



Policy Briefing Paper

KAIROS Policy Briefing Papers are written to help inform public debate on key domestic and foreign policy issues

No. 40 October 2014

People's Climate March Outshines UN Summit

By John Dillon
Ecological Economy Program Coordinator

Over 300,000 people marched for climate justice in the People's Climate March in New York City on September 21, 2014. Tens of thousands more participated in 2,807 rallies in 166 countries around the world. Two days later, a Climate Summit convened by UN Secretary-General Ban Ki-moon failed to deliver an adequate response to the challenge of climate change. At the end of the Summit Graça Machal, Nelson Mandela's widow, summed it up well when she told the UN General Assembly: "There is a huge mismatch between the magnitude of the challenge we face and the response we heard here today."¹

This Briefing Paper will contrast the urgent and achievable demands of the climate justice movement with the slow UN process that risks allowing the world to slide into the catastrophic consequences of climate change.

The People's Climate March was the largest ever mobilization on climate issues. It drew attention to the need for real cuts to greenhouse gas (GHG) emissions and public funding of alternatives to dependence on fossil fuels. Marchers called for feasible solutions, including more public transportation, renewable energy, ecological agriculture, an end frivolous consumption, compact urban design and zero-waste strategies for recycling, waste disposal and building retrofits.²



Indigenous Environmental Network participants in the People's Climate March.

In Part One of this Briefing Paper we will examine how the UN process is falling short of what is urgently needed. In Part Two, we will investigate three proposals made at the Summit that appear to address climate change but are fraught with contradictions. In Part Three, we will explore some achievable measures to stop disastrous climate change.

Part One: UN Fails to Reach a Climate Agreement

The intent of the Summit convened by the UN secretary-general was not to achieve a new climate treaty. Rather, its goal was to build momentum for negotiations at the 20th Conference of the Parties (COP) to the UN Framework Convention on Climate Change in Lima in December 2014. From there, the objective is a new, binding agreement at the 21st COP in Paris at the end of 2015.

UN Accord would only take effect after 2020

The fundamental problem with the UN process is that any measures agreed upon by member countries in Paris would not take effect until 2020. Pablo Solon, former chief climate negotiator for Bolivia, says that unless we act now we'll have no chance of keeping temperature increases below two degrees Celsius - the goal agreed upon in Copenhagen in 2009 and officially ratified the next year in Cancún. Solon writes: "The main point of reference for any assessment is the greenhouse gas emissions gap for this decade. What we do now is more important than what we will do in the next decade or in 2050."³

The International Energy Agency (IEA) warns that decisive actions to get GHG emissions under control must be in place by 2017. The IEA points out that the energy-related infrastructure that is built over the next few years will remain in place for decades. So the time to act is now, not in two years and certainly not in 2020 or beyond. In the words of IEA chief economist Fatih Birol, "The door to reach two degrees is about to close. In 2017 it will be closed forever."⁴

There were some new pledges at the September Summit.⁵ For example, the European Union said it would aim to cut emissions by 40% by 2030 and offered US\$2.5 billion in financing for adaptation and mitigation measures in low-income countries over the years 2014-2020.

On the whole, though, there was insufficient forward movement despite some impassioned rhetoric. U.S. President Barack Obama declared: "The climate is changing faster than our efforts to address it. The alarm bells keep ringing. Our citizens keep

... We cannot pretend we do not hear them. ... We recognize our role in creating this problem. We embrace our responsibility to combat it. ... For the sake of future generations, our generation must move toward a global compact to confront a changing climate while we still can."⁶ Yet the only new policies announced by the president were an executive order directing federal agencies to consider climate resilience in their programs and another calling on agencies like NASA to share data with other countries.

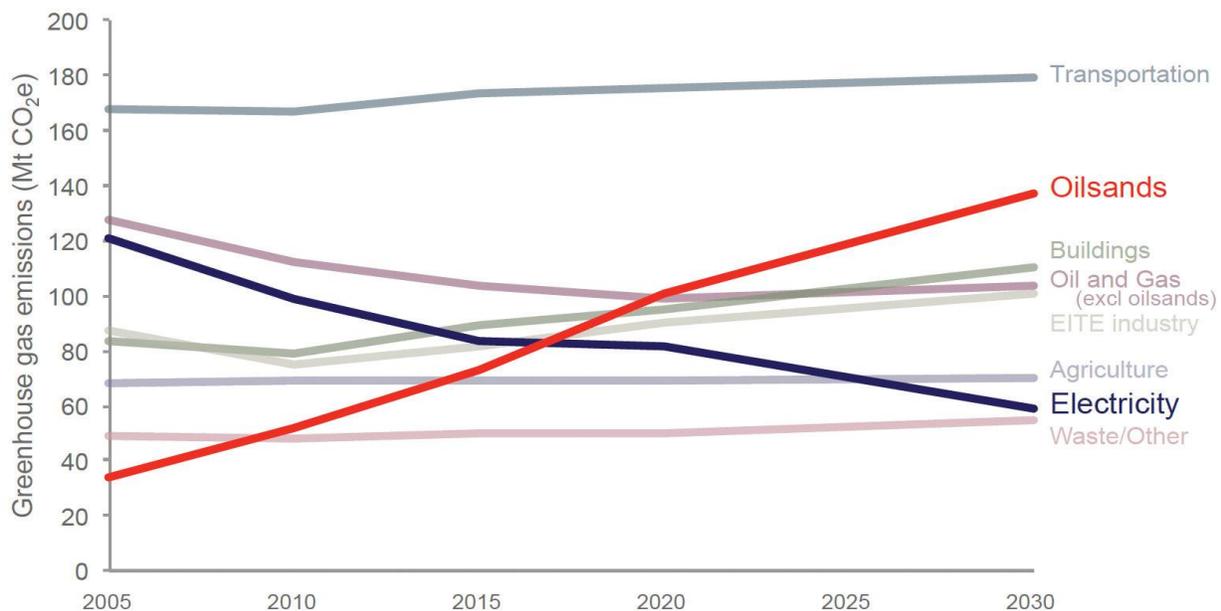
Although Prime Minister Stephen Harper was in New York, he chose not to address the Summit. Instead, Environment Minister Leona Aglukkaq spoke for Canada, highlighting a previously announced commitment to tighten vehicle emission standards, making them identical to those in the U.S. Given the tight integration of the two countries' auto industries, such harmonization is inevitable and scarcely adequate to address Canada's climate change responsibilities.

President Obama can credibly assert that the U.S. is on track to reach its stated target of reducing greenhouse emissions to 17% below their 2005 levels by 2020, as pledged at Copenhagen. The Canadian government cannot make the same assertion. Julie Gelfand, Canada's Commissioner of the Environment and Sustainable Development, has confirmed that Canada will miss that target by a substantial margin.

Gelfand's recent report shows that Canadian GHG emissions are on track to reach 734 megatonnes (millions of metric tonnes) of carbon dioxide equivalent by 2020, just three megatonnes below their 2005 level.⁷ Under current policies, emissions will be a mere 0.4% below their 2005 levels. Even if new emission reduction measures are undertaken, the most Canada could deliver is a 7% reduction by 2020. To date, two-thirds of emission reductions are due to provincial government programmes, not federal initiatives.

The chart on the next page shows how Canada's failure to meet its promised GHG reduction target is chiefly due to growing emissions from the tar sands.

Canada's Projected GHG Emissions by Economic Sector



Source: P.J. Partington. *The trouble with 2030*. Drayton Valley: The Pembina Institute. January 10, 2014. Used with permission. www.pembina.org/blog/774.

World headed for warming ‘incompatible with a civilized global community’

Even if Canada, the U.S. and all the countries that set emission reduction targets under the voluntary Copenhagen Accord were to meet their goals by 2020, the world would still be on track for an increase in global temperatures of around 4°C, double the 2°C target.⁸ Kevin Anderson, former director of the Tyndall Centre for Climate Change Research, says that 4°C of warming is “incompatible with any reasonable characterization of an organized, equitable and civilized global community.”⁹

Anderson and colleagues at the Tyndall Centre calculate that if we are to have any hope of keeping warming below two degrees, industrial nations must reduce their emissions by eight to 10% per year starting now.¹⁰ Yet according to the latest data, global GHG emissions rose by 2.3% in 2013, only slightly below their 2.5% per annum rate of growth over the last decade.¹¹ The International Energy Agency projects temperatures as high as 6°C above pre-industrial levels under a business as usual scenario. Pablo Solon believes that the rise in global temperatures could be as high as 8°C in this century.¹²

In our October 2013 Briefing Paper [*IPCC Confirms We Must Act Now on Climate Change*](#), KAIROS reviewed estimates of what proportion of known fossil fuel reserves can be burned if we are to avoid catastrophic climate change. While the details and methodologies for calculating the world’s “carbon budget” vary, the bottom line is that most of the recoverable oil, gas and coal known to exist must remain underground. The International Energy Agency warns that we can burn no more than one-third of proven fossil fuel reserves if we want to contain warming below 2°C.¹³

However, because the negotiations under the UN Framework Convention on Climate Change are not addressing steps to keep “unburnable carbon” underground, much of the debate how to avoid disastrous climate change is taking place outside of the UN negotiating process. For example, Bank of England governor Mark Carney added his voice to calls for keeping fossil fuels underground, telling a World Bank meeting on October 10, 2014 that the “vast majority of reserves are unburnable” if we want to keep temperature increases below 2°C.¹⁴

Environmental journalist Stephen Leahy adds another important perspective to this debate. After reviewing data on the world’s remaining carbon

budget, Leahy cites a study by Steven Davis of the University of California and Robert Socolow of Princeton University showing the crucial factor for living within our remaining carbon budget is the rate at which new fossil fuel burning infrastructure is built between now and 2018.

The crucial time frame is short because once a coal-burning power plant is built it operates for 40 years or more. Similarly, inefficient buildings, cement plants or transportation vehicles built now will continue to emit GHGs for decades. Leahy sums up the implications of the Davis and Socolow study: “No new coal or gas power plants can go online after 2018 unless they’re replacing retired plants. It means freezing the size of the global automobile fleet and the industrial and commercial sectors, unless their energy efficiency increases.”¹⁵

Part Two: Summit Proposals A Mixture of Candy and Poison

Pablo Solon characterizes the outcome of the UN Summit as a mixture of “candy and poison.”¹⁶ Measures that at first glance appear to address climate change often contain hidden dangers that may lead to human rights violations without resulting in meaningful GHG emission reductions. Here are three examples of flawed solutions that were touted at the Summit.

1) Emissions trading and offset schemes

The World Bank celebrates how 74 countries, 22 states, provinces or cities, and over 1,000 businesses attending the Summit’s parallel Private Sector Forum have declared their support for putting a price on carbon.¹⁷ Unfortunately, this broad category fails to differentiate between jurisdictions that propose, or have enacted, useful carbon taxes and those who favour problematic “cap and trade” schemes.

As Pablo Solon explains: “Carbon taxing penalizes companies and industries for their actual polluting emissions, while under cap and trade, governments establish an emissions cap and give stakeholders permits to pollute. After the permits have been distributed to the level of the emissions cap, they can be traded privately. The wealthiest and most polluting companies can buy from others and continue to pollute, and the market defines the price of each permit, which involves a lot of speculation and leads to the creation of new financial bubbles. The Emissions Trading Scheme (ETS) of the Euro-

pean Union established the biggest carbon market in 2005. After eight years of implementation, even conservative sources estimate that between one- and two-thirds of the carbon credits brought into the ETS ‘do not represent real carbon reductions.’ Instead, the ETS has worked to subsidize polluters and pass the costs to consumers.”¹⁸

When KAIROS initially issued the [Pricing Carbon: A Primer](#) Briefing Paper in 2009, the debate on whether carbon taxes or cap and trade systems were the best way to deliver GHG reductions was still an open question. Since then evidence of the failure of cap and trade to deliver has grown. While carbon prices under the ETS fell by nearly 90% after 2005, electric utilities in the U.K., Germany, Spain, Italy and Poland made between US\$32 and \$99 billion in windfall profits from trading over a period of just five years.¹⁹ The UN’s own Clean Development Mechanism (CDM), set up under the Kyoto Protocol, fared even worse with a 99% decline in carbon prices between 2005 and 2013.

Moreover, several of the offset projects in developing countries under the CDM have been tainted by fraud and some have resulted in grave human rights abuses. Our 2009 Briefing Paper described how these were already occurring.²⁰ Since then, human rights violations have continued, particularly against Indigenous peoples and peasant farmers who have been pushed off their traditional lands after their forests and croplands were designated as carbon sequestration projects.

In Brazil’s Parana state, “Indigenous Guarani were not allowed to forage for food or hunt in the places they’d always occupied. Or even fish in nearby waterways.”²¹ In the Bajo Aguan region of Honduras, palm oil plantations, registered as carbon offset projects, have displaced traditional agriculture. Disputes over land have led to the deaths of as many as 100 small farmers and human rights advocates.²²

2) Climate finance – public funds co-opted by private interests

Under the non-legally binding 2009 Copenhagen Accord, industrialized countries announced “a goal of *mobilizing* jointly 100 billion dollars a year by 2020 to address the needs of developing countries. This funding will come from a wide variety of sources, public and private, bilateral and multilateral, including alternative sources of finance.”²³ The

governments of low-income countries were led to believe that substantial funds would be available for public investment in renewable electricity generation or infrastructure, such as sea walls, to protect their citizens against the inevitable consequences of climate change.

The following year at the Cancún climate conference, a Green Climate Fund (GCF) was established under the guardianship of the World Bank but without any substantial financial contributions. At the September UN Summit, France pledged to provide US\$1 billion for the GCF over four years, while smaller amounts were pledged by Norway, Sweden, Denmark and Mexico. With another US\$1 billion previously promised by Germany, the total pledged has risen to US\$2.3 billion. UN officials had hoped to raise US\$15 billion by the end of 2014 with the money to be spent over the years 2016-2018. But this goal was reduced to US\$10 billion in the secretary-general's summary of Summit achievements. African countries have signalled that unless at least US\$7 billion is promised by the end of November, the chances of reaching an overall deal in Paris in 2015 will be in jeopardy.²⁴

While most of the public discussion has focused on the amount of funding for the GCF, under the radar another debate is underway concerning how the money will be spent. Many civil society observers fear that the GCF may not focus on direct grants or financing on substantially more generous terms than market loans for low-income countries. Instead, the GCF may give priority to leveraging "private sector engagement in only a few competitively selected countries and investment opportunities."²⁵ Another fear is that financing will primarily take the form of loans resulting in yet more external debt for low-income countries rather than cancelling financial debts as a step towards making reparations for the much larger ecological debt owed to the peoples of the global South.²⁶

Private interests have lobbied for allocations to be used primarily to leverage equity investments or insure private projects. The director for climate finance at the International Emissions Trading Association asserts that the primary role for public funds in the GCF should be to act as a catalyst for "private capital ... investments into mitigation and resilient development opportunities."²⁷ Indeed the biggest financial commitments made during the UN Sum-

mit came not from governments but from business groups attending the parallel Private Sector Forum. Commercial banks promised to lend US\$30 billion for climate projects by the end of 2015 and the insurance industry "committed to double its green investments to \$82 billion by the end of 2015."²⁸

3) Using carbon taxes for enhanced oil recovery

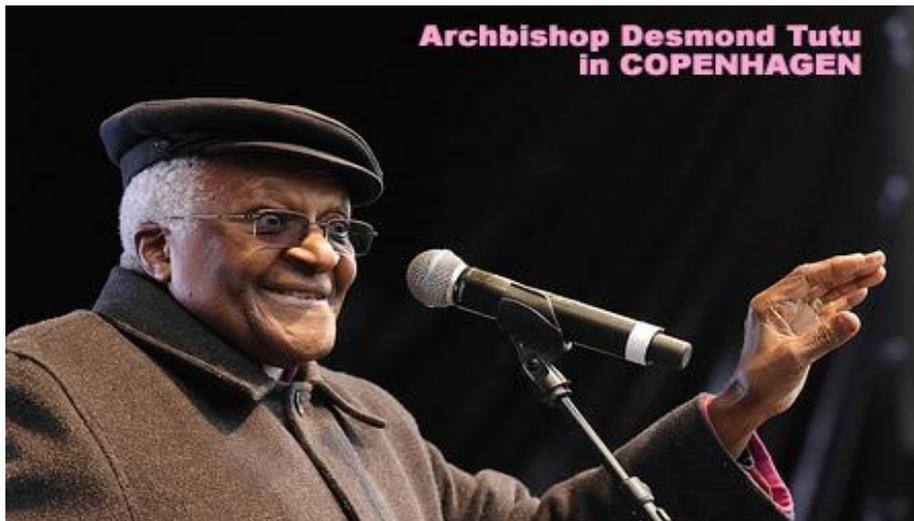
In our 2009 Briefing Paper on [The Costs and Risks of Carbon Capture and Storage](#), we discussed investing in projects to capture carbon dioxide from coal-fired power plants or tar sands operations and sequester it underground. In that report, we concluded that carbon capture and storage (CCS) projects are very risky, unlikely to divert sufficient emissions to avert climate chaos and not even viable without heavy government subsidies. Now a new plan has been hatched to use revenues from carbon taxes to subsidize CCS instead of using them to indemnify low-income persons or fund alternative energy programs.

The World Business Council on Sustainable Development proposes using the proceeds from carbon taxes to finance what they call "carbon capture, **utilization** and sequestration." What they mean by "utilization" is that CO₂ captured, for example, from a coal-fired power plant, would be utilized for Enhanced Oil Recovery (EOR).

EOR involves the injection of steam or compressed carbon dioxide into depleted oil wells to force more of the remaining oil to the surface. According to the U.S. Department of Energy there are about 400 billion barrels of "stranded" oil in the United States that cannot be extracted through conventional technologies. Some 85 billion barrels could be flushed out through the injection of CO₂ underground provided there were sufficient tax incentives and "low-cost, reliable CO₂ supplies."²⁹

These 85 billion potential barrels are four times as large as all proven oil reserves in the U.S. Rachel Smolker writes, "access to that oil would depend in large part on availability of inexpensive compressed carbon dioxide."³⁰ Hence the World Business Council on Sustainable Development proposes to use a carbon tax to subsidize CCS. Freeing up another 85 billion barrels of stranded oil would be a huge step backwards since, once burned, it would release yet more GHGs. Using CO₂ captured from coal plants in the U.S. "would end up releasing about four times as much CO₂ as it would save."³¹

Part Three: Proposals with Genuine Solutions



“This moment demands unprecedented collective action.”

In a videotaped message on the eve of the UN Summit, South African Archbishop emeritus Desmond Tutu identifies this as a decisive moment in the struggle to maintain God’s Earth – “a moment that demands unprecedented collective action.”³² In our ecumenical theology we would call this a “kairos moment,” a time when God calls us to act boldly in the face of extraordinary challenges to life on Earth.

Noting that the most devastating effects of increasing global carbon emissions are visited on the impoverished, and that the climate crisis has become the global human rights challenge of our time, Archbishop Tutu proposed a four-part agenda to free humanity of its dependence on coal, gas and oil.

1) Freeze further exploration for new fossil sources and use exploration budgets to develop renewable energy solutions.

In light of the need to keep one-third or more of known fossil fuel reserves underground, this is surely a necessary course of action. Unfortunately, oil, coal and natural gas corporations are not following this advice. In 2013 the industry spent more than US\$600 billion exploring for new reserves. By contrast, global investments in renewable energy from all sources amounted to just US\$244 billion.³³

If governments put serious limits on fossil fuel extraction, it would be in the industry’s own interests to redirect exploration spending before it is left with large portfolios of stranded assets, that is, assets that lose value due to changes in laws, regulations, markets, societal norms or environmental shocks.

Despite their advertisements, petroleum corporations are not reinvesting much of their profits into green energy. British Petroleum rebranded itself as “Beyond Petroleum” in 2000, but has since abandoned that logo. The five largest private oil companies invested just 4% of their 2008 US\$100 billion in profits in renewable or alternative energy. Chevron ran an advertising campaign declaring, “It’s time oil companies get behind renewable,” but in 2014 it told staff in that division “to find jobs elsewhere ... [because] funding for the effort would dry up.”³⁴ Instead of pulling back, these corporations continue to reinvest revenues from conventional oil and gas extraction into even greater GHG-intensive fossil fuel sources including the tar sands and the hydraulic fracturing (fracking) of shale gas deposits.

2) Hold accountable those responsible for climate damage by making them pay for the damage they cause.

While large tobacco companies have had to pay compensation for the harm caused by their products

to the tune of US\$368 billion in the U.S. alone, the petroleum industry has seldom been held accountable under the “polluter pays” principle. Although British Petroleum was fined US\$18 billion for its gross negligence in causing the blow-out of its Deepwater Horizon well in the Gulf of Mexico, and has set aside another US\$22 billion for cleanup costs, legal fees and civil settlements,³⁵ these payments are an exception, not the rule.

Until now, fossil fuel corporations have not been held responsible for damages resulting from climate change. However, a report from the Canadian Centre for Policy Alternatives, *Payback Time? What the Internationalization of Climate Litigation Could Mean for Canadian Oil and Gas Companies*,³⁶ explores scenarios under which companies could be held legally accountable. The report states that the global financial cost of damage from climate change amounted to \$591 billion in 2010. It cites estimates from the National Roundtable on the Environment and the Economy that “climate change will cost \$5 billion annually by 2020” in Canada.

The report estimates the liability of five Canadian-based oil companies as “ranging from \$295.6 million to \$709.6 million in 2010 alone, rising to between \$2.090 billion and \$5.015 billion annually in 2030.”³⁷ It discusses the possibility that judgments handed down in countries most affected by climate change could be enforced in the courts of other countries, including those in Canada. The report concludes: “Major greenhouse gas producers and their investors can manage [their] risk only by reducing their emissions, which may require moving away from fossil fuels, and by supporting efforts to conclude new international agreements that address climate liability, compensation demands, and emissions reductions in comprehensive and meaningful ways.”³⁸

The liability that corporations face for climate change is a major component of the ecological debt that the peoples of the global North owe to the peoples of the global South. Responsibility for this debt does not lie exclusively with corporations. Patterns of excessive and wasteful consumption are a factor. Governments also have a responsibility for compensating victims of climate calamities.

A carbon tax would be the most straightforward mechanism for collecting public revenues while discouraging overconsumption. A tax on CO₂ emis-

sions in developed countries at a rate of US\$50 per tonne would raise around US\$450 billion a year.³⁹ Collecting higher royalties and raising corporate taxes on fossil fuel corporations could also raise public revenues while discouraging carbon-intensive extraction. Phasing out the US\$775 billion in annual subsidies given to fossil fuel industries worldwide would raise public revenues while discouraging polluting activities.

3) Curb political lobbying by the fossil fuel industry.

The fossil fuel industry spends about \$400,000 a day in the U.S. to lobby politicians and government officials.⁴⁰ The industry made US\$73 million in contributions to political campaigns to influence the 2012 U.S. election, 87% more than it spent in 2008.⁴¹ No similar data is available for Canada since corporations are not required to disclose their lobbying expenditures. However, a study by the Polaris Institute documented how the Canadian Association of Petroleum Producers visited federal officials no less than 536 times between 2008 and 2012.⁴² Since moral suasion alone is unlikely to persuade politicians to refuse corporate donations, comprehensive electoral financing reform and explicit disclosure requirements will be needed.

4) Divest from fossil fuel companies, and invest in a clean energy future that benefits the world’s majority.

This is perhaps the most immediately actionable recommendation from Archbishop Tutu. It points to a movement that is already being embraced by a number of faith communities as described in our Briefing Paper on [The Moral and Financial Case for Divesting from Fossil Fuels](#). The movement for divestment from oil, coal and gas is growing faster than any other similar movements in history including those against tobacco and apartheid. *The New York Times* reports that, “groups controlling more than \$50 billion in assets have pledged to divest ... [from] fossil fuels.”⁴³ Nevertheless, this is only about 1% of the nearly US\$5 trillion in assets held by fossil fuel companies listed on the world’s stock exchanges.⁴⁴

Divestment by itself will not force fossil fuel companies to shift their investments to green energy as shares sold by conscientious investors will be

purchased by other investors. But as Cameron Fenton, a leading voice in the movement in Canada, says, “No one is thinking we’re going to bankrupt fossil fuel companies. But what we can do is bankrupt their reputations and take away their political power.”⁴⁵

There are signs that the corporations are beginning to worry. Exxon/Mobil published a blog accusing divestment activists of being “out of step with reality,” arguing that growing energy demand in low-income countries will require development of all their reserves.⁴⁶ The Rev. Fletcher Harper, director of *Green Faith*, an interfaith partnership campaigning for divestment in the U.S., replies that the company ignores “the reality that impoverished people suffer the most from climate change and the air pollution caused by burning fossil fuels.”⁴⁷ Renewable energy sources have more potential than Exxon/Mobil implies, especially if more of the funds held by the major petroleum companies were actually diverted to investments in green energy.

Other Actions Promoted by the People’s Climate March

In addition to endorsing the four points highlighted by Archbishop Tutu, marchers called for other feasible alternatives that can be achieved without waiting for the UN climate negotiations. These include demands for accelerating the transition to clean energy under public and community control; promoting the local production of goods, thereby avoiding long-distance transport of what can be sourced locally; moving from export-oriented agriculture to community-based production based on the principles of agro-ecology and food sovereignty; applying zero waste strategies for the recycling and disposal of trash; and dismantling the military infrastructure.⁴⁸

With regard to the last demand, it is worth noting that the U.S. military is said to be the largest consumer of petroleum products in the world. In 2011 alone, it released some 56.6 million tonnes of carbon dioxide equivalent into the atmosphere, more than what ExxonMobil and Shell combined released within the U.S.⁴⁹ Cutting the annual armed forces’ budgets of each of the world’s top 10 military spenders by 25% would free up US\$325 billion for

fighting climate change based on their 2012 spending.⁵⁰

One contingent in the New York march carried the banner of the Canadian Green Economy Network (GEN) advocating the creation of one-million climate jobs. KAIROS is a member of GEN along with trade unions, environmental groups, youth groups and other social justice organizations. The GEN platform calls for

- a) investing in public and community controlled renewable energy, such as wind, solar and geothermal energy;
- b) improving the energy efficiency of homes and buildings;
- c) expanding public transit while building high speed rail transport between major cities.

At the core of the GEN strategy is a \$50 per tonne tax on GHG emissions that would rise to \$200 per tonne over 10 years. If the GEN action plan were fully implemented over a 10-year period, it would create the equivalent of over four million new, full-time person year jobs (i.e. jobs for one year each) while reducing Canada’s total GHG emissions by over 100 million tonnes a year by the end of a decade. Had that plan been implemented after the platform was released in 2011, Canada would be on track to meeting its 2020 GHG reduction goals. The platform also contains elements that would generate a more equitable society by creating employment within marginalized communities.⁵¹

Participants in the People’s Climate March drew attention to the intrinsic links between the struggle against climate change and the wider goals of movements struggling for Indigenous rights, social equity and racial equality. Representatives of Indigenous communities resisting tar sands expansion, bitumen export pipelines and hydraulic fracturing for shale gas were at the forefront of the march under the banner of Idle No More.⁵² The diverse composition of the march, including substantial numbers of youth and people from many different religious traditions, in many ways represents the broad social movement for fundamental change advocated by Naomi Klein in *This Changes Everything: Capitalism vs. The Climate*, released on the eve of the climate march.⁵³



Green Economy Network Contingent at People’s Climate March – from left Sari Sairanen, UNIFOR; Tony Clarke, Polaris Institute; Andrea Peart, CLC; Hassan Yussuff, CLC President; Jerry Dias, UNIFOR President

- ¹ Cited in Pilita Clark. “Climate summit ends with rebuke to leaders.” *Financial Times*. September 24, 2014.
- ² Patrick Bond. “Climate Justice Resurfaces amidst New York’s Corporate Sharks.” September 24, 2014. <http://www.telesurvtv.net/english/opinion/Climate-Justice-Resurfaces-amidst-New-Yorks-Corporate-Sharks-20140924-0082.html>
- ³ Pablo Solon. *How Did Leaders Respond to the People’s Climate March?* Bangkok: Focus on the Global South. September 26, 2014. <http://focusweb.org/content/how-did-leaders-respond-people-s-climate-march>
- ⁴ Cited in Naomi Klein. *This Changes Everything: Capitalism vs Climate*. Toronto: Knopf Canada. 2014. P. 23.
- ⁵ Mat Hope, Simon Evans & Christian Hunt. “All the significant announcements from the UN climate summit, and whether they’re new.” *The Carbon Brief*. September 24, 2014. <http://www.carbonbrief.org/blog/2014/09/all-the-significant-announcements-from-the-un-climate-summit-and-whether-they-were-new/>
- ⁶ President Barack Obama. *Remarks by the President at U.N. Climate Change Summit*. Washington: Office of the Press Secretary. September 23, 2014. <http://www.whitehouse.gov/the-press-office/2014/09/23/remarks-president-un-climate-change-summit>
- ⁷ Report of the Commissioner of the Environment and Sustainable Development. Fall 2014. Ottawa: Office of the Auditor General of Canada. October 2014. P. 24.
- ⁸ The four degree estimate was made by researchers at the U.S.-based Sustainability Institute shortly after the Copenhagen conference. See “Accord in line with 3.9 degree warming, say US researchers.” *SUNS Bulletin* #6862. February 12, 2010.
- ⁹ Cited in Naomi Klein. *This Changes Everything: Capitalism vs. Climate*. Toronto: Knopf Canada. 2014. P.13.
- ¹⁰ Ibid. P.87.
- ¹¹ Data from a study published in Nature Geoscience cited in Justin Gillis. “Global Rise Reported in 2013 Greenhouse Gas Emissions.” *The New York Times*. September 21, 2014.
- ¹² See Pablo Solon, Josie Riffaud and Tony Clarke. “Climate Change: Not Just Any Action Will Do.” *Huffington Post*. September 24, 2014. http://www.huffingtonpost.com/pablo-erick-solon-romero-oroza/climate-change-not-just-a_b_5871480.html
- ¹³ International Energy Agency. *World Energy Outlook 2012*. Executive Summary. Paris: International Energy Agency. November 2012. P. 3.
- ¹⁴ Jessica Shankleman. “Mark Carney: most fossil fuel reserves can’t be burned.” *The Guardian*. October 13, 2014.
- ¹⁵ Stephen Leahy. “We Have Five Years to Stop Building Coal Plants and Gas Powered Cars.” *Motherboard*. September 6, 2014. http://motherboard.vice.com/en_ca/read/the-carbon-age-needs-to-end-in-2018
- ¹⁶ Pablo Solon. *How Did Leaders Respond to the People’s Climate March?* Bangkok: Focus on the Global South. September 26, 2014. <http://focusweb.org/content/how-did-leaders-respond-people-s-climate-march>
- ¹⁷ World bank. “73 Countries and Over 1,000 Businesses Speak Out in Support of a Price on Carbon.” Washington: The World Bank September 22, 2014. <http://www.worldbank.org/en/news/feature/2014/09/22/governments-businesses-support-carbon-pricing>
- ¹⁸ Pablo Solon. *How Did Leaders Respond to the People’s Climate March?* Bangkok: Focus on the Global South. September 26, 2014.

- ¹⁹ Naomi Klein. Op. cit. P. 225.
- ²⁰ See John Dillon. "Pricing Carbon: A Primer." *Briefing Paper No. 20*, Toronto: KAIROS. November 2009. Pp. 4-5. <http://www.kairoscanada.org/sustainability/climate-justice/kairos-briefing-paper-20-pricing-carbon-a-primer/>
- ²¹ Naomi Klein. Op. cit. P. 221.
- ²² Ibid. P. 222.
- ²³ Cited from the text of the *Copenhagen Accord* endorsed by some Heads of State, Heads of Government and Ministers meeting during the Conference of the Parties to the UN Framework Convention on Climate Change in Copenhagen 2009. Emphasis added.
- ²⁴ Sophie Yao. "African countries demand \$7 billion for green fund by December." *Global Climate Change News and Analysis*. October 14, 2014. http://www.rtcc.org/2014/10/07/african-countries-demand-7-billion-for-green-fund-by-december/?utm_source=twitterfeed&utm_medium=facebook
- ²⁵ Heinrich Böll Foundation North America. *Post Bali: It's Crunch Time*. Washington: Heinrich Böll Foundation North America. April 2014.
- ²⁶ For a discussion of the ecological debts owed by the global North to the global South see our *Briefing Paper No. 26* "Decisive Action Vital at Cancún Climate Talks." November 2010. <http://www.kairoscanada.org/wp-content/uploads/2011/09/PBP26-Cancún.pdf>
- ²⁷ Katie Sullivan. "Private sector backing could transform UN's Green Climate Fund." *Climate Change News and Analysis*. October 13, 2014. <http://www.rtcc.org/2014/10/13/private-sector-backing-could-transform-uns-green-climate-fund/>
- ²⁸ Mat Hope, Simon Evans & Christian Hunt. Op. cit.
- ²⁹ National Energy Technology Laboratory. *Carbon Dioxide Enhanced Oil Recovery*. Washington: U.S. Department of Energy. March 2010. P. 16.
- ³⁰ Rachel Smolker. "Corporations Are Not Going to Save Us from Climate Disruption." Truthout. September 29, 2014. <http://truth-out.org/news/item/26501-corporations-are-not-going-to-save-us-from-climate-disruption>
- ³¹ Naomi Klein. Op. cit. P. 248.
- ³² Archbishop Tutu calls for end of fossil fuel era. September 18, 2014. Video statement issued by the Desmond & Leah Tutu Legacy Foundation. <http://www.tutu.org.za/archbishop-tutu-calls-for-end-of-fossil-fuel-era-18-september-2014>
- ³³ Data cited in *Divest & Reinvest Now: A Statement from Theologians, Ethicists and Religious Leaders*. September 20, 2014. <http://greenfaith.org/programs/divest-and-reinvest/divest-reinvest-statement-from-theologians-and-religious-leaders>
- ³⁴ Naomi Klein. Op. cit. P. 111.
- ³⁵ Daniel Gilbert and Justin Scheck. "BP found grossly negligent." *The Wall Street Journal* reprinted in *The Globe and Mail*. September 5, 2014.
- ³⁶ Andrew Gage and Michael Byers. *Payback Time? What the Internationalization of Climate Litigation Could Mean for Canadian Oil and Gas Companies*. Vancouver: Canadian Centre for Policy Alternatives-BC. P. 5.
- ³⁷ Ibid. P. 9.
- ³⁸ Ibid. P. 10.
- ³⁹ Naomi Klein. Op. cit. P. 114.
- ⁴⁰ Cited in *Divest & Reinvest Now: A Statement from Theologians, Ethicists and Religious Leaders*. September 20, 2014. <http://greenfaith.org/programs/divest-and-reinvest/divest-reinvest-statement-from-theologians-and-religious-leaders>
- ⁴¹ Naomi Klein. Op. cit. P. 149.
- ⁴² Ibid. P. 149.
- ⁴³ Kate Galbraith. "Churches Go Green by Shedding Fossil Fuel Holdings." *The New York Times*. October 15, 2014.
- ⁴⁴ Nathaniel Bullard. *Fossil fuel divestment: A \$5 trillion challenge*. White Paper from Bloomberg New Energy Finance. August 2014. P. 1. http://about.bnef.com/content/uploads/sites/4/2014/08/BNEF_DOC_2014-08-25-Fossil-Fuel-Divestment.pdf
- ⁴⁵ Cited in Naomi Klein. Op. cit. P. 355.
- ⁴⁶ See Ken Cohen. "Some thoughts on divestment." *ExxonMobil Perspectives*. October 10, 2014. www.exxonmobilperspectives.com/2014/10/10/some-thoughts-on-divestment/#print
- ⁴⁷ Rev. Fletcher Harper. "Green Faith response to Exxon/Mobil." October 17, 2014. <https://www.z2systems.com/np/clients/greenfaith/viewOnlineEmail.jsp?emailId=547450a6415d70b6dca048fca72fb50a5m6180622547>
- ⁴⁸ Pablo Solon, Josie Riffaud and Tony Clarke. "Climate Change: Not Just Any Action Will Do." *Huffington Post*. September 24, 2014. http://www.huffingtonpost.com/pablo-erick-solon-romero-oroza/climate-change-not-just-a_b_5871480.html
- ⁴⁹ Naomi Klein. Op. cit. P. 113.
- ⁵⁰ Ibid. P. 114.
- ⁵¹ See Green Economy Network. *Making the Shift to a Green Economy: A Common Platform of the Green Economy Network*. May 2011. http://polarisinstitute.org/files/GEN-Common-Platform-EN_web.pdf
- ⁵² See the video filmed on the streets of New York showing Indigenous peoples' leadership in the People's Climate March. <http://www.youtube.com/watch?v=qs585zaaMbM&feature=youtu.be>. See also a video showing the diversity of marchers' identities including those from civil rights and faith groups. www.youtube.com/watch?v=eUejaLqdcwc
- ⁵³ Naomi Klein. *This Changes Everything: Capitalism vs Climate*. Toronto: Knopf Canada. 2014.