CANADA LOW-CARBON PROJECT:
Planning Meeting, July 16 2007:

Convened and sponsored by:
Centre for Global Studies, University of Victoria
Energy and Environmental Systems Group, University of Calgary

Meeting Report and Workplan, September 21, 2007

1. Introduction: The planning meeting and the project.

On July 16 2007, a group of concerned and knowledgeable Canadians met at the University of Calgary to discuss the Canada Low-Carbon Project, a proposed project to strengthen Canadian action and policy debate on linked issues of climate change, energy, and environmental protection. The Canada Low-Carbon Project would establish a series of expert consultative workgroups to examine key questions and problems in developing a viable long-term Canadian strategy to limit greenhouse-gas emissions while sustaining Canadian energy security and environmental protection. The group examined a preliminary outline of the Project, offered suggestions on how to elaborate and revise it, and concluded – strongly – that the Project is worth pursuing. This report synthesizes the day's discussion. Section 2 summarizes the challenge posed by climate change and the inadequacy of present policy debate in Canada. Section 3 (pg. 4) discusses the proposed overall approach of the Canada Low-Carbon Project. Section 4 (pg. 7) provides greater detail on several specific tasks that workgroups within the project might address. Finally, Section 5 (pg. 11) presents a plan for next steps, including a draft business plan.

2. The Problem:
2.1. The Climate-change challenge:

The prominence of the climate-change issue in public and policy debates, and the number and seriousness of calls for action, have grown sharply in the past year, in Canada and elsewhere. This rapid change in public and political concern does not reflect major new scientific results, but rather a cumulative strengthening of scientific knowledge and consensus about the reality and severity of the risk, amplified by prominent events such as the new IPCC assessments, the Stern Report, and several popular books and films, notably *An Inconvenient Truth*. The upshot of this elevated concern is that many groups are calling for emissions reductions, in Canada and internationally, and every political leader and party needs a defensible view on the issue.

A serious response to climate change will require a fundamental transformation of the world's energy system over the next several decades. Stabilizing the atmospheric concentration of carbon dioxide (CO_2) and other greenhouses at levels ranging from 450 to 550 parts per million (ppm) – the range of reasonably prudent levels most often proposed – will require cutting global emissions from human activities by roughly 40 –

60% from current levels by the middle of the century. With a growing world population and economy, achieving such cuts in ***global*** emissions will require even sharper cuts in the rich industrialized countries to allow room for growth in the rest of the world – of order 70 - 80% by mid-century. Outside Canada, political leaders are increasingly stating commitments to cuts of this order – e.g., 60% cuts by 2050 in the UK, 60 – 80% in Germany, and 80% in California – although even in these places, the policies actually implemented still target smaller, nearer-term cuts. Although the US federal goal remains vacuous – a modest decline in emissions intensity by 2012 – several Congressional bills already propose cuts of this order and many observers speculate that the US may flip to supporting aggressive mitigation goals and policies after the 2008 elections.

The stakes in long-term climate-change policy are huge. In addition to continuing wide uncertainties about the rate and character of coming climate change and its impacts, the technical challenge, cost, and most promising routes to achieving cuts like these remain uncertain and contested. Most analyses suggest the cost of even strict stabilization targets may be small, as little as 1% to a few percent reduction in future incomes, but these estimates show large variation and all rest on a few major uncertain assumptions. These key uncertainties include how readily technological innovation will reduce the cost of emissions cuts in response to price and policy incentives, how readily people will change behavior in response to climate change and climate-change policies, and how closely real policies to cut emissions will resemble the idealized, cost-minimizing policies on which these estimates are based. The high-stake uncertainties involved in both climate change and mitigation policies put a great value on well designed policies that provide early, effective, and sustained motivation for technological innovation and other adjustments, and that are adopted in time to avoid major shocks to economies.

2.2. The State of Climate-change policy debate and proposals in Canada

Relative to the gravity of the climate-change issue and the risks it poses for Canada, the state of policy debate on the issue in Canada is woefully inadequate. At the National Level, the 2005 "Project Green" targeted only the modest near-term cuts required in the first Kyoto Protocol commitment period (6% below 1990 levels by 2008-2012), and purported to achieve even this cut using highly expansive estimates of the proposed measures' impacts. The April 2007 "Regulatory Framework for Air Emissions" adopted a weaker national target, a 20% reduction from 2006 levels (i.e., 2% above the 1990 level), but also appeared to base even this weak target on large over-estimates of the effects of measures being proposed to achieve it. Federal opposition parties have presented a few sketchy proposals, more suitable for rhetoric than implementation, with no comprehensive strategy or supporting analysis.

Provincially, Canadian climate leadership now sits in British Columbia, but whether BC's early, symbolic leadership will move into serious action remains to be seen. The Premier has stated a fairly aggressive target to cut Provincial emissions 10% below 1990 levels (one-third below the present level) by 2020. But the signs of what will follow are mixed. On the one hand, widespread rumors that the Premier and Finance Minister understand the gravity of the challenge and are willing to bear real political costs would

suggest a serious program of action will come. On the other hand, early statements featuring cheap symbolic measures (e.g., the "hydrogen highway"), repeated declarations that BC will reap competitive benefits from cutting emissions, and the early decision to exclude the forest sector from emissions targets, all raise concerns that the goals will not be matched by effective and commensurate actions.

Nor is the policy debate taking place outside governments more serious or realistic. On the environmental side, many actors recognize the magnitude of changes required, but not the costs or tradeoffs that must be faced to achieve them. For example, the recent Green Party platform calls for 80% emission cuts below 1990 levels by 2040, while phasing out all nuclear electricity generation and all fossil-fueled generation regardless of whether it captures and sequesters carbon. Among business and industry, stances range from silence, to passive waiting to see what burdens are imposed on Canada from outside, to continued denunciation of the now-irrelevant first-round Kyoto targets, to occasional flirtation with climate-science denialist claims that are transparently, indeed risibly false.

The deficiencies of the present Canadian climate policy debate, relative to what is needed to develop an effective response to the issue, and to manage the associated tradeoffs to defend the lives, prosperity and world stature of Canada, make a long and distressing list. The present debate is:

- Oblivious to the scale of mitigation Canada will probably have to make
- Excessively concerned with risks of policy action rather than risks of inaction
- Focused on the short term
- Focused on emissions targets, without considering means to achieve them or costs
- Neglectful of uncertainties
- Passive in the face of large risks and opportunities from potential actions elsewhere
- Polarized, between parties and between factions seeking stronger or weaker action
- Focused on assigning blame for past failures
- Alternating between extreme top-down and bottom-up approaches (e.g., the decisions to sign and ratify Kyoto, versus all those deadlocked consultative processes), without meeting in the middle.

This lack of seriousness in Canadian climate-policy debate is not just a recent phenomenon, and is not the exclusive fault of any party or group. Rather, the causes lie in several structural factors. The current configuration of Federal party support strongly favors minority governments, and is likely to continue to do so. Absent unusually effective leadership, this makes parties too risk-averse to risk major initiatives such as the climate-change issue requires – and at the same time, strongly motivates them to seize every cheap, short-term advantage that their opponents' initiatives may offer. Where the senior career public service might once have tactfully nudged the government of the day to effectively address such a compelling public need, its will and capacity to do so have been weakened by several governments' increasingly determined and effective imposition of complete control over the policy agenda from the political level.

While there are a few more signs of serious action from the Provinces, their capacity to address the problem is diminished by their smaller scale, their perennial need to defend locally dominant industries – e.g., forestry and mining in BC, oil and gas in Alberta, and automobiles in Ontario – and the tight entanglement of the climate-change issue with broader federal-provincial struggles over constitutional authorities.

Other nations may not be where they must to solve the problem, but they are far ahead of Canada. In the USA, for example, beneath the obstruction of the current Administration lies an impressively strong elite consensus over the shape of the deal that will be struck – a broad elite consensus that appears to have no parallel in Canada.

Because the causes of Canada's weak policy debate are structural – related to Canada's status as a weak federal state, with high emissions and extreme regional disparities in the structure of economies and the level and composition of emissions – substantial early improvement in the situation is not likely. A change in government, federally or in major Provinces, is unlikely to make much difference, for example. Absent some other source of leadership, major change is only likely in reaction to widespread and sustained public outrage about climate change, or pressure applied by other nations. Delaying serious policy action – or even serious analysis in support of action – until one of these stimuli grows strong enough to compel change would leave Canadian policy behind the curve playing catch-up – not a good place to be, either for Canadian industry or governments.

3. The Canada Low-Carbon Project: Proposed Overall Approach.

The Low-Carbon Project would seek to provide another source of leadership. It would establish a set of senior, expert consultations, outside government, to examine and diagnose the problem of achieving the required large emissions reductions in Canada, develop and evaluate potential approaches to meeting the challenge, and disseminate their insights widely among the public and key private and public-sector decision-makers.

The process would examine key questions that have not been addressed in the present policy debate, including linking near-term measures to the required large long-term reductions, major uncertainties, and the outline of promising national bargains – perhaps including elements outside of conventionally defined climate and energy policy.

The discussions would draw both on relevant scientific and academic research, and on the domain of practical decision-making, to seek potential responses that address the challenge at manageable cost, and that are also practical and politically feasible and sustainable. The work of the groups would be intensive, sustained, and informal. Participants would in all likelihood come to the process with different opinions and perspectives regarding the most promising routes forward, and the workgroups would involve a real process of sustained discussion, inquiry, and problem-solving. Although there would be staff support, staff would not write the reports: participants would be expected to do serious, sustained work.

The scope of the workgroups' tasks would be as broad as necessary to develop a picture of a low-carbon future for Canada and a route toward it. Although the motivation for the project is the need to better respond to climate change, workgroups' mandates would be both less and more than the conventionally bounded climate-change issue. Within climate change, their predominant focus would be on the energy and emissions side, not the climate-change impacts and adaptation side.[1] The project would examine the whole energy system, including all major areas of supply, all major demand sectors (including transport), and potential trends in technological innovation, behavior change, and policy that will affect both supply and demand. In addition, the project will look outside the energy sector to consider other industry sectors, forests, agriculture, and land use, to the extent that any of these represents important components of Canadian net emissions to be managed, or hold significant potential to contribute to reductions. Project workgroups may consider issues and initiatives outside conventionally defined climate or energy policy if the connections appear important enough, and will consider areas of technology, behavior, and policy across existing institutional boundaries.

As needed, project workgroups will consider the large, discrete public-policy decisions that periodically arise in managing a relatively small rich economy such as Canada's, that have large implications for Canadian emissions and mitigation opportunities: e.g., the nature of future public support for CANDU, or for a Canadian nuclear industry more broadly; and whether Canada invests in developing substantial national capacity in other areas of mitigation-related technology, such as carbon capture, solar, or biomass.

The project's time horizon would be through 2030 to 2050, which counts as "intermediate" in terms of the climate-change issue. This is far enough to be beyond any present political calculations, and captures the period over which much of the required energy-system transformation must be achieved: if we are to limit climate change to any reasonably prudent level, emissions by 2050 must be on a sharp downward trajectory in many of the world's major economies, and economic and political forces must be in place to sustain that movement thereafter. On the other hand, this is close enough that present decision-makers can imagine and care about it, and that attempting to characterize future risks over this horizon is not a ridiculous exercise.

The project would be outside the political arena, in that it would not be formally linked to any governmental decision-making process. But nor would it be another stakeholder-based consultative process, with participants chosen on the basis of their offices or the groups or constituencies they represent. Rather, participants would be chosen on the basis of strengths they bring to the process as individuals: their relevant knowledge and expertise, their intelligence and creativity, their understanding of the seriousness of the problem, and their commitment to solving it for all Canadians. Participants would bring expertise about the workings, constraints, and concerns of major stakeholder communities, and stature in these communities. We would expect that many participants

[1] While Canada also lacks adequate policies and debate about climate-change impacts, these pose different requirements than are needed on the mitigation side, in several respects. For example, impacts policy will require different expertise, a focus on mixed spatial scales with less compelling need for a coherent national response, and (with a few important exceptions) less urgency to re-orient relevant decisions immediately.

would have held senior leadership roles in government, business and industry, and civil society in the past. But they will not include current office-holders in any of these groups, and will not be expected to represent such groups' interests, positions, or arguments. Indeed, they will be on their honor to act not on the basis of such representation, but on the basis of their own judgments. Conversely, there will be no expectation that any participant can deliver the approval or consent of any group.

The project would have some commonality with, but significant differences from, several other well-known models of consultative and advisory bodies. For example:

- It would look a little like a US NRC Committee, except that its mandate would include advice on policy questions as well as scientific and technical ones;
- It would look a little like a Royal Commission, except it would not have formal authority from any government, and so would not be specifically accountable to any government in terms of mandate, membership, or process. Conversely, it would not be limited to conclusions or advice relevant to the mandate and capabilities of any single government. In addition, its informal operations would enable it to provide results much faster and cheaper than Royal Commissions.
- One close recent analogy – although larger in scale – might be the US National Commission on Energy Policy (www.energycommission.org). This was an independent, foundation-funded process including a commission of 20 senior stakeholders and a dozen-odd staff, which issued the major report "Ending the Energy Stalemate" in December 2004 and a subsequent series of white papers, conferences, briefings, and testimony.

Why not do this as another stakeholder consultation? Canada has had many failed climate-change stakeholder processes over the past 15 years, and there is no basis to expect a new process with participants representing constituencies to achieve more now. Moreover, stakeholder processes tend to devolve into lists of specific interest groups – typically industry and environmentalists, plus a few others. The broader interests of Canadians are not well represented by such processes, especially because participant numbers must always be limited to have a workable group. In contrast to full stakeholder consultations, however, this process will do more abbreviated "sounding-board" exercises, bringing results from its workgroups before somewhat larger, more representative, and more political groups for refinement and (hopefully) support.

The goal of the project is to advance the debate, by generating new ideas and proposals that may bridge the gap between near-term decisions and longer-term emission-reduction needs; encouraging more serious and sustained consideration of uncertainties; and promoting creative thinking about potential bargains that may prove more politically viable than those advanced thus far.

The outputs of the process will be reports and shorter items such as op-eds – in print, possibly in other media – that seek to inform and persuade Canadian elite and popular opinion, through dissemination of good ideas, agreed statements on certain key points, re-

framing of policy debates, and informal communication with decision-makers at provincial and federal levels, and other opinion leaders such as columnists.

4. Potential Workgroup Topics and Tasks

The planning meeting discussed several proposed topic areas for workgroups. This section outlines each topic, with varying detail. For some, we motivate the topic's importance (including noting how past or present processes have failed to address it adequately), identify specific issues and questions to be addressed within the topic area, and sketch out the requirements – e.g., participants, expertise, staff and analytic support – for addressing it successfully. For others, we provide only a brief outline. Not all topic areas are cleanly separated, so in some cases we note the possibility of integrating topics.

4.1. Emissions Trends and Mitigation Challenges: Exploration of Key Uncertainties.

The Task: This task would involve a scenario-based exploration of future trends in Canadian greenhouse-gas emissions, and the major uncertainties influencing the level and structure of emissions, the challenges of achieving various levels of emissions reduction, and the extent of reduction that might be required of Canada.

Why it's needed: Astonishingly, in all the proposals and arguments over Canadian emissions and targets, there has been essentially no consideration of uncertainty. All mitigation programs advanced by Canadian governments to date have expressed the mitigation requirement in terms of a single "emissions gap," the difference between the proposed target and one presumed baseline. This reliance on a single baseline persists in the Government's April 2007 proposals, in the current "Energy Outlook" of NRCan, and in the studies of long-term mitigation possibilities sponsored by the National Roundtable.

Relying on a single baseline, particularly on one for which little supporting discussion is provided, means giving no consideration to uncertain factors that might lead to higher, lower, or differently structured emissions. Absent such consideration of factors that are fundamental to defining the challenge of achieving any particular emissions target, it is hard to conceive of what various alternative emissions targets mean.

The Outputs: A more realistic sense of the challenge to attain various specific Canadian emissions limits; collective judgments identifying and prioritizing major uncertain factors influencing Canadian emissions growth, and estimating their potential impacts quantitatively; consequently, stronger foundation for estimating the relationship between specific policies or measures that seek to reduce emissions, and consequent future emissions levels. Such a discussion would likely give additional insights into the risks and benefits of framing political discussions over Canadian mitigation in terms of targets, versus framing in terms of policies to influence them. It might also help identify near-term policy choices that appear to have high leverage over multi-decade emissions trends, and key diagnostics – i.e., early warning signs suggesting trends likely to lead to higher emissions or make their control more difficult.

4.2.: Scenarios of stringent reduction requirements and how to meet them:

The Task: This task would follow the previous one, but would reverse the logic. Instead of estimating alternative trends in Canadian baseline emissions and the factors underlying them, it would stipulate a constraint on Canadian emissions and work through alternative means of meeting the constraint and potential consequences. A useful range of constraints might be emissions trajectories consistent with stabilizing CO_2 concentration at 450 or 550 ppm, leaving room for near-term emissions growth in developing countries. Assuming some reasonable division of emissions budgets between industrialized and developing countries, and among industrialized countries, this might involve Canadian emissions declining 60% to 80% below current levels by 2050.

Relative to the more policy-specific tasks below, this one can take a larger-scale view. It might be usefully advanced by using quantitative energy-economic models of Canadian emissions to examine what configurations of energy resources are compatible with these tight constraints, and what effective price on carbon emissions they might require. (For example, this task might comprise a repetition at the Canadian rather than the global level, of the stabilization-target scenario exercise recently completed by Clarke et al for the US Climate Change Science Program (www.climatescience.gov).

Why it's needed: Canadian policy debate has been so focused on near-term cuts that it has completely failed to consider the size of cuts likely to be needed over 30 - 50 years. Although international talks under the FCCC framework are making little progress, there are increasing calls for aggressive international action and future international policy is likely to be volatile. An exercise like this might serve to shock Canadian policy thinkers out of a complacent short-term focus. Moreover, it is plausible that Canada might be confronted with some stringent requirements for mid-century emissions cuts, whether through direct diplomatic pressures and sanctions or through indirect pressures mediated by markets. Failing to anticipate these and think in advance what might be required to meet them could risk making a hard and costly later adjustment even worse.

The Outputs: A basis for contingency planning for large future emissions reductions; identification of early decisions that either increase or decrease adaptability of future emissions trends. Possibly identifying previously unconsidered routes for achieving rapid future reductions, should these turn out to be necessary.

4.3. Potential future structures of international mitigation policy

The Task: This task would explore alternative potential structures for an international greenhouse-gas regime after the end of the first Kyoto commitment period and their implications for Canada. It would consider major uncertainties in international greenhouse-gas control – not just alternative decisions within the current FCCC/Kyoto framework, but also other possibilities such as action by smaller groups or unilateralism by the United States or some other major power(s). In particular, it would consider the possibility of other nations seeking to extend the reach of their mitigation policies extra-territorially, through such measures as border tax adjustments or portfolio standards that

reach up supply chains. It might also consider the possibility that the current state of ineffectual policy response persists as the evidence of serious climate changes and associated political pressures mount, possibly leading to hasty or extreme actions in a few decades. For a few salient alternatives, this exercise would ask what are the stakes for Canada, are there particular forms of international response that Canada should be advocating for or against, and what feasible decisions or actions are available to Canada to attempt to influence international policy?

Why it's needed: Among the risks being neglected in current debate is the risk of instability in global mitigation policies disrupting Canadian competitiveness and policy. This activity might help shake up complacency regarding Canadian world influence. Canada is only 2% of world emissions. China's year-to-year increase is comparable to Canada's total emissions. This does not mean that Canadian reductions are not needed, or that Canada can exercise no influence on world trends, but such influence cannot be assumed. A pathway is needed between the naïve presumption that Canada exercises ineffable moral leadership, and passivity in the face of our small contribution to world emissions, providing instead a realistic assessment of the likely extent of, and most promising pathways for, Canadian influence on global mitigation.

The Outputs: As with all scenario activities, the aim is to structure discussion, probe key uncertainties, and search for potential robust strategies, not to identify specific policy proposals, or even to claim that the details of particular scenario developed define the specific requirements for successful policy.

4.4: Identify and diagnose key barriers to effective Canadian mitigation:

The Task: There appear to be two especially acute barriers to serious mitigation in Canada. The first is the unequal burden of mitigation costs among Canadian provinces and regions, particularly in the context of a federation with highly diverse regional economies and a weak central government. The second is the perceived loss of competitiveness for Canadian industry from any mitigation policy imposing significant costs. This is a particularly acute concern in a relatively small, rich, and highly trade-exposed economy such as Canada's. This task would describe in moderate detail the conditions contributing to these barriers, diagnose their causes, and identify and assess potential initiatives to overcome them. This would require considering specific policies, and their economic, political, institutional, and legal setting, in more detail than the previous tasks. The task would focus more on feasible near-term actions, including actions that can be taken within a few years, while still considering the compatibility of near-term choices with reasonable longer-term emission-reduction goals.

In some respects, this examination of domestic distributive issues would represent an attempt to exorcise the ghost of the National Energy Program. Serious reductions from Canada in total will require serious reductions from Alberta, and it is likely that straightforward application of a nationally uniform mitigation policy (e.g., in the form of a carbon tax or a cap-and-trade system) will impose disproportionate costs on Alberta. But while Alberta will have to make significant reductions and bear significant costs, it is

crucial that a national mitigation strategy not be perceived as simply another federal imposition on Alberta. The challenge might instead be framed as Alberta exercising a leadership role commensurate with its wealth.

In addition, the treatment of distributive issues probably needs to be different looking forward versus looking backward. Looking forward, trying to manage the specific distribution of mitigation-related costs and rents is likely to be fruitless and risky. Rather, the distribution of future benefits and burdens should follow from private investment decisions made in response to market-driven opportunities and well designed, transparent, economy-wide policies to cut emissions. But these policies cannot be the whole response, for two reasons. First, effective mitigation will require augmenting economy-wide policies with additional government policies and decisions, in areas such as regulation of utilities and other high-impact sectors, permitting, zoning and planning, and the collection of government investments that make up every regions' implicit or explicit industrial strategy. For some of these decisions – e.g., managing the proposed "Technology Fund", to which emitters may contribute in lieu of holding permits under the 2007 Regulatory Framework – explicit, highly specific decisions to distribute substantial benefits may be unavoidable. Second, when new policies are imposed on the existing distribution of assets and resources the question of who bears the burdens cannot be avoided. While an effective Canadian mitigation strategy may require finessing some issues or avoiding certain explicit conversations about distributive effects, these issues are still fundamental to the feasibility of policies and must be considered, if only as the implied consequences of specific measures and packages being proposed.

In addition to distributions of costs among Provinces, developing a serious mitigation strategy will require addressing some issues in the distribution of constitutional authorities between federal and provincial governments. Thus far, these issues have arisen most acutely in debate over national emissions-trading systems. Centralized facility permitting appears to be essential for implementing any coordinated nation-wide cap-and-trade system. But permitting appears to be a clear area of provincial jurisdiction, which provincial governments – especially Alberta – have signaled extreme resolve to defend. If this conflict cannot be resolved or finessed to allow Canada-wide coordinated permitting, it is difficult to imagine how any national tradable-permit could work – which in turn suggests the need for a re-consideration of systems based on emissions taxes or fees. This approach has not received much serious consideration, largely because of its political symbolism: anything called a tax makes an easy target to attack. Nevertheless, several factors suggest the need for reconsideration, including increasing evidence of high price volatility under permit systems that may weaken their ability to motivate the desired investments; the precise ability to specify, and vary over time, the intensity of incentive under a tax or fee system; and the opportunity to reduce its political unattractiveness through parallel reductions of other revenue sources to maintain fiscal neutrality, and skilful re-framing of the combined initiative.

The second barrier to serious Canadian mitigation is the perception of major competitive effects, particularly vis-à-vis the United States. If strong Canadian mitigation raises the costs of Canadian firms in trade-exposed sectors, and competing firms in other

jurisdictions (particularly the US) are not bearing these costs, Canadian firms will face loss of profits and/or market share.

This presumption needs detailed examination. The analyses underlying the Martin Government's "Project Green" did begin such an examination, considering sector-by-sector cost burdens of the first-round Kyoto commitments, but no longer-term analysis of competitive effects has been done. Recent experience with the European trading system shows that sectoral losses can be small or even negative, depending on how tight the emissions constraint is and how the permits are distributed. It is obvious that competitive effects will vary over time, depending on the mix and cost structure of Canadian trade-exposed sectors, and – crucially – the level of mitigation effort by Canada's major trading partners. Moreover, risks to competitiveness can arise in two ways. While it is conventional to consider only the risk of Canada doing more mitigation than its trading partners and bearing a cost disadvantage, there is also a risk that Canadian firms may suffer trade disruptions or discriminatory policy treatment in their export markets because Canada is doing (or portrayed as doing) less mitigation than its trading partners, or some incompatible form. The most serious risk may be that the US jumps ahead of Canada after 2009 and restricts Canadian imports to protect its own firms from the resultant cost increases. Even absent large disparities in mitigation effort, the proliferation of uncoordinated mitigation systems and widespread concern about competitive disadvantages may lead to a general increase in administrative burdens on traded goods.

4.5: Elements of a Comprehensive Canadian Mitigation Strategy.

This activity would come last, critically reviewing outputs from the other activities to assemble a couple of possible alternatives for a complete Canadian mitigation strategy.

5. Putting the Idea into Action: Steps toward a Business Plan.

The first meeting generated substantial enthusiasm and support for the Project – in general, and for the specific tasks identified. The initial meeting provided only a little further traction, however, on elaborating the proposed tasks or identifying specific requirements for each one. This is an early priority, to be driven by the project initiators.

What's needed next?

- One more round of revision on the current substantive proposal by leaders and students/staff, to refine and elaborate proposed workgroup tasks, identify what task is to go first, and provide more background. The output should be a polished 5-8 page document that briefly explains the overall proposal and outlines the terms, goals, and workplan for the first task. *(Target: End of October?)*

- To prepare background for the first workgroup task, Ted will hire a student to review and synthesize relevant existing projections, e.g., of Canadian population and economic growth; of Canadian emissions in recent government and NRTEE activities, and in the two models used in IPCC SRES scenarios that represented Canada as a separate region. *(Target: mid-October?)*

- Prepare a business plan that addresses the concrete, operational aspects of the project. This document should include specifics re the proposed 1) Time-scale; 2) Governance and management structure; 3) format and schedule for workgroup activities; 4) Specific outputs to be provided; 5) Environmental scan – discussion of similar activities underway or proposed, and how this project will make an incremental contribution; 6) Required staff and resources. *(Target: end of September?)*

- Re-consult with founders (perhaps by conference call or email rather than in person) to review substantive document and business plan, gather further ideas on people/institutions to approach, for participation, support, or both. …

- Use revised substantive outline and business plan to circulate to potential funders and participants. Probably include seeking prominent publication outlet for short piece describing proposal in this round.) *(Target: End of November?)*

- Aim to hire staff by end 2007; recruit participants for first activity to take place through winter-spring 2008.

6. Business Plan Outline: Draft 0. (Still awaiting input from Rohit on this)

- One-paragraph description of proposal and goals, condensed from substantive outline above.

- One-paragraph description of the need and how this project will meet it:

- One-paragraph discussion of objectives and outputs:

- Project Timeframe: 3 years (Jan 2008 through end 2010)

- Project Governance:
  - Component tasks done by volunteer workgroups whose members serve as individuals. Participants are not paid (other than their expenses), but rather are recruited/attracted through importance and professional challenge of the activity, quality of their collaborators, and pleasant meeting settings/conditions (i.e., fund the meetings generously, but don't pay fees or honoraria).
  - Overall activity is chartered as an independent not-for-profit;
  - Governance is by a board, most likely a dozen-odd-member body that looks like the group present at the first meeting? … Most members of the board will serve on individual workgroups, but this is not essential for all. (Or does it need a smaller executive committee?)
  - Director and staff support contracted with some existing University-based research/analysis centre – ISEEE or (less likely) CFGS – to cut fixed costs.
  - A senior advisory board or review body reviews, critiques, and approves reports from the workgroups and other outputs. This body is more senior, larger, and more political/representative than the workgroups. Its members serve with their hats on. (Their input is advisory – comments and criticism from this body

collectively will be taken seriously, responded to, but this group does not have authority to stop publication of a report.)

- Typical schedule/workplan for a group: Three intensive, 2-day working meetings, spaced at ~ 3-month intervals, with member homework assignments and staff-support work between meetings.

- Estimated project budget: $435K per year for three years, total (with 5% escalation) $1,325K. (Draft 0 budget spreadsheet attached).

Convenors of the Meeting:

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