NOTE 1. INTRODUCTION TO COP6 ISSUES AND GLOSSARY TO COP6 TERMS

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As a result of decisions made now, changes in global emissions over the next few decades may, over the next hundred years, inexorably lead to catastrophic climate change like the breakdown of the West Antarctic ice sheets.

- Stephen H. Schneider, Stanford University

From November 13 to 24, 2000 the nations of the world will meet in The Hague to decide the fate of the Kyoto Protocol. Will the greenhouse gas emission reductions called for in the Protocol be real reductions from business as usual or reductions in form only? Will it be undermined by loopholes? Will the Protocol be enforceable or merely an exhortation that is legally binding in form only? Will developing countries block progress out of frustration with developed countries' failure to implement past obligations? Will the mechanisms like emission trading provide the flexibility that big emitters like the United States say is necessary if they are going to ratify the Protocol?

The climate summit — officially known as the 6th Conference of the Parties to the *UN Framework Convention on Climate Change* or "CoP6" — will be a historic watershed. If a success, the industrialised nations will at last take actions to reduce their greenhouse gas emissions.

At best the Kyoto emission targets are insufficient to avoid climate change. However, they will reduce the chance of catastrophic, rapid changes in the earth's climate system. And, the rules decided at CoP6 will help determine the effectiveness of emission reduction commitments in the post Kyoto period (after 2012). If loopholes do not undermine it, the Protocol may be sufficient to begin weaning the global economy from its addiction to fossil fuels.

This series of briefing notes provides an overview of the issues to be decided at CoP6. The series is intended to provide an environmental perspective to negotiators and educate other participants attending at the Hague or following the negotiations at home.

This introductory note begins with a discussion of the Framework Convention under which the Kyoto Protocol was negotiated. It then reviews the basic elements of the Protocol, discusses the key negotiating parties and provides a glossary of "climate speak" — the difficult to penetrate lexicon of climate negotiators.

THE FRAMEWORK CONVENTION ON CLIMATE CHANGE

The *United Nations Framework Convention on Climate Change* (FCCC) was one of several key environmental treaties negotiated at the June 1992 Earth Summit in Rio de Janeiro. Almost 160 nations have ratified the FCCC to date. The ultimate objective of the FCCC is to achieve:

"stabilization of greenhouse gas concentrations in the atmosphere at a level that will prevent dangerous anthropogenic [human-induced] interference with the climate system."

The FCCC is based on the principle of "common but differentiated responsibilities". It notes that the largest share of historic and current emissions originate in developed countries, and it establishes responsibilities that vary according to countries' ability to take action. For instance,

- All Parties are to formulate and implement programs containing measures to mitigate climate change.
- Annex I Parties essentially the industrialized world — are to adopt policies and measures with the aim of returning emissions to their 1990 levels by 2000.

 Annex II Parties — essentially countries that were members of the OECD in 1992 — are to support climate change activities in developing countries by providing financial support above and beyond current levels of financial assistance.

As its name implies, the FCCC is a framework of general principles and institutions. It sets up a process for developing more meaningful commitments. The Kyoto Protocol is potentially the first major step under this framework.

KYOTO PROTOCOL: THE KEY ELEMENTS

The Kyoto Protocol to the United Nations Framework Convention on Climate Change (the "Kyoto Protocol") was negotiated in December 1997. The Kyoto Protocol contains legally binding emission reduction commitments for developed nations. From an environmental perspective the most important decisions at CoP6 concern details of how the Kyoto Protocol will be implemented.

THE NEGOTIATING BLOCS

The negotiations are dominated by several groupings of nations. These include:

The Umbrella Group. Canada, the US, Russia, Australia, Norway, New Zealand and Iceland all belong to the Umbrella Group. The Umbrella Group has been the leading proponent of flexibility in the negotiations. Umbrella Group positions have been criticised as favouring flexibility over environmental integrity.

The European Union. The European Union is generally seen as a greater champion of environmental integrity than the Umbrella Group. However, its positions on some issues are weak, certain positions are poorly developed and it is not clear the extent to which EU positions reflect positioning for domestic consumption as opposed to strong commitments.

G-77/China. Along with the Umbrella Group and EU, the G-77/China is the third main negotiating bloc. Its members include groups with diverse interests, ranging from The Association of Small Island States (AOSIS) to Organization of Petroleum Exporting Countries (OPEC), united by their common interest in developing country issues such as technology transfer and funding for adaptation.

AOSIS. The Association of Small Island States. With members whose survival is endangered by sea level rise, AOSIS has taken strong environmental stance on many issues.

Environmental Integrity Group. Switzerland, Mexico and Korea. This group has distinguished itself as consistently developing positions that are environmentally defensible, while recognising the need for flexibility.

COMMITMENT PERIODS AND ASSIGNED AMOUNTS

Article 3 of the Protocol establishes a commitment period between 2008 and 2012 (the "First Commitment Period") during which the developed countries listed in Annex B (the "Annex B Parties") must limit their emissions. Parties are assigned an amount of allowable emissions (the "assigned amount") that is based on a certain percentage of emissions in a base year. For most purposes, the base year is 1990. Canada's assigned amount is 94% of 1990 emissions times five (to reflect the five years in the First Commitment Period). The US assigned amount is 93% of base year emissions times five; the European Union's is 92%. The Russian Federation is only required to stabilise emissions. Iceland is allowed to increase emissions by up to ten percent.

EMISSIONS TRADING AND THE FLEXIBILITY MECHANISMS

The Kyoto Protocol establishes four mechanisms, all of which involve some form of emissions trading (although only one mechanism is called emissions

> trading in the Protocol). Under emission trading programs, polluters (whether they are a nation or a company) are given flexibility in how to reduce their emissions. Where an emitter can, at a low or negative cost, reduce emissions beyond what is required by regulation they can sell or transfer an emission reduction credit or an emission quota to polluters who cannot reduce their emissions as easily. The Party acquiring the credit or allowance is then allowed to emit more. Trading itself is not intended to reduce emissions; it is intended to reduce the cost of meeting an emission limit defined by international and/or domestic law. Without trading, emission limits may be impractical or not enforced. On the other hand, loopholes or weaknesses in trading systems may allow global emissions to increase over what would occur in the absence of trading. The four

mechanisms established by the Kyoto Protocol are: international emissions trading, joint implementation, the Clean Development Mechanism and Joint Fulfilment

International Emissions Trading

Article 17 states that the CoP will define the "principles, modalities, rules and guidelines" for emissions trading and that Annex B Parties can participate in emissions trading for the purposes of fulfilling their commitments. Article 3 states that parts of Parties' assigned amounts will be added or subtracted when Parties trade under Article 17. Beyond this, the rules of emissions trading are undefined. The units traded under emissions trading are referred to as assigned amount units ("AAUs").

Clean Development Mechanism

Article 12 of the Kyoto Protocol establishes the Clean Development Mechanism ("CDM"). At its most basic, the CDM establishes a process for generating emission reduction credits in developing countries (non-Annex B Parties). The Annex B Parties can use these credits — officially know as Certified Emission Reductions or "CERs" — to increase their domestic emissions. Projects that qualify for the CDM generate CERs by reducing emissions below a baseline that represents what would have occurred in the absence of the project or absence of the CDM. The CDM is also supposed to help developing countries achieve sustainable development.

Joint Implementation

Under Article 6, Annex B Parties can transfer and acquire emission reduction units ("ERUs"). When ERUs are purchased, they are added to the purchasing nation's assigned amount and subtracted from the assigned amount of the nation transferring them. The main distinction between JI and trading is that under JI, ERUs represent reductions from a specific project while in emissions trading AAUs are not associated with a particular project.

Joint Fulfillment — the EU bubble

Article 4 allows parties to agree to fulfil their commitments jointly. It provides that if Parties have agreed to joint fulfilment, they will be deemed to have met commitments provided total emissions do not exceed the total assigned amount for all Parties. The terms of the agreement specify reduction targets for

the different parties. Article 4 was negotiated with the European Union in mind and the 92% target for all EU nations was agreeable to certain nations (e.g. Ireland, Portugal and Spain, all of whom have escalating emissions) on the understanding that they would be reassigned a less stringent target.

FOREST AND SOIL SINKS

The assigned amount of most countries is a percentage of "gross" emissions in 1990. Gross emissions are anthropogenic emissions of greenhouse gas emissions from energy, industrial processes, agriculture and waste. For most parties, assigned amounts do not reflect whether forest, soils and other carbon reservoirs are removing carbon from the atmosphere (i.e. acting as a sink) or acting as a source of greenhouse gases.

However, when calculating whether a Party is in compliance with its Article 3 emission limits, Parties are required to count some but not all carbon fluxes from forests. Under Article 3.3, they are required to count emissions and removals from 2008 to 2012 resulting from afforestation, reforestation, and deforestation since 1990. CoP6 may decide to add other categories of forest and soil sinks under Article 3.4.

SIX GASES

The Kyoto Protocol applies to six greenhouse gases: the three main greenhouse gases released by human activity (carbon dioxide, nitrous oxide and methane) and one gas and two families of gases that are released in small quantities but are both long lasting and extremely powerful (hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride).

COMPLIANCE

The Protocol is virtually silent on the issue of how to ensure compliance. As a "placeholder" Article 18 states that a meeting of the Parties to the Protocol is to approve procedures and mechanisms to determine and address cases of non-compliance. Any mechanisms involving binding consequences are to be adopted by amendment to the Protocol.

COMING INTO FORCE

The Kyoto Protocol only comes into force when it is ratified by a minimum of 55 Parties representing a minimum of 55% of Annex 1 emissions in 1990. So far none of the Annex 1 countries have ratified the

treaty, although almost all have signed it, indicating an intention to be bound in the future.

BUENOS AIRES PLAN OF ACTION

The Buenos Aires Plan of Action was adopted in the final hours of the Fourth Conference of Parties (CoP4) in Buenos Aires, Argentina. It established a time frame for Parties to resolve key issues associated with the FCCC and the Kyoto Protocol. CoP6 was set as the deadline for making decisions on the mechanisms (CDM, trading and joint implementation), treatment of sinks under Articles 3.3 and 3.4, and assisting developing country Parties with adaptation to climate change (Articles 4.8 and 4.9 of the *FCCC*). Subsequently CoP6 was identified as a deadline for decisions on compliance mechanisms.

THE COP 6 ISSUES

While the commitments included in the Protocol are potentially significant, a number of possible weaknesses and loopholes in the Protocol could undermine the Protocol's ability to reduce global emissions. This series of briefing notes covers the following issues:

- Compliance. Compliance provisions could make the difference between the Protocol being legally binding in theory, and binding in fact. (See Note 2 — Compliance).
- Avoiding Overselling. Under emissions trading
 it is possible that a Party could sell AAUs that it
 needs to remain in compliance. Indeed, trading
 could encourage parties to sell all their AAUs. In
 turn the sale could allow purchasers to increase
 emissions, making the environmental impacts of
 non-compliance multiply and spread through the
 system. Effective rules are possible which avoid
 over-selling without significantly inhibiting
 trading. (See Note 3 Avoiding Overselling).
- Hot Air. Many of the nations of Eastern Europe received assigned amounts far in excess of projected "business as usual" emissions.
 International emissions trading could also allow Russia, the Ukraine and other states to sell surplus AAUs, allowing total emissions to increase by seven percent over what they would be without trading. (See Note 4 Hot Air.)
- Achieving real reductions under the CDM:
 CDM Baselines. The CDM could vitiate the

- Protocol's effectiveness if CERs do not represent real reductions that would not have occurred in the absence of the CDM. (See Note 5 Baselines and Thresholds under the CDM.)
- Doing it at Home: Supplementarity. Will
 Parties be allowed to achieve all their reductions
 through the CDM, emissions trading and JI, or
 will supplementarity rules specify minimum
 domestic action? Are there means of encouraging
 domestic action without a concrete cap on use of
 the mechanisms? (See Note 6 —
 Supplementarity: Incentives and Requirements for
 Domestic Action.)
- AAUs and Trade Rules. Will international trade rules stop national governments from restricting companies' use of international emissions trading, joint implementation and CERs to achieve domestic limits? (See Note 6 — Supplementarity: Incentives and Requirements for Domestic Action also).
- Forest and Soil Sinks. The treatment of greenhouse gases inhaled and exhaled from the forests and soils of industrialized nations will have huge impacts on allowable emissions from industry and atmospheric concentrations of greenhouse gases. They will also determine the extent to which the costs of climate mitigation are passed to future generations. A Canadian proposal could allow emissions to increase by 12.5 percent in the First Commitment Period. (See Note 7 Credits and Debits for Forests and Soils).
- Restricting project eligibility under the CDM. Should emission reductions from large hydro, nuclear or coal be credited under the Clean Development Mechanism? Do these projects qualify as sustainable development? Will they help in achieving long term reductions? Should the CDM be restricted to appropriate technologies that are generally unfunded by either private investment or development assistance? (See Note 8 Should all Types of Project Qualify for the Clean Development Mechanism?).
- Adaptation Fees and Developing Country
 Issues. While CoP6 will focus on the rules of the
 Kyoto Protocol, all parties must be satisfied with
 the outcome. A key issue for developing
 countries is whether developed countries will
 deliver fully on previous commitments for money
 to help with adaptation to climate change,

money for building capacity and money for transferring low carbon technologies. (See Note 9 — Developing Country Concerns and Fees on Mechanisms).

 Developing Country Commitments. Should developed countries insist at CoP6 on a process for negotiating emission limits for developing countries? Should Kazakhstan be allowed to avoid CDM baseline rules by becoming an Annex 1 Party? (See Note 10 — Adequacy of

Commitments:

Do Developing Countries Need to Reduce their Emissions?).

Amendments to the Protocol. Are amendments to the Protocol necessary, or are decisions at CoP6 sufficient? (See Note 11 — Does the Protocol need to be amended?).

Policies and
 Measures. Is a
 process needed to
 co-ordinate or
 harmonise
 mitigation
 measures among
 Annex 1 Parties?
 (See Note 12 —
 Co-ordinating
 Policies and
 Measures: Good

Idea or Loss of Sovereignty?).

 JI Baselines. Should Annex 1 Parties be able to avoid restrictions on emissions trading by channelling transfers of assigned amount through joint implementation? Do joint implementation baseline rules need to be as stringent as under the CDM? (See Note 13 — Baselines for Joint Implementation.)

LOOPHOLES YOU CAN DRIVE ANNEX B THROUGH?

How significant are the potential loopholes under the Kyoto Protocol? While estimates vary, it is clear that weaknesses in the Protocol could lead to a dramatic escalation of global emissions. This briefing note series quantifies some of the loopholes, potential loopholes and weaknesses. Table 1 summarises the results.

Table 1

Loophole	Mega-tonnes increase during first commitment period
Sinks. Credit for all net sequestration of carbon by forest and agricultural lands. (Based on best available data. Actual amount could be higher or lower) (See Briefing Note 7.)	10,834
Hot Air. Credit for business as usual in economies in transition. (Based on most recent US government projections; could be lower if Russian economy recovers rapidly) (See Briefing Note 4.)	6,340
Originating Party Liability emissions trading system. Potential increase due to weak compliance and issuer liability trading (Worst Case Scenario: Assumes total noncompliance by Ukraine and Russia. Actual increase likely to be lower.) (See Briefing Note 3)	13,456
Weak CDM Baselines. Potential increase in emissions due to weak baselines. (Very rough estimate. Actual amount could be far higher or lower, or even negative. This assumes a very active CDM market in which one fifth of credits are for non-additional reductions.) (See Briefing Note 5).	3,000
Total potential increase in emissions through comprehensive credit for forest and soil sequestration, hot air, issuer liability and weak CDM baselines.	33,630

The total increase in emissions that would be allowed due to potential loopholes or weaknesses in the Protocol is estimated at over 30 billion tonnes of CO₂ equivalent during the First Commitment Period. While this estimate is extremely rough (any estimate will be), it conveys the importance of closing loopholes and ensuring the environmental effectiveness of the Kyoto Protocol. Thirty three billion tonnes is over one third of Annex B 1990 emissions. A single potential loophole — full credit for all forest and soil sequestration — is sufficient to eliminate almost all the environmental improvements expected from the Kyoto Protocol. ¹

Unfortunately, for many of these loopholes or weaknesses Canada opposes positions that would restrict the potential damage to the environment. In some cases, Canada has been an active proponent of the loophole. These Briefing Notes suggest changes to Canada's position that would help minimise loopholes while retaining flexibility.

GLOSSARY

Annex B Parties. Those parties with emission reduction commitments under the Kyoto Protocol, listed in Annex B to the Protocol. They are the same as Annex I parties, except Turkey is not included.

Annex 1 Nations/Parties. These nations were classified as developed during the negotiation of the UNFCCC. They include Annex II Parties and economies in transition. These parties are listed in Annex 1 to the UNFCCC and have commitments to adopt policies and measures with an aim to return emissions to 1990 levels by 2000.

Annex II Nations/Parties. These nations were members of the OECD during the negotiation of the UNFCCC. These parties are listed in Annex II.

AOSIS. The Association of Small Island States.

Assigned Amount. Parties' quotas of allowable emissions for the 2008 to 2012 period. See "Commitment Periods and Assigned Amounts" above.

Assigned Amount Unit (AAU). The 'currency' of emissions trading. See "Emissions Trading" above.

Carbon Reservoirs. Places where carbon is sequestered so that it does not contribute to climate change. Reservoirs include forests, soils, vegetation and wood products.

Clean Development Mechanism (CDM). The mechanism under which Annex B Parties can get credit for emission reductions in developing countries. Credits (Certified Emission Reductions) allow Annex B Parties to increase their emissions above their assigned amount.

Certified Emission Reductions (CERs). These are the credits under the Clean Development Mechanism.

CoP/MoP is the Conference of the UNFCCC Parties acting as a meeting for the Parties to the Kyoto Protocol. CoP/MoPs will commence after the coming into force of the Protocol.

Economies in Transition. These are the Eastern European and former Soviet Union Parties to the UNFCCC who are undergoing transition to a market economy.

Emission Reduction Units (ERUs). These are the units traded under Joint Implementation. Emission reductions from JI projects generate ERUs. The ERUs are subtracted from the host country's assigned amount and transferred to the purchaser's assigned amount.

Emissions Trading. The mechanism under which Annex B Parties trade parts of their assigned amounts (referred to as assigned amount units).

Environmental Integrity Group. Switzerland, Mexico and Korea.

G-77/China. The negotiating bloc of developing countries.

Intergovernmental Panel on Climate Change (IPCC). The global community's body for apolitical scientific or technical information related to Climate Change.

Joint Implementation. The mechanism under which Annex B Parties trade parts of their assigned amounts equal to reductions achieved by projects in the seller nation. The traded commodity is referred to as an Emission Reductions Unit.

Kyoto Mechanisms. Joint Implementation, Clean Development Mechanism, Emissions Trading and Joint Fulfilment.

Subsidiary Body for Implementation (SBI). One of two bodies that are subsidiaries to the CoP. SBI is a highly politicised forum for negotiation.

Subsidiary Body on Scientific and Technical Advice (SBSTA). One of two bodies that are subsidiaries to the CoP. Despite its name, SBSTA is a highly politicised forum for negotiation.

Sinks. Places or processes by which carbon is removed from the atmosphere and sequestered in carbon reservoirs.

Supplementarity. The issue of whether Annex B Parties are required to take minimum actions to ensure that the Kyoto Mechanisms are supplemental to domestic action.

Umbrella Group. The negotiating bloc representing most non-EU industrialized countries including Canada and the US.

United Nations Framework Convention on Climate Change. This is the umbrella treaty under which the Kyoto Protocol was negotiated. It was negotiated in 1992 as part of the Rio Earth Summit, and came into force in 1994. It contains vague commitments to aim to return emissions to 1990 levels by 2000.

¹ Chris Rolfe, *Sinking the Climate*, (Vancouver: WCELRF, 2000).