



COUNTDOWN TO COPENHAGEN

FACT SHEET

Climate at a Crossroads

December's Copenhagen summit is a crucial milestone in the global effort to tackle climate change

It's a make or break moment for the world's climate. This December, representatives from over 190 countries will gather in Denmark's capital to hammer out a new global climate deal.

The UN's Copenhagen climate summit is the culmination of a negotiation launched two years ago in Bali, Indonesia. The agreement that countries aim to reach in Denmark will set the rules for international action on climate change when the first phase of the Kyoto Protocol ends in 2012.

This fact sheet provides an overview of the key issues in those negotiations, and answers some frequently asked questions about the UN climate talks. It also includes an update on climate action in the United States under President Obama.

To understand what's at stake in Copenhagen, picture the atmosphere as a bathtub with the taps turned on. Like the water filling the bathtub, greenhouse gas (GHG) emissions don't just drain away: they can persist for anywhere between decades and thousands of years after they're

released. Over the past 200 years, we've filled the bathtub almost to the top, and most of the "water" came from the world's developed countries.

The negotiations on reducing GHG emissions are really about how to divide up the last few inches of bathtub space between the nations of the world. But that's only one of the "building blocks" that countries have agreed must make up the next climate deal. Financial support for poorer countries, technology cooperation and adaptation to climate impacts are also integral elements of the negotiations.

Climate science tells us that, to avoid a dangerous amount of global warming, the world's GHG emissions must peak in just a few years — by 2020 at the latest. The agreement to be reached in Copenhagen will cover, at a minimum, the years from 2013 to 2017 — the key period in which global emissions must plateau and start falling. A too-weak deal in Copenhagen could mean that drastic impacts — on human health and security, the environment, and the world's economy — become "locked in."

Key Issues for Canada

What's on the table in Copenhagen, and where Canada stands

Writing a global climate treaty is a highly complex job, and countries are negotiating on numerous issues — everything from data to deforestation is up for discussion. But for developed countries like Canada, two issues tower above the rest. They are:

- how much we will cut our own emissions, and
- how much financial support we will provide to poorer countries to enable them to tackle climate change.



Photo: istock

Cutting Canada's Emissions

Any effective global agreement must be ambitious enough to prevent dangerous climate change. In fact, that's a legal responsibility that countries accepted when they ratified the UN Framework Convention on Climate Change (UNFCCC), which Canada did in 1992.

Based on scientific projections of the impacts of climate change, many jurisdictions have concluded that an increase in the global average temperature of 2°C, relative to the pre-industrial level, constitutes dangerous climate change and must be avoided. Prime Minister Stephen Harper signed on to a G8 summit declaration in July 2009 that recognized the 2°C limit.

The Intergovernmental Panel on Climate Change (IPCC), co-winner of the 2007 Nobel Peace Prize, is the world's most authoritative climate science body. In its 2007 assessment report, the IPCC concluded that industrialized countries need to reduce their total GHG emissions by 25–40% below 1990 levels by 2020 to have a chance of avoiding a 2°C temperature increase.

Canada's current 2020 target is equivalent to 3% below the 1990 level, well short of the 25–40% range identified by the IPCC. Relative to current emissions, even the lowest end of the science-based target range is twice as ambitious as Canada's current target.

Pembina's analysis found that the 2009 U.S. stimulus package outspent Canada's 14:1, per capita, on renewable energy technologies like wind and solar power.

Looking to Washington

For Canadian decision-makers, the policy agenda in Washington has always been an important reference point in setting our own climate policy. That focus has only increased in recent months, as U.S. legislators craft a new approach to climate policy under a president who has vowed to "roll back the specter of a warming planet."

In June 2009, the U.S. House of Representatives passed comprehensive climate and energy legislation known as the "Waxman-Markey" bill. The centrepiece of that bill is a cap-and-trade system that would

cover over 80 per cent of U.S. emissions. A significant portion of the value of the emission "allowances" would be re-invested in emission reductions. The 2020 target in the bill is roughly comparable to Canada's current target. However, analysis from the World Resources Institute (a respected U.S. climate think tank) indicates that additional reductions spurred by this bill — notably, investments in international efforts to avoid deforestation — mean that the total emission reductions would be much greater.

Throughout the fall of 2009, the U.S. Senate will consider its own climate bill, the Clean Energy Jobs and American Power Act (the "Kerry-Boxer" bill). At the time of writing, this bill was still a work in progress, with Senate committees working to fill in its provisions. In rough terms, the bill reproduces the cap-and-trade proposal from the Waxman-Markey bill, but includes a slightly stronger 2020 target.

The final bill is likely to include some form of tariffs on imports from countries that fail to put in place climate policies that match the U.S. level of effort.

Financing Climate Solutions

Helping poorer countries adapt to a problem they did little to create

Climate change is already happening, and more of it is inevitable. No matter how successful we are in cutting emissions from now on, we also need to protect people from the damage we've already done.

The UN Framework Convention on Climate Change requires developed countries like Canada to provide financial support to developing countries for adapting to climate change and reducing their emissions.

For example, adaptation expenses could include building infrastructure strong enough to withstand more violent storms, or investing in malaria prevention in new regions as the disease spreads. These investments are urgently needed to protect some of the world's most vulnerable people from the consequences of a problem they did little to create.

Although it's not possible to reach a precise assessment of the funding required, a range of authoritative estimates shows that it will run into the hundreds of billions of dollars per year.

Several countries have already put forward plans to generate, manage and disburse climate financing. Some of these proposals feature "innovative" fundraising approaches, such as a levy on airline emissions, that would generate funds without governments having to make annual budget decisions about whether to contribute.

Despite its rapid industrialization, China's per-capita emissions of carbon dioxide — the most important greenhouse gas — are three times lower than Canada's; China's per-capita GDP is seven times lower than Canada's. The disparities are even greater in the case of India.

Q&A on Climate Negotiations

Is the UN the only forum for climate negotiations?

No, it's not. Climate change is a top foreign policy priority for many countries, so it's on the agenda at many multilateral meetings, including recent G8 and G20 summits. The U.S. also initiated a process called the Major Economies Forum, which brings together 17 of the world's top GHG emitters, including Canada. But virtually all countries agree that the UN is the right "home" for a comprehensive global climate deal.

Shouldn't China and India cut their emissions too?

Major developing countries like China and India are experiencing rapid growth in their emissions as they lift millions of people out of poverty. At the same time, many developing countries are already taking unilateral actions to reduce the growth in their emissions. (For example, China has an economy-wide energy efficiency target, ambitious vehicle fuel efficiency standards and incentive policies for renewable electricity.) A successful Copenhagen deal needs to slow the rate of near-term emissions growth in the emerging economies — but this will require targeted financial support from richer countries.



Looking to the Leaders

- Norway's government has committed to cut its net emissions to zero ("carbon neutral") by 2050 at the latest. If there's a strong international agreement, Norway will move up that deadline to 2030.
- Within days of taking power, Japan's new government pledged a science-based emissions reduction target of 25% below 1990 by 2020.
- Under the "Waxman-Markey" climate bill passed by the U.S. House of Representatives, the U.S. would invest several billions of dollars per year in developing countries to support adaptation, clean technology, and efforts to reduce deforestation.
- Although Kyoto does not oblige developing countries to set national emission reduction targets, South Africa has adopted one voluntarily that will see its emissions begin declining by 2035.



Photo: Ng Swan Ti, courtesy of Oxfam

The United Nations Climate Change Conference opened on December 3, 2007, in Bali, Indonesia.

Pembina's Perspective

Canada has faced significant international criticism for the positions it has taken at recent UN climate talks. With Copenhagen just weeks away, it's time for some long-overdue climate leadership from Canada. In our view, that includes:

- **Adopting a stronger national emissions target.** Canada's current target falls far short of the reductions that climate science tells us we need to make. Economic analysis from M.K. Jaccard and Associates, a leading climate economics firm, shows that Canada could reach a science-based target of 25% below 1990 in 2020 and still have a strong growing economy.
- **Committing our fair share of climate financing.** Pembina's analysis shows that Canada should take responsibility for 3–4 per cent of the financing needed in poorer countries. Using conservative estimates, that works out to a contribution of between \$2 to \$6 billion per year.

Where We Stand: Canada's GHG Emissions in the Global Context

Indicator	Canada's Rank
Per Capita Emissions 2005	8th
Emissions 2005	8th
Cumulative Emissions, 1850–2005 (energy-related CO ₂)	10th

More Information

For in-depth reports, backgrounders and updates on the latest climate news and negotiations, go to climate.pembina.org.

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