

limate change is set to become one of the defining issues of the 21st century. How we choose to address this challenge now will shape our future for decades to come. Our health, our ecosystems, our economy, and our very planet depend on it.

The scientific consensus is in – burning coal, oil and gas has trapped massive amounts of greenhouse gases in our atmosphere, and is fundamentally altering life on earth. If we don't radically change the way we use energy, we face a future with more air pollution, more storms, floods and droughts, and more water shortages and disease.

This bleak scenario is not inevitable. Political leaders, business leaders, and individuals around the world are stepping up to the challenge of climate change. The Kyoto Protocol, an international agreement that requires industrialized countries to cut their greenhouse gas emissions, finally entered into force in February 2005.

But the Kyoto Protocol is just a first step. A new report from the David Suzuki Foundation and the Pembina Institute shows that Canada – and the world – needs to go far beyond its Kyoto targets if it is to meaningfully address climate change. The report recommends that Canada:

- Reduce greenhouse gas emissions 25 per cent below 1990 levels by 2020
- Reduce greenhouse gas emissions 80 per cent below 1990 levels by 2050

The report shows that only deep, long-term emission cuts will prevent the dangerous effects of climate change. Simply halting the rise of greenhouse gas emissions will not be enough to stabilize the concentration of gases that have built up in the atmosphere. In order to halt the build-up in concentrations, *The Case for Deep Reductions* shows that Canada – and the world – needs to cut emissions to a small fraction of current levels.

Anything less will not prevent dangerous climate change.





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Kyoto and beyond

Under the terms of the Kyoto Protocol, Canada has agreed to cut its greenhouse gas emissions six per cent by 2012. But the federal government has not made any commitments regarding the far deeper reduction targets that will be needed after the first set of Kyoto targets expires in 2012. In other words, Canada's current climate change policy will end abruptly on January 1, 2013.

The Case for Deep Reductions sets out post-2012 greenhouse gas targets for Canada and explains how the country should approach international negotiations around this issue.

The report comes at a critical juncture. Between November 28 and December 9, 2005, Canada will host the annual United Nations climate change conference in Montréal.

This will be the biggest climate conference the world has seen since the Kyoto Protocol was adopted in 1997, and it's the first time the 155 countries that have ratified Kyoto will meet since the Protocol entered into force earlier this year. It's also the first time the meeting will be held in North America.

One of the key issues under discussion will be what happens after 2012 when the first set of Kyoto targets has expired. As host of the conference, the eyes of the world will be on Canada. This intensifies the urgency of defining our post-2012 climate policy and places our role in the long-term, global effort to cut greenhouse gases in the spotlight.

There is no better moment for Canada to show real leadership at the global level than right now.

The case for long-term targets

Federal Environment Minister Stéphane Dion has said, "Deep reductions in global emissions are essential." Yet Canada's current climate change plan proposes no targets or policy details beyond 2012.

There are several reasons why this is a serious problem:

- Without knowing where we want to be five decades from now, governments cannot
 make the right policy decisions about where we need to go over the next decade.
- Canada's energy policy, which includes support for the expansion of polluting
 activities such as oil sands development, is sharply at odds with its climate policy.
 Canada's energy policy needs to be overhauled to make it consistent with its climate
 policy, but this cannot be achieved if its climate policy is limited to the near-term.
- Canadian energy producers are contemplating infrastructure investments of \$200 billion over the next 20 years with potentially enormous greenhouse gas emissions and operational lifetimes of 40 years or more.
- Without clarity on medium- and long-term greenhouse gas targets, the private sector does not have the necessary incentive to invest in the development and deployment of technologies needed for deep emission reductions.

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IMPACTS

If greenhouse gases continue to rise unchecked, climate change could cause:

- Sea level rise sufficient enough to flood areas inhabited by millions of people
- More intense tropical storms
- Hundreds of millions more people at risk from malaria
- Billions more people at risk from water shortages
- · Widespread extinction of many species
- Destruction of more than half the world's coral reefs
- A decline in the extent of sea-ice around the North Pole in summer by more than 50 per cent, and a threat to the cultural survival of some Arctic communities

SOLUTIONS

Addressing climate change with a long-term plan for deep emission cuts will yield both environmental and economic benefits for Canada.

A concerted effort to cut energy consumption and waste will reduce energy bills for businesses and individual consumers, and channel that spending into other goods and services. Studies estimate that annual energy savings for industry and consumers will total more than \$30 billion if Canada cuts its greenhouse gas emissions in half by 2030.

The shift to cleaner energy and more efficient and innovative industrial processes will create jobs in energy-related design and manufacturing, deliver health benefits and help protect the environment.

Smart policy objectives that can reduce our demand for energy by 2030 include:

- Doubling the thermal efficiency of residential and commercial buildings
- Doubling the fuel efficiency of the truck fleet, and tripling the efficiency of the passenger car fleet
- Doubling the average efficiency of electrical devices, including lighting, motors and appliances
- Improving the energy efficiency of industrial output by one per cent per year
- Phasing out coal and nuclear powered electrical generating plants as demand for electricity subsides and new renewable opportunities arise

SOURCE: Kyoto and Beyond, David Suzuki Foundation and the Climate Action Network of Canada, 2002

An opportunity for Canada

It is essential for industrialized countries that have ratified Kyoto, including Canada, to meet the Protocol's existing short-term targets. Long-term greenhouse gas targets alone are insufficient. Short- and medium-term targets are important to keep the issue high on the political agenda and ensure governments take action now.

But it is also essential to reach a broad international agreement that will result in much larger greenhouse gas reductions after 2012.

The Case for Deep Reductions calls on Canada to move quickly to adopt medium- and long-term emission reduction targets to ensure Canada plays a key role in achieving deep reductions in the world's greenhouse gas emissions. The scale and urgency of the problem, as demonstrated in this report, demands bold, imaginative leadership that takes as its starting point the essential need to avert the human, economic and environmental catastrophe of uncontrolled climate change.



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The David Suzuki Foundation works through science and education to protect the diversity of nature and our quality of life, now and for future generations.

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The Pembina Institute creates sustainable energy solutions through research, education and advocacy.

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