Sierra Club of/du Canada

PLANETARY CITIZEN'S GUIDE TO THE GLOBAL CLIMATE NEGOTIATIONS

Toward a Bali Breakthrough

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Sierra Club of Canada
412 -1 Nicholas St., Ottawa, ON, K1N 7B7
1-888-810-4204
info@sierraclub.ca
www.sierraclub.ca

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From December 3rd – 14th, 2007, Indonesia will host the 13th Conference of the Parties to the United Nations Framework Convention on Climate Change and the 3rd Meeting of the Parties to the Kyoto Protocol. Veteran activists from previous negotiations ("climate junkies") call these meetings "COP 13/MOP 3."

If you are walking into a United Nations negotiation for the first time, you are likely wondering what to expect. If you are staying home, but want to make a difference through local activism, editorials, letters to the editor, and participating in the December 8th rallies, you may want a more detailed briefing on the issues and the terminology.

This guide is meant to help make the negotiations a success by equipping citizens with the information you need to effectively pressure governments to play a responsible part in the global effort to stop dangerous climate change! If we are to act in time, the world will need a breakthrough at the December 2007 Kyoto meetings in Bali that will launch negotiations for a Kyoto Phase II.

Sierra Club of Canada's Planetary Citizen's Guide to the Global Climate Negotiations will give you an easy-to-understand review of the history, the science and the critical issues that lie ahead.

1. Global climate treaties:
a. In general

There are a lot of different words to designate binding legal agreements between countries: *treaties, conventions and protocols.*

Environmental treaties generally start as "*conventions*." A convention, such as the Vienna Convention to protect the ozone layer, is a broad statement of principles and objectives without binding targets. Every convention has its own formula for *entry into force* (abbreviated in many UN documents as EIF). The EIF formula is determined in the negotiations. Governments often sign a new convention as soon as it is negotiated, but it also needs to be approved domestically, through national parliaments and legislatures. That process is called "*ratification*". It is particularly difficult to achieve in the US, where, under the Constitution, the ratification of international treaties requires a 2/3 majority in the Senate.

Whenever a country ratifies a convention, that country is known as a "party" to the convention. Once the convention has been signed and ratified by enough countries, it enters into force. Once a convention or protocol has entered into force, it becomes international law.

Every environmental convention is much more than a piece of paper. Each convention launches a living process. All the countries that have signed and ratified (the *Parties*) meet regularly in a mini-Parliament to make sure the convention meets its goals. These mini-Parliaments are called "*Conferences of the Parties*" or COPs. The Parties often decide that the vague statement of principles, the Framework Convention, is not enough. Then they negotiate a more meaningful and specific agreement. Any binding legal agreement negotiated by Parties to an existing convention is called a "protocol."

A good example of this is the progress of the UN Framework Convention to Protect the Ozone Layer, known as the Vienna Convention. After a few years, it was very clear that the threat to the ozone layer was urgent and that without specific targets and timelines to eliminate ozone-depleting chemicals, the result would be catastrophic for the world's environment. The countries began working in scientific meetings and diplomatic sessions to develop an approach to real reductions. Those meetings culminated in a meeting in Montreal in September of 1987. The resulting treaty, the Montreal Protocol, was the first agreement to set

out mandatory reductions of ozone-depleting substances.

The Montreal Protocol, which celebrated a successful 20 years this September, is an important agreement to have in mind as we go to Bali. For one thing, the Montreal Protocol worked! It is likely the most effective of all global environmental treaties.

The Kyoto Protocol was designed using the same principles as the Montreal Protocol. It embraced the principle that the agreement would be "science-driven" and responsive to new information of the scale and scope of the threat as it emerged. It also established the principle that industrialized countries should take the first steps.

In order to ensure fairness between rich countries and poor countries, the two groups were treated differently under the Montreal Protocol, and the same is true for the Kyoto Protocol. There were several reasons for this. For one thing, the problem had been created by the rich countries. For another, the rich countries had more resources to develop the technologies to replace the ozone-depleting chemicals. As well, developing countries had urgent need of better refrigeration and wanted to expand their use of ozone-depleting refrigerants. And finally, the negotiators wanted to ensure that all countries were in the agreement, so they made provisions for developing countries totake on the reduction targets later than developed countries. So, the successful Montreal Protocol of 1987 called on rich countries to reduce their manufacture and use of ozone-depleting chemicals by 50%, while allowing developing countries to increase their use initially. Rich countries successfully met, and in some cases exceeded, their targets under the Montreal Protocol, paving the way for developing countries to join in and take on reductions of their own.

b. The Climate Agreements – in particular

The beginning of work to limit greenhouse gases by international treaty can be traced to the 1987 Report of the World Commission on Environment and Development (the WCED is often known simply as "The Brundtland Report," after its chair, Dr. Gro Harlem Brundtland). At the time, Brundtland was the Prime Minister of Norway, and she is now one of the UN Secretary General's special envoys on climate change. The WCED's final report, "Our Common Future," identified three global crises -- a development crisis, an environment crisis

and a crisis of militarism.[1] The Brundtland Report called for a major global summit to be held in 1992 to address the most pressing threats. Climate change was seen as among the most urgent.

The United Nations General Assembly called for negotiations in advance of the 1992 Summit, which was to take place in Rio de Janeiro. The gathering became the largest summit of heads of government, to that point, in world history. The Earth Summit, as it became known, succeeded in approving two global conventions - one to protect biodiversity, and the second to deal with climate change. This 1992 agreement is called the UN Framework Convention on Climate Change (UNFCCC).

The Convention's "ultimate objective" is to stabilize "greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system." In other words, the build up of greenhouse gases (GHGs) due to human activity should be stopped before it becomes dangerous.

"**Mitigation**" is a funny term for reducing emissions. To many people, mitigation sounds more like adapting, in the way that projects "mitigate" an environmental impact through modifications in design. In UNFCCC-speak, "mitigation" means one thing: reducing GHG emissions (or removing them from the atmosphere).

"**Adaptation**" refers to those policies and practices, such as land-use planning and engineering designs, which help protect communities against the climatechange that can no longer be avoided. Examples of adaptation strategies include drought-resistant cropping, higher levees and dykes in low-lying areas, and not re-building in flood plains.

The key word here is "dangerous." It is a subjective word. If you were in France for the heat wave of 2003, in the western Canadian Arctic watching the ice and permafrost melt, in New Orleans when Katrina swept through in 2005, on the coastlines of southeast Asia for tremendous cyclones, or in southern California during the fires of 2007, you might well conclude that things are already pretty dangerous. To ensure a science-based approach, the Convention relies on an expert group of scientists, the Intergovernmental Panel on Climate Change (IPCC) to summarize scientific developments and to translate this complex science into advice for "policy makers." The IPCC was created in 1988. It is comprised of scientists from government agencies, universities and the private sector, whoanalyze all the peer-re-

1 The issue of militarism was dropped from the "sustainable development" challenge when the UN General Assembly approved an agenda for the 1992 Summit on Environment and Development.

viewed published scientific literature to produce their summaries. It is essentially the world's largest peer review system. It was awarded the Nobel Peace prize with Al Gore in 2007 for its work on climate change.

The convention requires its parties to "aim towards" stabilization of GHGs in the atmosphere. It set out two large areas for work:

- Reduction of GHGs, called "*mitigation*" in convention-speak; and,
- *Adaptation* to those levels of climate change that cannot be avoided.

Virtually all aspects of human activity, as well as biological systems and species, will need some kind of adaptive response to the coming impacts of climate change. Because of their lack of financial resources, the poorer countries will have a much harder time than the wealthy industrialized world. (Although with images of Hurricane Katrina victims fresh in our minds, it's clear the wealthy countries also need far better preparation and adaptive strategies.)

c. UNFCCC Enters into Force

Within two years, the UNFCCC was signed by over 165 countries. Over 100 ratified, including the United States, Canada and every Annex I (industrialized) country. This allowed the Convention to enter into force (EIF) in March 1994. (As of November 2007, almost all countries in the world have ratified the UNFCCC.) Once it became legally binding on the parties through its entry into force, the Conference of the Parties (COP) process began. The first COP was held in Berlin in 1995. It was at this first and critical negotiating session that a way forward was developed, known as the **Berlin Mandate**. Acknowledging that the obligations under UNFCCC were not sufficient to avoid dangerous climate change, the Berlin Mandate launched a two-year negotiating phase to establish a new treaty protocol that would include a "comprehensive menu of actions". Countries could then pick and choose options to reduce emissions that made best economic and environmental sense. The new protocol would also provide a uniform approach to reporting emissions and GHG reduction measures.

Building on the precedent of the successful Montreal Protocol, the Parties agreed that they should:

> …protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities. Accordingly, the developed country Parties should take the lead in combating climate change and the adverse threats thereof.

COP2 in Geneva in 1996 advanced the work toward a protocol.

COP3 was in Kyoto, Japan in December, 1997, where the parties finally reached agreement on a protocol. One is tempted to say, "and the rest is history…"

d. The Kyoto Protocol – A comprehensive menu for emissions reductions

The Kyoto Protocol followed the principles established in the Montreal Protocol. It listed the industrialized nations in an Annex, called "Annex B." Quite often discussions about Kyoto will refer to "*Annex I countries*", because Annex I of the UNFCCC is almost identical to Annex B of Kyoto. Annex I includes the European Union (27 countries as of January 1, 2007), the United States, Canada, Japan, Norway, New Zealand, Australia, Russia, Ukraine, Belarus, Turkey, Iceland, and Switzerland. Annex II is another relevant group, consisting of Annex I minus the former Soviet Bloc countries, referred to as "*Economies in Transition*" or EIT. Developing countries are also separate. They can be part of the protocol, but do not have emission reduction targets.

The Annex B countries (except for Belarus and Turkey) accepted binding targets for emissions reductions. The greenhouse gases covered by the Kyoto protocol, (also known as the "Kyoto 6" gases) are:

- Carbon dioxide (CO2), Methane (CH4), Nitrous oxide (N2O), Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs), Sulphur hexafluoride (SF6)

Based on the 1992 agreement at Rio to promote "**common but differentiated responsibilities**," Annex B countries took on different targets at Kyoto. The European Union, which entered the Kyoto negotiations proposing 15% reductions, accepted an overall 8% reduction target. The United States adopted a 7% goal. Canada came in with a 6% target. All of

these reductions were to occur against a 1990 base year. The reductions were to be achieved between 2008 and 2012. This five-year time frame is referred to under Kyoto as "*the first commitment period*."
Most global negotiations are a challenge. Even the successful Montreal Protocol negotiations nearly ended in a deadlock. Everything fell apart that September week in Montreal twenty years ago. The same two groups that so often have been at loggerheads on Kyoto, the United States and the European Union, were not talking. President Reagan didn't really want to curtail ozone-depleting chemicals, and even the Netherlands became unhelpful. New Zealand's Environment Minister came up with a compromise and thank goodness for it.

By any standard, Kyoto was worse.

It is the style of UN negotiations to achieve agreement by attrition. Negotiations can go into the wee hours of the morning. There is often no food. Vending machine pop and chips keep bleary-eyed negotiators at their microphones so long as the translators are willing to make things work in six official languages. It is a grim and uninspiring spectacle.

While late nights and cliffhangers are routine, Kyoto's sleep-deprived brinkmanship remains unsurpassed. The negotiations exceeded the allowable time for the meeting itself. The last round went for an incredible, uninterrupted 36 hour marathon. By the end, the Kyoto convention facility was being dismantled to make room for a trade show. When the deal was finally agreed upon, the ink was still wet as delegates rushed for planes home.

In order to get a deal, negotiations had developed a complex set of brand new concepts. These concepts are generally called "*flexible mechanisms*." Many environmentalists called them loopholes. Based on the understanding that the global atmosphere is well mixed and it does not matter where emissions are released, three basic kinds of flexible mechanisms were adopted:
1) Joint Implementation, under which Annex I countries can get credits for funding projects that reduce GHG emissions in other Annex I countries, principally those in the former Soviet Bloc (EIT);
2) The Clean Development Mechanism, through which Annex I countries can get credits for funding projects that reduce GHG emissions in developing countries; and
3) International Emissions Trading, through which Annex I countries can buy and sell car-

bon credits where one country has exceeded its target and can "sell" its reductions by tonne to another country.

This third element has been the most controversial. It is Russia that has always been seen as the main beneficiary of this provision. Because of Kyoto's 1990 base year, Russia can get credit for the post-Soviet collapse of its economy and resulting decline in GHG emissions. Without making an effort to reduce emissions, Russia has met and exceeded its Kyoto targets. Trading in the pollution of the former USSR is generally called trading in "Russian hot air."

As well, Kyoto included the idea that Annex 1 countries can get credit for enhancing "*sinks*." In convention-speak, a sink is any natural ecosystem that sequesters carbon, holding it out of the atmosphere. Carbon sinks are especially important because they capture a significant fraction of greenhouse gases. The total capacity of sinks is decreasing rapidly through deforestation, conversion of forest land to agriculture and other changes, referred to under Kyoto as "land use, land use change and forestry" (LULUCF).
Kyoto's sinks are generally agricultural and forest, with credits available for projects in farming, afforestation, and reforestation. In other words, if you plant a forest where one was not before, you can get credits under Kyoto. This does not apply to commercial logging. You cannot get credit for cutting down a forest only to plant one. Also due to controversy, credits for avoided deforestation are not included in the Kyoto protocol. These issues are very technical, the science is still evolving, and not surprisingly the debate over what should actually qualify as Kyoto "sinks" is very heated.

e. Kyoto's Rocky Road

The Kyoto Protocol also had a complex formula for its entry into force (EIF). Fifty-five countries would have to ratify the Protocol and, in addition, those 55 countries would have to be equivalent to 55% of the global emissions in 1990.

In 2001, within a few months of taking office, President George W. Bush pulled the US out of the Protocol, announcing that the US would not ratify. President Bush did this without even a pretense of Cabinet consideration and without so much as a conversation with the

head of his environmental agency.[2]
When Bush pulled the US out of Kyoto, he did more than walk away with one vote out of 55. Bush walked away with 25% of global emissions, and 36% of Annex I GHG emissions, making the challenge of reaching 55% of Annex I emissions from 1990 far more difficult. Then the US exerted pressure on Russia not to ratify. The Kyoto Protocol was in trouble.

Negotiations had fallen apart even while Bill Clinton was in the White House. In the fall of 2000, at the height of the US Presidential race, the 6th COP took place in The Hague.[3] The EU and the US reached an impasse over the rules to make Kyoto work. The Chair of the COP chose not to end the meeting, but to take a pause of over six months and resume in Bonn at what was known as COP 6 (bis). COP 6 resumed with Bush denouncing Kyoto, and pushing others to abandon the treaty (the US still sent a delegation to the COP, as they were -- and still are a party to UNFCCC). But the COP 6 bis managed to salvage global resolve to keep Kyoto alive. **The world decided it could not afford to wait for George W. Bush.** The effort to develop intricate, detailed, fair and transparent rules continued, while pursuing the uphill work of achieving ratification.

COP 7 in Marrakech (2001) achieved a breakthrough on key rules for the flexibility mechanisms. By COP 8 in New Delhi (2002), the US was overtly pressing India not to accept GHG emission reduction targets. As Bush had used the rationale that Kyoto was unfair because developing countries did not have targets, Bush had an incentive to keep the developing countries from doing what he refused to do.

COP 9 in Milan was held while there was still uncertainty about when or even whether Kyoto would come into force. Those difficulties were removed when Russian President Vladimir Putin announced that Russia would ratify. The Russian Duma had ratified by the December 2004 meeting in Buenos Aires, but the required waiting period under the formula for EIF meant that the Kyoto Protocol would not officially become a fully binding instrument until February 16th, 2005.

2. Breakthrough in Montreal

2 See Suskind, The Price of Loyalty, the story of Bush's first term Secretary of the Treasury, Paul O'Neill who had favoured the Kyoto Protocol.

3 COP 4 had been in Buenos Aires, Argentina in 1998; COP 5 in Bonn Germany in 1999.

With ratification by Russia, the Kyoto Protocol officially entered into force as international law on February 16th, 2005. This meant that at the 11th COP held in Montreal, the climate negotiations had the first MOP or "*Meeting of the Parties*" under Kyoto. Just as the COP series of meetings governs actions under the UNFCCC, the Kyoto Protocol has its own process under MOP. COP and MOP meetings are held at the same time.
This was the first time such a meeting took place in North America, and Canada played a crucial role as President and host of the negotiations. Volunteers and delegates from around the world, including the United States, showed up in force, making it one of the largest climate negotiations in history with over 10,000 people in attendance. The stakes were high: this meeting could either launch negotiations for a second commitment period after 2012 under the Kyoto Protocol; or Kyoto could fall victim to the Bush administration's strategy of sabotage and expire after 2012.

Throughout the two-week meeting, involved citizens kept up the pressure on their delegations and turned up 40,000 strong in the freezing December streets of Montreal to support the continuation of the Kyoto Protocol. Canada's environment Minister, Stéphane Dion, presided over the negotiations and worked around the clock to make sure the Kyoto Protocol did not die. The outcome of these negotiations was a reinvigorated international community, respect for Canada's leadership in the Kyoto negotiations, isolation of the anti-Kyoto Bush faction, and the launch of discussions for a second Kyoto phase. Delegates agreed there would be "no gap" between the first commitment period, which ends in 2012, and the second commitment period. This implies that negotiations for the post-2012 regime must finish by 2009 at the very latest, to allow countries the time to ratify the new agreement so it can enter into force in 2013. An "ad-hoc" working group was created to begin discussions on a way forward for Annex I countries after 2012.

Another important success in Montreal was a summit of municipal leaders, which adopted targets of a 30% greenhouse gas reduction below the 1990 level by 2020, and an 80% reduction below the 1990 level by 2050.

A "dialogue" process under the UNFCCC was also launched in Montreal. The US is part of the UNFCCC and has to agree to anything decided under this process. With US insistence, it was clearly spelled out that the "dialogue" would not lead to any new, binding targets. Although it is clear that Annex B countries and the US should take on absolute, binding

emissions reduction targets, the dialolgue could provide a forum through which developing countries can discuss participation in a second commitment period.

3. Canada's Changing Tune

Little more than a month after Stéphane Dion hammered down the gavel and successfully launched discussions for Kyoto Phase II, the Liberal government of Paul Martin was defeated and replaced by a minority Conservative government under Stephen Harper. While the new Environment Minister, Rona Ambrose, accepted the position of President of the UNFCCC negotiations (a position the Environment Minister of the country hosting the conference holds for a full year), she and her government wasted no time in trashing the Kyoto Protocol and its flexible mechanisms as vehicles for corruption, denouncing the Montreal conference as a waste of money, and abandoning Canada's Kyoto target.
Although he has not officially withdrawn Canada from the Kyoto Protocol, Stephen Harper has consistently aligned himself with the Bush administration. In May 2006, during a two-week session of negotiations in Bonn, Canada's negotiators were instructed to delay negotiations, push for the abandonment of the Kyoto protocol after 2012, and block discussion of tougher targets for industrialized countries, according to documents leaked to the Globe and Mail and La Presse. The momentum established in Montreal was effectively destroyed by Canada's new government.

It took only one year to severely damage Canada's international credibility. Minister Ambrose arrived at COP 12 in Nairobi and stood on a world stage to blame Canadian opposition parties and reiterate Canada's abandonment of Kyoto. This time, she also declared that Canada had a 20% reduction target for 2020. She conveniently left out the fact that Canada had changed its baseline year and was now using 2006, not the Kyoto baseline year of 1990. John Baird has since replaced Rona Ambrose as Environment Minister. Unfortunately, the government's policy on climate change remains unaltered with the new Minister, and John Baird has continued the tradition of exaggerations about Canada's climate change policies. Canada's behaviour has seriously eroded the trust that is essential for constructive negotiations.

4. Sideshows

Several meetings over the course of 2007 had climate change at the top of their agendas. This included the G8 meeting in Heiligendamm, Germany, the Asia Pacific Economic Cooperation (APEC) meeting in Australia, and the Major Economies Initiatives held in Washington. Pro-Kyoto countries, including the Europeans, have clearly stated that none of these meetings are meant to compete with Kyoto, but instead that any agreement they generate will help build on the UN and Kyoto processes. Thanks to the leadership of the German Presidency of the G8, the G8 meeting in Germany made progress on climate change with a reaffirmation that the UN is the only legitimate negotiating forum for a way forward. In contrast, the Bush administration is clearly trying to launch a new, voluntary process that would generate an empty agreement lacking binding commitments and continuing the trend of delay.

With over 160 signatories, the Kyoto Protocol is the largest and most inclusive multilateral initiative through which countries are bound by international law to reduce their global greenhouse gas emissions. Under the Protocol all parties are bound to implement measures and programs meant to prevent andadapt to climate change. If large developing countries are to adopt fixed commitments at a later date, it is imperative that industrialized countries keep their commitment under Kyoto. Furthermore, since the Kyoto Protocol was signed a decade ago, the Parties have met twice a year to build and strengthen the institutions, infrastructure and resources needed for the integrity and good running order of these flexible mechanisms. The infrastructure in place mandates strict reporting andmonitoring of greenhouse gas emissions. The world cannot afford to start all over again.

Instead of sabotaging negotiations, distracting attention away from Kyoto, and being dishonest with Canadians and the world about its intentions for 2020, the Canadian government should take note that the scientific consensus increasingly and urgently warns that time is running out. Like the European Union, Canada must recognize the need to keep global warming from rising 2 degrees Celsius above pre-industrial levels.

Why?

5. 2°C and the scientific backdrop to the Kyoto meetings in Bali

Climate change has arrived. We are already experiencing it through erratic weather pat-

terns, forest fires, droughts, insect infestations and glacier melt. Worse, based on the levels of greenhouse gases we have already pumped into the atmosphere, temperatures will continue to rise, and the severity and frequency of severe weather events will continue to increase. If we do not reduce global emissions of greenhouse gases urgently, the disasters of today will be dwarfed by future catastrophic impacts.

We have become addicted to fossil fuels for energy, a principal cause of human-generated greenhouse gas emissions. The ongoing assault on the world's tropical forests through burning and cutting contribute approximately 20% to the climate crisis, while the global livestock industry is responsible for 18% of greenhouse gas emissions.[4]
Clearly, humanity's principal challenge this century will be to avoid catastrophic levels of human-induced global warming. To do this, we must drastically reduce our emissions of GHGs,which wrap around the earth like a blanket and trap heat in our atmosphere, raising global temperatures. We can no longer avoid a significant level of climate disruption, as atmospheric levels of CO2 have increased from the pre-industrial levels of 280 parts per million (ppm) to a current level of 380ppm -- or more than 30% -- in the last century, largely due to the burning of fossil fuels. This increase is, in human time frames, irreversible. The IPCC's 4th Assessment Report indicated we have already committed the planet to a global average temperature rise of 1 degree Celsius above pre-industrial levels. Our goal is to avoid even more dangerous levels.

What is dangerous? 400 ppm? 550ppm? 700 ppm?

Increasingly, scientists worry that climate change may operate more as a switch than as a dial. Sudden, abrupt and catastrophic impacts may occur at a given "tipping point." If we allow the global average temperature to exceed 2 degrees Celsius increase over pre-Industrial Revolution levels, then we run an unacceptable risk of reaching a devastating tipping point.

The sudden and abrupt changes that are now top of mind for many scientists include: the collapse of the Amazon rainforest and other tropical forests; runaway melting of the Greenland Ice sheet; collapse of the Western Antarctic Ice Shelf; a vast increase in methane emissions from the Canadian boreal forests; and a dramatic reduction in the ability of oceans to absorb carbon dioxide from the atmosphere. Any one of these events represents a devastating signal of abrupt climate change that could trigger irreversible runaway climate disruption

4 United Nations Food and Agriculture Organization (2006), Livestock's long shadow.

with catastrophic consequences around the world.

Kyoto was always seen as a small first step. To avoid 2 degrees C, we need to hold long-term atmospheric concentrations of greenhouse gases at no more than 450ppm. This requires much deeper reductions than Kyoto. By 2050, global emissions must be slashed to at least 50% below 1990 levels. To achieve this, global emissions must stabilise and start to decline by 2015. Developed countries have been emitting GHGs for well over a century and therefore are responsible for a majority of greenhouse gases accumulated in our atmosphere. As a result, their reduction targets should reflect their historical contributions to causing global warming. In addition, developed countries' per capita emissions dwarf those of the developing world: Canada emits approximately 23 tonnes of GHGs per capita. China emits 3.4 tonnes of GHGs per capita. Industrialized countries must take on their fair share of reductions and reduce 30% below 1990 levels by 2020, and 80-90% below 1990 by 2050.

6. Why the 2007 Kyoto meetings are so important

The next two years will be crucial in determining whether humanity is able to meet its greatest challenge: stopping dangerous climate change. Bali should set the wheels in motion for the next two years. UN Secretary General Ban Ki Moon has called for a breakthrough in Bali to pave a way forward. It's been twenty years since scientists first rang the alarm bell, and our denial and procrastination have placed us perilously close to the tipping point. We must move swiftly to reach an international agreement with deep reductions, and to put in place the domestic policies required to implement it.

The greatest issue at stake in Bali is whether countries will take on deeper commitments under the Kyoto Protocol's architecture in a second commitment period, and continue to expand the carbon market that Kyoto has created.

To avoid a gap between Kyoto's first and second phase (the first one ends after 2012), we need a new binding treaty by 2009 at the latest. This would allow three years for countries to ratify (it took an agonizing eight years for enough countries to ratify Kyoto for it to enter into force) and send a clear signal to international carbon markets well before 2013 that the Kyoto Protocol is alive and well.

Success at Bali would mean the creation of a negotiating mandate similar to the Berlin Mandate which led to Kyoto: the **Bali Mandate**. This negotiating mandate should lead to an agreement that builds on and expands the mechanisms of the Kyoto Protocol. This agreement could take the form of a treaty or an amendment to the Kyoto Protocol, and must set the world on track to limiting global warming to as far below 2 degrees as possible. For the next commitment period, all countries must take on deeper commitments than they had in the first phase of Kyoto. Key elements of the post-2012 agreement must include:

- Deeper absolute targets for Annex I countries in line with their *historical responsibilities*: 30% below 1990 levels by 2020 and 80-90% below 1990 levels by 2050. The United States, Australia and Canada must do their fair share, which includes making up for lost time.

- New, absolute reduction targets for some newly industrialized countries, such as South Korea, Singapore, Saudi Arabia, Kuwait and Mexico, and their inclusion in the Kyoto emission-trading regime.

- Building on the current *flexible mechanisms* under the Kyoto Protocol, and including more such mechanisms to create incentives for rapidly industrializing, middle-income countries such as China, Brazil, India and South Africa. These countries could:
  - commit to a low carbon development path;
  - work to prevent deforestation; and
  - take on emissions intensity targets as well as renewable energy targets.

- Expand on the current Kyoto carbon market and include **new flexible mechanisms** such as:
  - A clean technology deployment mechanism to scale up research, deployment and transfer of technology;
  - A deforestation reduction mechanism that would provide regular and reliable incentives to developing countries to reduce deforestation; and
  - An adaptation mechanism to ensure that greater prominence is given to adaptation and that the most vulnerable countries have the necessary support to adapt to the level of climate change that is unavoidable.

France has recently proposed adopting a worldwide carbon tax. It has also asked the European Commission to study the potential carbon tax that would take into account the carbon used to produce and transport goods that the EU imports.

7. Keep an eye out for

Exceptional meeting of finance ministers and institutions: Indonesia has taken the unprecedented step of inviting finance ministers from over 40 countries to meet in Bali during COP 13. Six financial institutions, such as the World Bank, have also been invited. Previously, climate change had been perceived as an environmental issue that fell solely under the jurisdiction of environment ministers. The meeting of finance ministers will serve to emphasize the wider implications that climate change has for the world economy, and to engage ministers and institutions that control a large part of the world's finances. The goals of this meeting will be to:

- explore means of incorporating climate change into development financing approaches;
- have finance ministers add the topic of investments and finance to mitigate and adapt to climate change in their regular discussions, such as those held at the G20 and other venues; and
- seek a possible agreement for finance ministers to meet regularly at future COP gatherings to report on progress on these issues.[5]

Intensity Targets vs. Absolute Targets: Absolute targets, such as those in the Kyoto Protocol, set goals in terms of GHG emission reductions. Intensity targets set their goals in terms of emissions per unit of production (e.g., GHG emissions per barrel of oil produced, or GHG emissions relative to a country's GDP). Under an intensity-target system, if output increases, overall emissions can increase even if companies meet their targets. The intensity-based approach has long been advocated by industry, and has been promoted by George W. Bush and Stephen Harper. Unfortunately, the atmosphere reacts to and measures greenhouse gases in absolute terms – it doesn't, and couldn't care less about reductions in intensity, only reductions in GHG emissions. It is not acceptable for industrialized countries to adopt intensity targets, either as their national target or for industry sectors. Unfortunately, Canada has proposed using intensity targets for heavy industry, and has misled the international community and the public about this. At the recent APEC meeting in Australia, Prime Minister Stephen Harper spoke about an 18% reduction in emissions as a result of his regulatory proposal for industry. He failed to mention that this was an 18% intensity target, which will

5 Terms of Reference : Ministers of Finance Initiated Dialogue, UNFCCC

in fact allow a rise in emissions from Canada's biggest polluters.

More sideshows from anti-Kyoto camps, which could take the form of continued attempts to undermine Kyoto, discontinue its architecture after 2012, and start a new agreement from scratch. The world cannot afford to waste more time.

Reducing Emissions from Deforestation and Forest Degradation: Currently, countries cannot get credit under the Kyoto protocol for taking measures to avoid deforestation. This is in part due to the fact that there is much controversy around baseline uncertainty, how to ensure the 'permanence' of reduced deforestation, and ensuring that reductions achieved in one place or country are not cancelled by increases elsewhere. There is also concern that efforts to reduce fossil fuel emissions could be undermined if a large number of credits generated through avoided deforestation become available at low cost. However, due to the fact that deforestation causes 20% of global warming, countries are increasingly recognizing the need to implement measures for avoiding deforestation. During COP11 in Montreal, the Coalition for Rainforest Nations put forward a proposal to consider approaches to reduce emissions from deforestation. The subsequent work from that proposal has culminated in a draft decision text which is to be discussed in Bali. A combination of market and non-market measures will be needed to provide adequate incentives to reduce deforestation. This must include support for governments to monitor and measure deforestation transparently and improve environmental law enforcement and forest governance, and direct benefits to local populations who live off forests. Financial incentives to governments and businesses to avoid deforestation should also be considered.

8. Positioning of Key Countries

Annex B Countries

European Union
The European Union has an 8% reduction target below 1990 levels for Kyoto's first commitment period, and the EU as a whole is on track to meeting this target. It has created a European Union Emissions Trading System for the Kyoto period which places absolute caps on industrial emissions in the EU and allows emissions trading for the 11,500 companies that are part of the system to meet their targets. The European Union has publicly declared

that it considers 2 degrees Celsius as the threshold beyond which the world will experience dangerous climate change. To avoid 2 degrees of warming, the EU is pushing for worldwide emission levels to decrease to a point that would avoid 2 degrees of global warming above pre-industrial levels. As a result, the EU has pledged to reduce its emissions by 20% below 1990 levels by 2020, and if other industrialized countries adopt similar targets, it will improve its target to 30% below the 1990 level by 2020. The EU has also pledged to increase energy efficiency by 20% by 2020, and to generate 20% of its energy from renewable sources by the same date. The EU strongly supports a second commitment period under the Kyoto Protocol.

Japan

Japan defines itself as "pro-Kyoto". Japan has a Kyoto target to reduce its greenhouse gas emissions by 6% below 1990 levels. This is a challenging target for one of the world's most efficient countries, and its current emissions are 13% above 1990 levels.

The Japanese government has created a series of programs designed to achieve its Kyoto targets. Its Kyoto Protocol Target Achievement Plan will start in January 2008. Japan is planning to achieve a 6.5% emissions reduction in the energy and non-energy sectors, 3.9% with forest sinks, and 1.6% with the Kyoto Mechanism (carbon credits).
Japan advocates that other countries tackle climate change "more aggressively" and that they "strengthen" the Kyoto Protocol during the discussions leading up to the second phase of the accord. It has set up a $141.5 million fund to further engage in the international carbon market. Japan has expressed support for intensity based targets, however its willingness to take targets for a second commitment period will very much be influenced by the US and China's engagement in a post-2012 deal.

Australia

Australia initially committed to a target of 8% above 1990 levels under the Kyoto Protocol but has since refused to ratify, and aligned much of its policies with the Bush administration. However, Australia is currently experiencing the worst drought in perhaps over 1000 years, and Australians are waking up to the catastrophic consequences of climate change. Australia will hold federal elections on November 24th, a few days before the start of the Kyoto talks in Bali.The Labor Party, which has consistently been polling to win a landslide victory is committed to ratifying Kyoto immediately after being elected. Ironically, Australia is on

track to meeting its Kyoto targets, despite not having ratified. With respect to a 2020 target the Labor Party has announced that, "Any future agreement must reduce emissions and involve all major emitters, recognising common but differentiated responsibilities in terms of targets and timelines within the commitment period." They have announced a 20% renewable energy target for 2020. The incumbent Liberal party has been clear they have no intention to ratify Kyoto, but have pledged to a 15% clean energy target for 2020.

United States

Since announcing that the US was withdrawing from Kyoto, the Bush administration has worked strenuously to scuttle Kyoto, opposing even weak agenda for meetings to negotiate a post-2012 framework.

However, the effective absence of the US from the Kyoto multilateral process has allowed it to achieve its own character without heavy- handed direction.

In the US itself, a powerful groundswell of public support has resulted in nearly 700 cities signing the Mayor's Climate Protection Agreement, state laws to reduce vehicle greenhouse gas emissions, global warming targets and clean energy programs. The northeast Regional Greenhouse Gas Initiative (RGGI), Western Climate Initiative, and Midwest Governors programs are moving toward full-fledged carbon market programs with regional CO_2 caps, allowances, trading and offsets. Energy and climate bills are also starting to move in Congress, and a new President from either party will clearly take the nation in a better direction than the Bush administration. But progress will be difficult and politically complicated, since understanding of the scientific research is weak and knowledge of the UNFCCC/Kyoto process is almost nonexistent. The US is now on the verge of engaging politically with the global context -- but not quite there yet.

The political dialogue is almost entirely limited to domestic legislation. Yet the US has unparalleled financial, technical and political leadership potential.

A strong framework, a Bali Mandate, for development and adoption of a post-2012 expansion of the Kyoto Protocol, is needed to draw the next US administration toward full involvement as a partner in the global process.

Canada

Although Canada remains an Annex B country under Kyoto, it has announced it has no intention of reaching its target or even trying to honour its commitments under Kyoto. Canada's emissions are approximately 35% above its Kyoto targets. In 2007 Canada announced regulations for greenhouse gases based on intensity targets, allowing Canada's overall emissions to continue to rise. It also announced a 20% reduction target below 2006 levels for 2020. This target is unacceptable for a country such Canada, whose per capita emissions are amongst the highest in the world. Four independent studies have shown that with the proposed regulations, even this 2020 target won't be met. Canada has a responsibility to do much more if dangerous climate change is to be avoided. Canada must agree to do its fair share by honouring its Kyoto commitments, accepting a 30% target below 1990 levels for 2020 and an 80% target for 2050.

Non-Annex B countries

China

The International Energy Agency predicts that China will soon overtake the US as the largest emitter of greenhouse gases. However, on a per capita basis, China emits 3 tonnes of CO_2 per person, compared to 24 tonnes per person in the US.[6] Those refusing to ratify or implement Kyoto blame it on the fact that China has no binding targets under Kyoto. However, all countries that have ratified Kyoto, even those without fixed reduction targets, have obligations under Article 10 to implement emissions reductions programs. In June 2007, China unveiled its first national plan on climate change which included a 20% improvement in energy efficiency by 2010, and doubling of renewable energy by 2020. China is also actively participating in the Clean Development Mechanism (CDM) under the Kyoto Protocol and it is expected that between 2008 and 2012, CDM projects will deliver annual reductions of 78 million tonnes, for a total of 390 million tonnes.[7] China has indicated it is not willing to take on binding emissions reductions under a post-2012 regime, although it could take on voluntary commitments.

India

On August 26, 2002, the Indian Government ratified the Kyoto Protocol. As a developing country whose main priority is poverty alleviation, India has no binding GHG reduction tar-

6 http://www.carbonplanet.com/home/country_emissions.php

7 http://cdm.unfccc.int/Statistics/Registration/AmountOfReductRegisteredProjPieChart.html

gets. Under the Article 12 of the Kyoto Protocol, India is participating and benefiting from the Clean Development Mechanism. It is currently predicted that the CDM will achieve annual reductions of 35 million tonnesbetween 2008 to 2012 in India.[8] The Kyoto Protocol enables India to take up clean technology projects with external assistance in accordance with national sustainable development priorities. India's decision to ratify the Kyoto Protocol is a reaffirmation of the country's faith in the multilateral process for addressing global environmental problems.

India's per capita emissions are equivalent to about 1.3 tonnes of carbon dioxide.[9] In comparison, Canada emits approximately 23.45 tonnes.[10] The main objective of India's national development strategy is to reduce the incidence of poverty to 10% by 2012 and provide gainful employment. As a result, India is expecting an increase in energy consumption both at macro and micro levels which will lead to absolute growth in emissions. One of India's main priorities is transfer of technology from industrialized countries in order to achieve development through clean technology.

Brazil

The Kyoto Protocol was ratified by the Brazilian government in August 2002. As a non-Annex 1 developing country, Brazilhas no targets for reducing or limiting its anthropogenic greenhouse gases. 75% of Brazil's emissions are from deforestation, although emissions from deforestation were cut in half over the last three years. They appear to be rising again due in part to high prices for commodities like beef and soybean. Brazil's national priorities are to meet the pressing social and economic needs, such as eradicating poverty, improving health conditions, fighting famine and creating decent living conditions. Brazil is committed to doing its part to reduce greenhouse gas emissions and has been actively participating in various projects under the Clean Development Mechanism of the Kyoto Protocol. In addition, there are a number of governmental programs and initiatives in Brazil which are resulting in significant reductions in the emissions of greenhouse gases. Some of them are responsible for Brazil having a comparatively "clean" energy matrix, with low levels of greenhouse gas emissions per unit of energy produced or consumed.

Least Developed Countries

8 http://www.unfccc.int

9 http://www.carbonplanet.com/home/country_emissions.php

10 Ibid.

The Kyoto Protocol and UNFCCC are the most inclusive multilateral negotiations, and include the least developed countries who are the most vulnerable to climate change, yet the least responsible for it. The priorities of this group of countries are to adapt to the climate change which we are already experiencing and that which is unavoidable in the future. Because of their vulnerability the Least Developed Countries group have been amongst the most vocal proponents for stronger action on climate change mitigation. They are also very strong supporters of an adaptation fund that would be financed by developed countries and which would fund adaptation projects in the least developed countries.

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