that could be seen—in light of accommodating compensatory measures—as mutually advantageous. More particularly the focus will be on the barriers to effective collective action that appear to erode or offset any political will either to enter into the necessary binding commitments or to take the action necessary to realize the intention of such commitments. (Beyond regulatory measures directed toward behavioural change to bring about reduced emissions, of course, such action might include greater incentives for development of new technologies for direct carbon capture, management and storage.)

The rationale for this orientation for the research proposal can be found in part in recent statements by influential leaders in the energy sector itself.

In a recent keynote address to the International Energy Forum (22 April, 2006) Lord John Browne, CEO of BP, commented on the challenge of energy security. He observed that "Security can only be sustained if the relationships on which it is based are founded in the principles of mutual advantage", and went on to suggest that security challenges are back on the agenda now because of renewed growth in demand and increased trade, but also because of "growing concern about the impact on the natural environment of increased consumption of hydrocarbons, and in particular about the risks of a fundamental change to the earth's climate." As one of four steps that should be taken in response, he suggested that "The science of climate change may still be incomplete, but the evidence is mounting... The case for precautionary action is very strong..." (emphasis added).

In conclusion he noted that "These are complex issues. But the key point is that they represent common goals....If we can pursue these goals successfully I believe we can achieve a position of mutual advantage...."

What would be the character of precautionary action that could be seen as leading to a position of mutual advantage, given the profound uncertainties surrounding the scale—and more particularly the distribution—of the risks involved?

What manner of compensation could the winners from such action offer—and deliver—to the losers, in order to achieve agreement?

How can the barriers to collective action in sustaining such an agreement be overcome?

At least since the pathbreaking work of Mancur Olson in the mid-sixties there has been awareness that there are problems in which outcomes that would be in the interest of everyone can not be achieved because rational individual agents will not see it as in their interest to take the necessary action. Action that would leave everyone better off is not achievable because familiar barriers to collective action cannot be overcome without conscious cooperation among individual actors who are prepared to commit themselves to joint initiatives from which there will always be an individual incentive to defect.

Measures to protect the global public commons that is the Earth's atmosphere have long been recognized to encounter these standard barriers to collective action. The global

The proposal for the present three-year work program envisages an interactive process that emphasizes the need for development of a general covenant reflecting particular needs of individual nations, and respecting the particularities of place in the implementation action demanded. (A lesson increasingly cited from work on integrated ecosystem management is the need to be able to scale decision-making processes to the extent of the ecosystem concerned. This lesson shapes this aspect of the research proposal here.)

In this program, the CFGS is establishing a Canadian team to work with a small number of other national teams based in national think-tanks with whom the CFGS principals already have an established working relationship. The program will support a continuing interactive exchange punctuated by more inclusive workshops. It will be directed toward identification of national positions that might be carried into the formation of a coalition strong enough to negotiate a global bargain seen both as mutually advantageous and as legitimately derived through procedures sufficiently broadly acceptable to concerned civil society actors as well as bus

Contact has been made with potential sponsors to commission 'evergeen' briefing notes on selected topics to be maintained as a coordinated briefing book to provide background to participants in future workshops and to senior decision makers in participating countries; two such papers have been commissioned; conclusion of arrangements for commissioning of others by Industry Canada and by Natural Resources Canada is pending; (the covering note and revised draft list

In addition to David Keith and Ted Parson, as noted above, Hadi Dowlatabadi, Canada Research Chair at UBC, has agreed to participate in this project as it develops

David Victor of Stanford University has agreed to lead a US group in this work. Discussions with potential Southern academic and think-tank partners suggested by Victor is now in train.

By embedding the discussion of national policies within the context of global negotiations designed to overcome the array of barriers to collective action and global commons problems, this project design will carry the underlying analytical work into the sphere of concrete application and action. Over the summer 2006, research teams and think tank representatives from developing countries will work with us to organize later exercises exploring negotiati