainable.

More than any other issue, climate change illustrates the economic costs of environmental degradation. Sir Nicholas Stern, former chief economist of the World Bank, has warned in a comprehensive study of the economics of global warming that failing to immediately invest in protecting the climate could lead to the global economy shrinking rather



than growing. “Our actions over the coming few decades could create risks of major disruption to economic and social activity, later in this century and in the next, on a scale similar to those associated with the great wars and the economic depression of the first half of the 20th century. And it will be difficult or impossible to reverse these changes,” he has warned.

Similarly, the National Round Table on the Environment and Economy, in its federal government-commissioned report, *Getting to 2050: Canada’s Transition to a Low-emission Future*, stated that “[w]ith a climate change policy that enables cost-effective emission reductions through broad-based emission pricing and in a world where Canada’s major trading partners undertake similar deep GHG emission reductions, it is reasonable to conclude that Canada’s economy will continue to thrive with a relatively limited impact on economic growth.” In fact, the Round Table report found that over a 43-year period, Canada would forego at most one to two years of economic growth during the transition to a more sustainable economy.

Canada's Economic Action Agenda:

- Begin shifting the federal tax burden from desirable activities (such as savings, income and investment) to undesirable environmentally harmful activities by:
 - Instituting carbon pricing through carbon taxes or a cap-and-trade system for greenhouse gas emissions and using the proceeds to finance further actions to reduce GHG emissions while protecting low-income Canadians;
 - Increasing taxes on the use of virgin resources and using the proceeds to encourage greater use of recycled materials;
 - Immediately shortening by two years the phase-out period for the accelerated capital cost allowance for the tar-sands industry;
 - Reducing existing subsidies for the mining and oil-and-gas industries and committing to a ban on any new subsidies or fiscal incentives for mining or oil-and-gas projects, such as for the Mackenzie Gas Project.

For further information:

- Green Budget Coalition (2007) *Budget 2007: Opportunities for a Greener Canada*
- National Round Table on the Environment and the Economy (2007) *Getting to 2050: Canada's Transition to a Low-emission Future*
- Stern, Nicholas (2007) *The Economics of Climate Change: The Stern Review*
- National Round Table on the Environment and the Economy (2002) *Toward a Canadian Agenda for Ecological Fiscal Reform: First Steps*

conclusion

The fundamental challenge of the 21st century is that the human footprint of resource consumption and waste now exceeds the capacity of ecosystems to support the growing world population at a reasonable standard of living for all. This situation is unsustainable and ultimately, dangerous. The longer humankind waits before implementing the needed policies, the higher the environmental, social and economic costs that will have to be paid. The time for action is now.

Canada's high standard of living has in many ways been built on unsustainable practices. As a country that has prospered from environmental exploitation, we have a corresponding moral and economic responsibility to shoulder a relatively heavy share of actions leading to solutions.

Canada, more than many countries, is well-positioned to make the transition to a more sustainable economy. We have the resources and ingenuity to help citizens and businesses through this transition, and we have citizens and leaders with the foresight to see how much this country could lose if we continue with business as usual. In fact, it is not really a question of whether we will undertake this transition, but when – and whether it will be done with planning and foresight or in panicked response to a growing environmental catastrophe like unchecked climate change.

Signatory Organizations:

Canadian Parks and Wilderness Society

David Suzuki Foundation

Ecojustice

Environmental Defence

Equiterre

Greenpeace Canada

Nature Canada

Pembina Institute

Pollution Probe

Sierra Club Canada

WWF Canada



Acknowledgements

This document was prepared by Canadian Parks and Wilderness Society, David Suzuki Foundation, Ecojustice, Environmental Defence, Equiterre, Greenpeace Canada, Nature Canada, Pembina Institute, Pollution Probe, Sierra Club Canada and WWF Canada. We wish to thank the J.W. McConnell Family Foundation for its generous support of this initiative. We also wish to thank our writers, Brad Cundiff, Stephen Hazell, Francois Bregha and Alanna Mitchell, and designer Lisa Rebnord.