



Policy Briefing Paper

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Is Durban the world's last, best hope to avoid climate disaster?

By Jim Davis and John Dillon

“Our Mother Earth is ill. The development model of unlimited economic growth and overconsumption has broken the balance between human beings and the environment. The current proposals on the table in the negotiations are not enough to stop climate change. We propose the model of living well in harmony with Mother Earth as the way forward to re-establish the balance between humans and nature.”

Rafael Quispe, Bolivian Indigenous leader¹

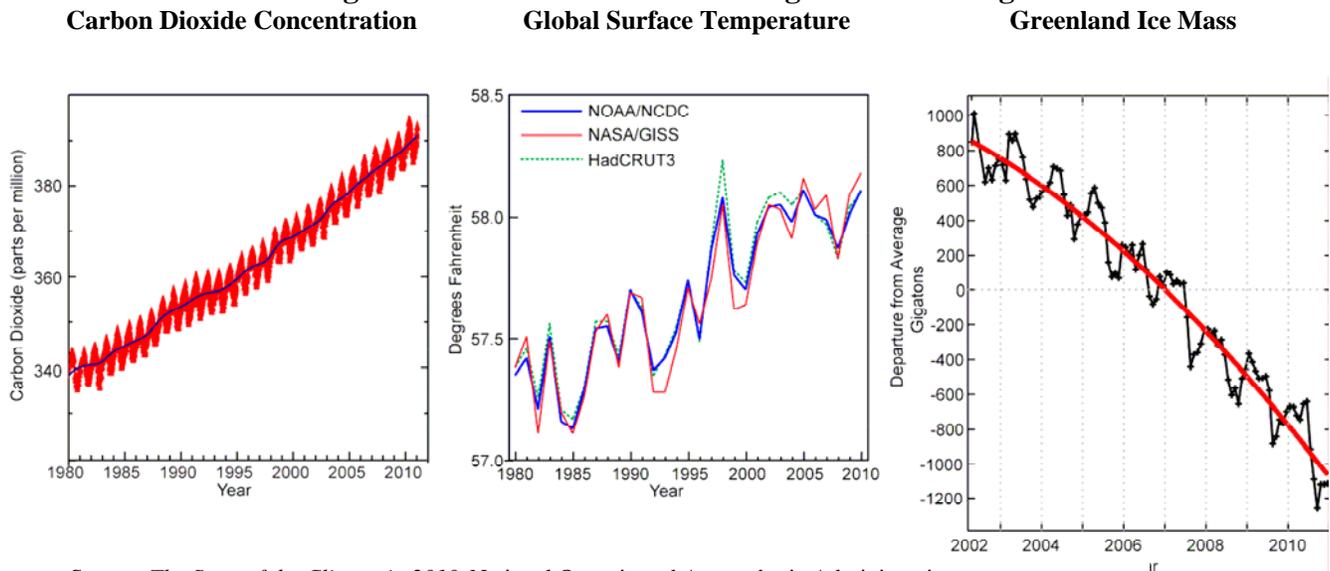
The time is fast approaching when humanity must undertake decisive measures to reduce greenhouse gas emissions or face ecological destruction on a scale unprecedented since humans first walked the Earth.

The 17th Conference of the Parties to the UN Framework Convention on Climate Change in Durban,

South Africa (November 29-December 9, 2011) will be a crucial test of the willingness of nations to act together for the sake of preserving life on Earth.

The impacts of human-induced climate change are growing in intensity, causing some 300,000 people die every year.² In 2010, floods in China and Pakistan and other climate-related calamities displaced 38 million people – twice as many as the year before.³ According to the U.S. National Oceanic and Atmospheric Administration, carbon dioxide levels increased at a faster rate in 2010 than the average rate over the previous 30 years. Air temperatures above land in 2010 were the second warmest on record. The world's mountain glaciers shrank for the twentieth consecutive year. Greenland's glaciers deteriorated more in 2010 than any other year on record.⁴

Figure 1: Indicators of Accelerating Climate Change



Source: *The State of the Climate in 2010*. National Oceanic and Atmospheric Administration.

In 2010, Canadians experienced the warmest year on record since 1948. In 2011, severe spring flooding prevented prairie farmers from planting between 2.4 million and 3.2 million hectares of land. Climate scientists report the area of Canadian forests burned per decade has increased four-fold from the 1960s to the 1990s due to human-induced climate change.⁵

François Gemenne, a researcher at the Institute for Sustainable Development and International Relations in Paris, notes that in the coming decades, with so much of the world's population concentrated in deltas and other low-lying areas, at least 20% of humanity will be at high risk of severe flooding and extreme rainfall.⁶ Hundreds of millions more will lack sufficient water due to droughts and disappearing glaciers from the Andes, the Himalayas and the Rockies. Between 21% and 52% of the world's plant and animal species are at risk of extinction due to climate change.⁷

The Durban Conference of the Parties (COP 17) represents an opportunity to put the UN climate change talks back on track after they were derailed at COP 15 in Copenhagen in 2009 and COP 16 in Cancún in 2010.

Copenhagen and Cancún Pledges Entirely Inadequate

In order to prevent disastrous climate change, global average temperature increases must be kept below 2°C (degrees Celsius) and preferably as near as possible to 1.5°C above pre-industrial levels. Even if all greenhouse gas (GHG) emissions were ended today, temperatures would still likely rise by around 1.5 degrees due to the concentrations of carbon dioxide already in the atmosphere.

Under the 2009 Copenhagen Accord, developed countries made a wide range of voluntary pledges to reduce GHG emissions. An analysis by the United Nations Environment Program shows that in a best case scenario, in which countries implement their higher pledges and are subject to strict accounting rules, the world will still experience an increase in global temperatures of 2.5 degrees Celsius.⁸ In a worst-case scenario, where countries implement lower pledges and use lenient accounting rules, the increase would be 5 °C.⁹

What is less well-known is that China, India, Brazil and other developing nations have committed to make

larger GHG emission reductions than those promised by industrialized nations. A study by the Stockholm Environment Institute shows that if the industrialized nations were to implement their higher pledges, their emission cuts would amount to 3.8 gigatons of carbon dioxide equivalent (CO₂e) by 2020. Reductions by the developing countries' during the same period would amount to 5.2 gigatons.¹⁰

On the other hand, if developed countries were to meet their lower range pledges, while applying strict accounting rules, their emission reductions would amount to 1.2 gigatons and those of developing countries would be 3.6 gigatons.¹¹ In a worst case scenario where industrial countries met their lowest pledges and took advantage of loopholes available through lenient accounting rules, some of them could claim to have complied with their reduction targets with very little, or no, actual emission reductions.

A prime mechanism for transferring responsibility for reductions from developed to developing countries is the use of international offsets. Carbon offsets involve paying for projects abroad that prevent carbon emissions (e.g., through forest preservation) or remove greenhouse gases from the atmosphere. The on-going emissions by the industrial countries are supposedly "offset" by funding such projects. KAIROS partners in the global South object that offsets unfairly shift the burden of emission reductions from industrial to developing countries.

One reason why industrial countries' actual emission reductions could be remarkably low is the practice of double counting. Industrialized countries include international offsets (emission reductions that actually occur in developing countries but are paid for by industrial countries) in their reduction claims. Since these cuts are also claimed by the developing countries, the double counting could result in lowering the impact of current pledges by up to 1.6 gigatons of CO₂e by 2020.¹²

Another significant loophole available to developed countries involves credits claimed for "land use and land use change and forestry" (LULUCF) offsets. For example, countries could claim credits for such carbon-sequestering activities as reforestation or cropland management to offset actual emissions.¹³ Accounting rules governing LULUCF measures will be debated at the COP 17 in Durban. Other loopholes involve the exclusion of emissions from shipping or aviation.

A crucial debate in Durban will concern the expanded use of carbon trading as a supposed means of emission reductions and a potential source of funds for the Green Climate Fund agreed to at Cancún. In addition, negotiators at COP 17 will discuss rules for the Reducing Emissions from Deforestation and Forest Degradation (REDD) initiative. The KAIROS Policy Briefing Paper [Decisive Action Vital at Cancún Climate Talks](#) (November 2010) provides a critical assessment of how expanded carbon trading, and REDD in particular, could jeopardize the rights of Indigenous peoples.

Canada's Climate Policies Widely Condemned

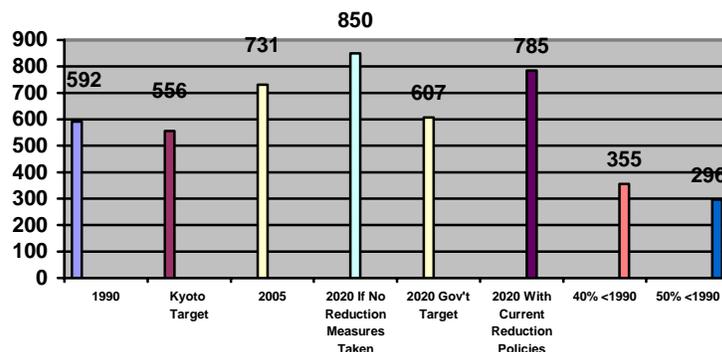
At COP 16 in Cancún, Canada down played its intentions for a new emissions reduction commitment under the Kyoto protocol. However, at the June 2011 climate talks in Bonn, a member of the Canadian delegation openly declared: "Now that we've finished our election, we can say ... that Canada will not be taking a target under the second commitment period of the Kyoto Protocol."¹⁴ This refusal comes on top of Canada's refusal to comply with the legally-binding emission reductions it had committed to at Kyoto in 1997.

During the negotiations in Bonn, a spokesperson for the group of least developed countries warned that "history will not look favourably" on Canada and other countries that are refusing to consider further commitments under the Kyoto Protocol. A delegate from the Solomon Islands (which could disappear beneath the ocean if climate change continues) alleged that "killing the Kyoto Protocol will kill humanity."¹⁵

The target adopted by Canada at Copenhagen for reducing emissions to 17% below their 2005 levels by 2020 means that emissions would be 2.5% **above** their 1990 levels that year. Moreover, according to data from Environment Canada (see Figure 2), under current GHG reduction, policies emissions are predicted to reach 785 megatonnes of CO₂e in 2020 – 29% above the official target and 33% above their 1990 level.¹⁶

The projected emissions for the year 2020 are between 121% and 165% higher than the levels necessary if industrialized countries are to do their part to keep world temperature increases below 2°C over pre-industrial levels.

Figure 2:
Canadian Greenhouse Gas Emission Targets
(Megatonnes of CO₂e)



Source: Environment Canada data

Canada Becoming a "Petro-State"

Some observers claim that the Canadian government's opposition to curbs on emissions is due to Canada having become a "petro-state," overly dependent on petroleum exports.¹⁷ Oil companies plan to invest \$2.077 trillion in building and operating the Alberta tar sands over the next 25 years, raising production capacity from the current 1.7 million barrels a day to 4.9 million by 2035.¹⁸

NASA climate scientist James Hansen maintains that if we burn just one-quarter of the proven reserves of conventional oil, gas and coal, the global climate will warm by more than 2°C, even though an increase of 2°C is "a recipe for global climate disasters."¹⁹ He warns that "fully exploiting the tar sands will make it impossible to stabilize the climate."²⁰

In developing the tar sands, Canada is ignoring the imperative to reduce global atmospheric concentrations of CO₂ from the current 391 parts per million (ppm) to 350 ppm. The seven billion barrels of tar sands oil produced to date have already raised global CO₂ concentration by approximately 0.6 ppm. If expansion plans go forward over a 10-year period, the Canadian tar sands would be responsible for more than a 2 ppm increase in global emissions.²¹

If all 315 billion barrels of tar sands oil deemed to be recoverable with current technologies were extracted, their combustion would increase global carbon dioxide concentration by around 30 ppm. Emissions from the tar sands already account for 5% of Canada's total GHG emissions and are projected to rise to 16% of emissions by 2020 at current rates of expansion.

Ecological Debt

Global temperatures have risen 0.8 °C above pre-industrial levels over the past century. The countries of the global North bear a particular responsibility for this increase. Industrialized countries are responsible for about 75% of carbon emissions since the industrial revolution began in the mid-1700s. Some of the carbon dioxide emitted hundreds of years ago still remains in the atmosphere because of the slow rate that the Earth's vegetation and oceans can reabsorb it.

The peoples of the global South, who bear the heaviest burden of climate change, have done the least to cause it. Of the 325 million people most affected by floods, droughts and crop failures induced by climate change, 98% live in developing countries. The 50 least developed countries are responsible for less than one percent of global carbon emissions.²²

The global North's over-appropriation of the Earth's carbon absorption capacity has built up an enormous ecological debt to the peoples of the global South and to all living beings in the Earth community. Our ecumenical partners in the global South challenge us to take responsibility for this debt. The "Dar es Salaam Statement on Linking Poverty, Wealth and Ecology in Africa" challenges the churches in the North to "acknowledge the privileges derived from complicity – through their production and consumption patterns – in systems of domination and exploitation that dehumanize and destroy life in Africa."²³

Excessive Adverse Impacts on Africa

The worst effects of climate change are manifest in Africa. They range from the well-publicized drought and famine in the Horn of Africa to lesser known internal and international migrations. The majority of Africans, who bear very little responsibility for climate change, are being sacrificed for the comfort of an elite few.

The Intergovernmental Panel on Climate Change has confirmed that Africa is the most vulnerable continent. Studies project that global mean warming of around 1.5 °C could lead to reductions in crop yields across Africa in excess of 30 percent, causing major food insecurity, economic collapse and social conflict.²⁴ The World Meteorological Organization recently reaffirmed that African countries are al-

ready suffering major levels of warming resulting in drought and other extreme weather events.²⁵

Agriculture is by far the largest consumer of water, using between 70 and 80 percent of available resources.²⁶ Over the past two decades, food production has been adversely affected by droughts in various parts of the continent.²⁷ It is projected that from 75 to 250 million people will be exposed to increased water stress in arid and semi-arid regions. Changes in rainfall and intensified land use will further exacerbate desertification.²⁸ The 15 states in the region encompassed by the Southern Africa Development Community (SADC) have great climate variability, especially in the southernmost drier countries where it is typical to have years of drought broken by large-scale floods. An increase in temperature affecting precipitation "will have complex repercussions on the social, environment and economic activities in the region."²⁹

A study commissioned by the Pan African Climate Justice Alliance (PACJA) predicts that mean average global temperature of 1.5°C above pre-industrial levels by just after 2040 would have an economic cost of 1.7 percent of Africa's GDP. As the mean temperature rises to 2.2°C by 2060, economic costs rise to 3.4 percent of GDP. By the end of the century, with a mean temperature rise of 4.1°C, they would be equivalent to almost 10 percent of the continent's GDP.³⁰

African faith leaders have said: "The Durban COP must decide on a treaty – and second commitment period for the Kyoto Protocol – that is fair, ambitious and legally binding, to ensure the survival of coming generations."³¹

As negotiators and civil society meet in Durban, the Fellowship of Christian Councils in Southern Africa (FOCCISA) cautions: "There is a divergence between the interests of the regional economic giant, South Africa, which is trying to preserve its energy intensive, resource intensive, highly polluting model for economic development, and other countries of the region, which are more vulnerable to the effects of climate change, and have fewer resources to meet these challenges."³²

If global average temperatures are allowed to rise by 2°C, the current official target reaffirmed at the Copenhagen and Cancún conferences, temperatures in Africa are expected to rise by one and a half times more. In the words of Archbishop emeritus Desmond Tutu, “A global goal of about 2 degrees C is to condemn Africa to incineration.”³³

Reparations for Ecological Debt

KAIROS’ partners in the global South maintain that we in the North must make restitution for our ecological debt, first of all by reducing our own greenhouse gas emissions. If we are to have any hope of keeping global temperature increases below 2 °C (and as near as possible to 1.5 °C) above their pre-industrial level, the global North must reduce its greenhouse gas (GHG) emissions to 40% to 50% below their 1990 levels by 2020. Even if we were to stop burning fossil fuels tomorrow, global temperatures would still rise by around 1.5°C due to the carbon dioxide concentrations that are already in the atmosphere.

In addition, we must cancel developing countries’ unsustainable debts without imposing the conditions demanded by International Financial Institutions, such as the World Bank and the International Monetary Fund. We must also provide sufficient funds to cover the costs of the adaptation and mitigation measures that Southern countries must take in the face of unavoidable climate change. The UN Department of Economic and Social Affairs calculates that developing countries need between US\$500 billion to \$600 billion a year for adaptation and mitigation.³⁴

The international community needs to raise new sources of finance that are not tied to policies dictated by International Financial Institutions. KAIROS’ Southern partners are particularly wary of financial mechanisms tied to the World Bank because of its Northern-dominated governance structure and because of the role it plays as a financier of fossil fuel projects. Between 2008 and 2010, investment in fossil fuels accounted for 56% of World Bank financing for energy projects. Only 20% of its lending was for energy efficiency and just 15% was for renewable energy projects other than large hydro dams. In 2010 the Bank loaned US\$6.6 billion for fossil fuels, an increase of 116% over the previous year, with two-thirds of the total invested in coal-based energy projects.³⁵

Canada pledged \$400 million for “fast start” adaptation funding for developing countries under the 2009 Copenhagen Accord. Of that amount, \$285 million has been allocated for loans through the International Finance Corporation (IFC), the branch of the World Bank that promotes private sector investments. Not only does making loans, rather than grants, increase Southern countries’ financial debts, this decision also strengthens the role of a body with a dubious record. One study found that projects financed by the World Bank and the IFC in 2008 alone would, over their lifetime, account for about 7% of annual CO₂ emissions from the energy sector.³⁶

In an era of shrinking commitments to Official Development Assistance (ODA), it is imperative that financial transfers to confront climate change not come at the expense of the ODA needed to fight poverty, hunger and disease. One alternative for raising funds for climate adaptation and mitigation would be some form of Financial Transaction Tax (FTT). In the KAIROS Policy Briefing Paper, [An Idea Whose Time Has Come: Adopt a Financial Transactions Tax](#), we describe how such a tax might raise funds for fighting poverty and climate change.

Since the publication of that paper, the European Union (EU), under the leadership of France and Germany, has taken further steps towards implementing an FTT. It remains to be seen whether a portion of the substantial potential revenues from an EU tax will be made available for climate adaptation and mitigation measures.³⁷ French President Nicolas Sarkozy has put discussion of an FTT to raise funds to fight poverty and climate change on the agenda of the November 2011 G20 meeting in France.

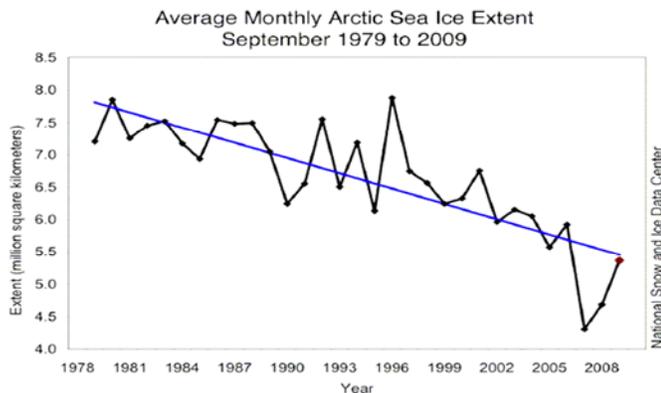
In Bonn, at the June 2010 pre-COP17 negotiations, Bolivia proposed a 0.01% tax on all international financial transactions among countries willing to collect the revenues for a fund that would be used principally to assist developing countries to cope with climate change.³⁸ This is the first time a proposal for an FTT has been tabled within the UNFCCC negotiations.

Inuit Warn of Dire Consequences of Arctic Melting

While Africans are expected to experience some of the worst effects of climate change, its consequences are already evident in our own Canadian North. Arctic temperatures are increasing twice as fast as elsewhere on Earth. By 2007, they had risen by 2°C above their

historic 1961-2000 average. A decade ago climate change models predicted the Arctic Ocean would be ice free by 2100. As new evidence became available, scientists revised their predictions to 2050 and then to 2030. Arctic sea ice cover has declined over the last three decades (see figure 3).

Figure 3: Extent of Arctic Sea Ice 1979-2009



Sheila Watt Cloutier is a Canadian Inuit leader and former International Chair of the Inuit Circumpolar Council. In her keynote address to the KAIROS Gathering in Waterloo, Ontario, in June 2009, she warned of the dire consequences of climate change in the Arctic:

“Rapid climate change has profoundly impacted our very right and ability to exist as an Indigenous people. We face dangerously unpredictable weather, extreme erosion along coastal communities and an invasion of new species of insects. In some areas of the circumpolar regions, during certain periods of the year, as travelling and hunting on the land become more dangerous, fewer continue the traditional subsistence way of life. This can mean less and less of our culture is passed down to our young people. ... The projections of the continuing rapid sea ice decline will profoundly reshape the North, and indeed the entire world, regardless of how successfully we begin to address climate change now. ... Shipping through the Northwest Passage and the increased risk of oil spills and contamination of our delicate ecosystem would be clear evidence that climate change has gone too far.”

The speed at which climate change is occurring in the Arctic is particularly troubling. A study published in *Geophysical Research Letters* indicates that climate change there may have already reached its point of no return.³⁹ Melting Arctic ice creates a dangerous feedback loop as open waters absorb more than 90% of

incoming sunlight in contrast to ice which reflects sunlight back into space.

Scientists caution that an increase in temperatures of as little as 2°C endangers the entire Greenland ice sheet. Richard Alley, a geosciences professor at Pennsylvania State University warns: “Sometime in the next decade we may pass [a] tipping point ... What is going on in the Arctic now is the biggest and fastest thing that nature has ever done.”⁴⁰ The consequence of the disappearance of the Greenland ice sheet would be a rise in global sea levels of seven metres, wiping out small island states and coastal cities all around the world.

Another consequence of Arctic warming is the melting of permafrost (permanently frozen soil), releasing

Investing in Alternatives

Each year the Canadian government gives \$1.4 billion in subsidies to the oil and gas industries. KAIROS has campaigned to redirect these subsidies to investments in energy conservation and renewable energy production that would create about three times as many jobs as investments in oil production. Furthermore, these jobs would be spread across the country and encourage preferential hiring for people from marginalized communities. The Green Economy Network, representing labour, environmental and ecumenical organizations, including KAIROS, calculates that:

- an annual investment of \$4.65 billion in renewable energy projects (chiefly for wind, solar and geothermal energy) will create 92,000 full-time jobs per year;
- an investment of \$50 billion over 10 years in retrofitting Canadian homes and buildings to save energy would generate 988,800 jobs over a decade and reduce Canada’s greenhouse gas emissions by 10 million tonnes a year by 2020;
- an investment of \$55 billion in public transit over five years would generate 211,600 jobs annually;
- an investment of \$25.7 billion in inter-city high speed rail service over five years would create another 101,647 jobs per year.

methane, a greenhouse gas that is 25 times more potent than CO₂. A recent study by Kevin Schaefer, a scientist at the National Snow and Ice Data Center in Boulder, Colorado, found that between 29% and 60% of the world's permafrost will thaw by 2200, releasing 190 gigatons (billions of metric tonnes) of carbon, the "equivalent to half the amount of carbon that has been released into the atmosphere since the dawn of the industrial age."⁴¹

Schaefer estimates this additional carbon would increase average Arctic temperatures by 8 to 10°C and the Earth's average temperature by 3°C, in addition to other human-induced temperature increases.

Conclusion: Living Well in Harmony with Nature

The Andean Indigenous peoples' vision of "living well," that is, living in harmony with the natural world, inspired the 2010 World Peoples' Conference on Climate Change and the Rights of Mother Earth held in Cochabamba, Bolivia. The Peoples' Agreement that emerged from that conference speaks of the need to recover and strengthen the wisdom and ancestral practices of Indigenous peoples.

This wisdom teaches us the prudence of embracing an economy that provides for the fundamental needs of all while rejecting "the path of development that has led the richest countries to have an ecological footprint five times bigger than what the planet is able to support."⁴² The Peoples' Agreement warns: "The regenerative capacity of the planet has been already exceeded by more than 30%. If this pace of over-exploitation of our Mother Earth continues, we will need two planets by the year 2030."

The Indigenous peoples' vision of "living well" can be a guide as we embrace a sustainable economy where all people live within the Earth's biophysical limits, sharing in the Creator's gifts of clean water, nutritious food, adequate shelter and opportunities to care for one another, engage in creative work and deepen our spiritual lives.

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KAIROS: Canadian Ecumenical Justice Initiatives unites eleven churches and religious institutions in work for social justice in Canada and around the globe.

Endnotes

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