

STRICTLY CONFIDENTIAL

3E Initiative

Economy, Energy, Environment

Synthesis of Participant Interviews

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This note synthesizes a set of interviews of participants in the 3E (Economy, Energy, Environment) Initiative, conducted in preparation for the first meeting of the Initiative, to be held in Merrickville Ontario, from November 1-3, 2007. The note highlights themes found in the proposals, arguments, and concerns expressed by the interviewees, juxtaposed with selected quotes that vividly illustrate points expressed. On a few topics, the note also summarizes relevant information drawn from sources outside the interviews. The note's purpose is not to prematurely reduce the richness and diversity of interviews to any single consensus. Rather, it seeks to give an overview of the issues raised, and to provide a sense of both points of convergence among multiple speakers, and the range of views on points of diversity or disagreement.

The note is organized in five sections, addressing the following points:

1. Speakers' concerns about climate change and potential responses to it;
2. The concrete changes or actions that managing climate change will require;
3. Strategies for bringing about these changes or actions;
4. Key dilemmas or points of tension in identifying paths forward;
5. What this initiative, and this initial meeting, can most usefully accomplish.

1. The gravity of the climate change issue demands Canadian action—for prudential reasons, as a moral imperative, and as a legacy of this generation of leaders.

All speakers recognize the reality and potential gravity of climate change, although with some differences of degree. A large majority believe climate change is a grave environmental threat, and is well enough established scientifically that it is time to identify actions to address it. Many speakers referred to the new IPCC assessments, but also to continuing events—such as the extreme loss of Arctic sea ice this summer, and growing indications of risks of large carbon-cycle feedbacks or potential abrupt changes—suggesting the IPCC projections may under-state the risks we face. At the same time, a few speakers continue to worry about scientific uncertainties and suspect that environmentalists may be exaggerating the risks. None of these denies the risk, however, and even these speakers share the sense of a need for action. Some judge that the most immediate pressure for Canadian climate-change action may be economic rather than environmental: other nations may take aggressive actions and impose penalties on trading partners who do not match their efforts. For example, low-carbon fuel standards such as proposed in California would foreclose a large market to the oil sands—and could threaten broader loss of markets for Alberta energy products—unless their emissions were reduced through carbon sequestration or offsets. Such foreign compulsion would surely un-stick Canadian debate over climate change, although relying on such compulsion would not say much for Canadian leadership. Differences in degree and in specific reasoning aside, there is strong consensus among speakers on the need for Canada to act on climate change. Speakers see this as a prudential issue, a moral and spiritual imperative, and an issue that may predominantly define the legacy of today’s generation of leaders.

At the same time, many speakers expressed a pessimism bordering on despair, about the extreme harms that climate change could bring—as real risks, even if not likely ones—and about the profound difficulties of addressing it effectively. Difficulties identified included uncertainty about specific climate impacts, which obstructs agreement on what to do about it; the slow responses of

“The bad consequences could be so total that the only comparison is to nuclear holocaust: there was no wishing the USSR away, and there is no wishing this away. If we don’t take action there will be an increasingly wide range of impossible problems in the world. We have to think about this in human terms: the earth is impersonal, our children are not.”

“It is clear that this generation of leaders has under-performed when it comes to the environment. Responsible people should do more.”

“The present course of developing the oil sands is putting Alberta’s water at risk, causing acid rain, raising costs for all other sectors and bringing all the problems of unbalanced petroleum economies—as well as a bad reputation. If Albertans continue on this course, they will be boycotted. The Norwegians are showing the alternative course: they are decreasing emissions, slowing down investment and improving the way they use their resources. Their economy is more balanced, the resources are still there for them to exploit in the future—and they will make more money.”

“Whether climate change is going to be serious or not, we need to buy an insurance policy to manage the risk. Canada is going to be under external pressure from US regulations and restrictions on imported energy products.”

“There is urgency in finding new possibilities. Environmental laggards now will become economic laggards soon.”

“Climate change is so difficult because it is a global commons issue, and because the time-lags are so huge, 50 to 100 years.”

the system, which mean that efforts must be made today to reduce risks decades in the future; and the fact that the issue is a global commons, making Canada—or any country—a small part of the problem and so at best a small contributor to the solution. Worst of all, we may already be too late to stave off catastrophic harms and not even know it.

“We may be beyond the tipping point with respect to the oceans. If we do in the oceans, we do in the oceans, then the game is up. This situation leaves me filled with fear and despair. Is there nothing for us to do but “eat, drink, and be merry, for tomorrow we will die?” We can’t be sure that we’re not too late already, but still our obligation is to try to do something about it.”

2. OK, action is needed and change is needed: but what actions and what changes?

Most speakers identified specific changes or actions that could contribute to an effective response to climate change. The speakers are a highly well-informed group, and the actions they identified corresponded closely to what is known about the climate issue, scientifically, technically, and economically.

“We’ve got to reduce greenhouse gas emissions 80 to 90% to stop a real catastrophe. If we think distributionally, this implies astounding changes to the political economy of Europe and North America. I can’t see how to get there from here.”

Effective action on climate change must include two components—“mitigation” actions to reduce greenhouse-gas emissions by raising the efficiency of the energy system and shifting it toward non-emitting energy sources, and “adaptation” actions to reduce the harmful impacts of the substantial climate change we will not be able to avoid, including what is already occurring—plus a third component, geoengineering, to be studied, assessed, and held in reserve against the risk that we fail to limit emissions or are unlucky in how fast and how bad climate change turns out to be.

“We need to pace ourselves: we’re in for the long haul, and can’t keep sprinting. We need to stop looking for immediate response, immediate gratification. We need persistence. This is not WW II, it is more like the 100 Years’ War: it spans generations.”

Of these three components, slowing climate change by reducing emissions is the key near-term requirement, because of the long lags in the climate system. Holding climate change to a further 2 or 3 degrees (Celsius) of global warming—a change that will very likely still bring substantial harmful impacts—requires limiting atmospheric concentrations of all greenhouse gases to the equivalent of 450 to 550 parts per million (ppm) of CO₂. For comparison, human emissions have already increased this concentration from about 280 to 380 ppm over the past 150 years, and are presently increasing it by 2 ppm per year. Achieving this limit will require global emissions to fall more than 50% by mid-century, and to keep falling thereafter. Since this drop in *global* emissions is required against the backdrop of continued development in lower-income countries, the emission cuts required of rich industrialized countries like Canada to meet this limit will be even larger, perhaps 60 to 80%. This is a huge task which will require intelligent, well implemented, sustained efforts over many decades.

Moreover, with a challenge so huge, there is a chance that we will fail. Even as we pursue these reductions, we must anticipate the risk that we achieve little or nothing for a few decades. This means assessing and preparing more extreme interventions that may be required a few decades hence: an extreme—because belated—program of mitigation, together with an intense campaign of adaptation investments and, possibly, deploying geoengineering solutions.

There are only a few ways to achieve such emissions reductions. The first is to develop and deploy technologies to use energy more efficiently and shift toward non-emitting sources, such as renewable energy, nuclear, or fossil fuels used with carbon capture and sequestration. The only alternatives to cutting emissions through technological innovation are to change people's lifestyles, behaviour, and aspirations so they consume less emissions-producing stuff; or to have fewer people on the Earth. Speakers identified all these ways, but differed—in some cases strongly—in their relative priorities. Many emphasized the primary importance of technology and innovation in energy production and use. Others emphasized the primary importance of lifestyle and consumption changes, and of processes of education and influence to make such changes appealing, or at least acceptable, to people. Speakers stated several reasons for emphasizing consumption, including scepticism about whether technological innovation could deliver enough change in time without introducing other, perhaps equally severe problems, and concern about other environmental and social harms from present patterns of consumption in addition to climate change. This is a point on which there are real tensions among speakers.

Many speakers emphasized, however, that we must meet multiple societal and economic needs. We cannot focus exclusively on climate change, or on the need to reduce greenhouse-gas emissions, in isolation from other priorities such as health, education, development, security (including energy security), employment and incomes, and the management of other environmental risks—nor must we seek to manage the risk of climate change in a way that puts these other values at risk. Some speakers expressed this as a substantive need to address multiple societal priorities, while others

“We will not do enough mitigation, so we will be forced into rapid response mode ten years from now. We will see a significant release of methane and a significant sea level rise, neither of which have mitigation solutions. We will need geo-engineering solutions such as engineering the albedo or carbon uptake or aerosols into the atmosphere. I've never been confident we could get down to the level of emissions needed for climate stabilization.”

“Environmentalists tend to low-ball the cost and difficulty of mitigation. They need to recognize that considering adaptation is not being 'defeatist' about mitigation: it is a necessary response to a grave societal risk.”

“There is a huge opportunity for 'green' equipment. But a green solution has to be a smart solution, not faddish or shallow. It becomes sustainable if the economics are there.”

“We have trained people to think that environment is about recycling and planting trees, and neither of these will help us with climate change.”

“There is a healthy tension between economy, energy, and environment, and a need to balance them. You need to have a productive and competitive economy in order to address the other two. It's one thing to have environmental policies but without a strong economy there is no incentive for behaviour change.”

expressed it as a constraint on the political feasibility of climate-change responses, although the practical significance of these two views appears to be the same. In addition, there is tension among speakers over how tightly these other societal priorities constrain our response to climate change, which mirrors the tension above over whether our response should predominantly pursue technological innovation (and gamble on its ability to solve the problem), or should also seek (somehow) to change consumption and lifestyles.

“Climate change is always the bridesmaid and never the bride: other issues need to be put in the forefront. Nobody is solely interested in climate change and its impacts. For example, people in the Arctic have much bigger problems—for example health and violence and lack of skilled staff—than climate change.”

“We have to include all three Es. Nobody gets elected to kill growth.”

“Solving climate change is a pre-condition for success. If we don’t do this right, the rest—early childhood development, health, education, etc.—doesn’t matter.”

3. How can these changes be achieved? Strategies and theories of change.

Speakers expressed many views about strategies for realizing the required changes, showing more diversity than there was among the required actions identified. Different strategy proposals appear to imply different theories of how societal change happens, or of where the highest-leverage points are to intervene—points on which people hold strongly divergent views in part because there is so little well established knowledge. Speakers’ different strategies and theories of change might be viewed as opposing alternatives, or as different partial views of a complex totality—the blind men and the elephant. Perhaps in certain domains some of these are right and others wrong; perhaps in some domains they are subject to some form of higher-order integration. Four strategies and theories were prominently expressed.

Strategy I. Stimulate direct, voluntary action by citizens and businesses to solve the problem, through education, exhortation, and manipulation.

Many speakers refer to this strategy, and a fair number identify it as a necessary component of action on climate change. But a frequently expressed view is that this approach has been tried, with much energy and commitment, for a long time—by leading firms, by activist groups, and by governments when they want to avoid stronger measures—and has been clearly shown insufficient to stimulate the required scale of changes.

Some people are more influential than others, however. Some speakers stressed education and persuasion not of the citizenry at large, but of executives, politicians, and other opinion leaders. These people are powerful, but they are also human and care about their children, their nation, and the world. Several speakers pointed out

“CEOs have the same DNA as everyone else, and much of what feeds into corporate behaviour is the personal instincts of the leadership.”

important instances of change that came about because some powerful person was thinking about their children, or getting pressured by them.

Strategy 2: Promote technological innovation, driven by leading firms and new entrepreneurs operating through markets.

Speakers identified many specific instances of technologies and other innovations that could play key roles in a response to climate change. Moreover, they identified many instances of how such innovations could be profitable—profitable now in some cases, profitable soon or under slightly changed conditions in other cases.

A few speakers connected the power of innovation to help solve climate change to the broader theme of re-defining Canada’s competitive position in the world economy, branding Canada as an “energy and environment superpower” that would be both a source of environmentally beneficial innovations and the provider of choice for a wide range of energy and natural resource products (water was also mentioned), in part because of its excellent environmental performance.

“The market will solve this. Venture capital is already moving in the climate direction.”

“It’s dangerous for government to mess around and tinker with subsidies, as they did with corn and ethanol. It’s better not to play with it, and leave it to the market.”

“The belief that green construction costs more is a real problem and needs to be debunked. It is possible to make a greater return on green buildings. To build greener you need a rethink the network of suppliers and designers and deal with the silos and exist in the traditional industry. Currently there is little motivation to change the existing industry model.”

“The economic impacts of climate-related adjustments is a small percentage of the overall economy. In a typical office building, there might be \$100 million capital invested in the building; the payroll of people working in it might be \$70-80 million per year, while the energy cost is \$2 million per year.”

“Canada could create a brand for itself, as an environmental and energy superstar—making it the preferred provider of energy, resources, and other goods. This would take real vision from the top, a unifying economic idea. Unfortunately, the two major Parties are not well suited to providing this: the Conservatives don’t want big ideas, and the Liberals have too many sloppy, ill-considered big ideas. The main impetus in shaping this nationwide idea must come from business.”

“Doing more on climate change is feasible. It will raise costs, but we can control this and live with it. There just has to be a way to make a profit.”

“The hard truth is that we are going to consume more energy, so we’d better get more efficient about it.”

Strategy 3: Enact policies and regulations, to motivate, expand, and coordinate actions subsumed under the first two theories of change.

Many speakers said that counting on education, voluntarism, or innovation and entrepreneurship alone will not solve the problem. Further force is required to motivate change, and that force must come from public policy. Policy is needed to provide consistent, predictable incentives—to motivate and reward innovators and entrepreneurs, and to provide a stable planning environment for long-term investments.

All speakers stress the importance of consistent, economy-wide policies that put a price on emissions—and thereby a reward for reducing them. These could take the form of an emissions tax—best, crafted as a comprehensive and revenue-neutral tax reform—or a system of tradable emissions permits under an emissions cap. For some speakers, these economy-wide measures are all that is needed, or almost all. Others identify additional regulations, specific government decisions, or public investments in support for R&D as essential parts of an effective policy response—some explicitly stating that policies to price emission alone cannot be sufficient.

“People don't know what to do—they are looking to the government to take direction. I am a private sector believer, but the government sets the tone, there needs to be a balance between the free market and the public sector.”

“Business or industry isn't guilty: government must take the lead. Voluntary action driven by self-interest is not enough. Government policy needs to change. We need to make a business case for companies to do more than they are doing.”

“I don't see any possibility of persuading large businesses to change their policy. The only way to do it is to create public pressure on government.”

“What we need here is serious industrial policy. We need to transform the Canadian economy. We need policy development, and we need a political-cultural movement. Guys like me can pack snowballs for political leaders.”

“Until you can make a business out of global warming—until you put a price on things and bring supply and demand into play—then nothing is going to happen.”

“We need a carbon tax or equivalent. As long as all significant countries do it at the same time, it could work.”

“Carbon trading is better than carbon tax, but the government needs to set the framework.”

“What we need is a tax reform package that can bring the environmentalists and the corporates together.”

“The industry would be more likely to support a carbon tax than a serious cap and trade system. Nationwide trading would be a big wealth transfer out of Alberta. Trading within a small market like Alberta will create a high and volatile price, and serious local fiscal problems.”

“The increase in the price of oil from \$20-\$60 per barrel is equivalent to a tax of \$200 per ton of CO2 and that hasn't been enough! Markets alone can't deliver the changes we need.”

Speakers noted, however, that policies must meet multiple conditions of being intelligently designed, effective, fair, and well implemented. They must actually solve the problem. They must treat all emissions sources and reduction opportunities even-handedly. They must seek to minimize compliance costs and administrative burdens. And they must promote, not obstruct, the pursuit of other priority social goals. In addition, effective climate-change policies must meet several conditions that are specific to Canada. They must protect and enhance Canada's competitive position in the world economy. They must fit the legal and political context of Canadian federalism, while avoiding a patchwork response that would be ineffective and excessively costly. (This nut has never been cracked, and could well obstruct any national cap-and-trade system because it would collide with Provincial authority over facility permitting.) And even as they pursue opportunities for innovation-driven growth, policies must also take account of losers—the businesses, communities, and people who bear the costs of measures to cut emissions. The need to consult and tend to losers is especially acute in Alberta and Saskatchewan, where most of the burden of any simple emission-cutting program will fall. This has both substantive and symbolic elements. The fear in the oil patch about climate-change policy, the hostility toward casual talk about policies that could be another Federal revenue and power

"I can't believe we can deal with this solely through prices. We need some combination of high prices and strict regulation. And we have to share this across the globe in a way that we have never done!"

"Taxes are part of the solution, but I'm concerned about relying too much on taxes. One problem is that, as with sin taxes, you tax something you want to discourage but the government gets addicted to the revenue. And earmarking the revenue for climate change is also a problem, because you might have a lot of revenue and you don't want it all locked into just climate-related activities."

"It really isn't a question of markets versus regulations and taxes. We need both. Markets will work for companies, who look for a 10 to 15% return on investment, but won't work for consumers, who make a different calculation and expect a 50 to 100% return. They will need regulations or tax measures to change their behaviour. We will have to push all the levers."

"The government doesn't understand business realities. We need to drive new technologies, but this requires major capital investment. There needs to be a national agenda, so policy is consistent across Provinces and sectors. If we don't have this, it's too small a market and regulation won't help. And we need a long-term game plan. The government needs to recognize the importance of lead times and not change things constantly. Regulation is fine. I'm not afraid of regulation. But it has to be consistent across jurisdictions, and of long enough duration."

"In Canada, there is sensitivity to national political agendas being imposed on the regions, especially in Western Canada. People see the national government as interventionist and unwise. The NEP is an important part of this backdrop, an example of policies being imposed on the West. People see Kyoto as another NEP -- "carbon tax" is very tricky language. One way to create some room for movement is to have ideas not proposed by the Eastern government."

grab, and the rawness of wounds left from the fight over the NEP and the early 1980s recession, cannot be over-stated.

More broadly, many speakers—not just in the West—expressed grave scepticism about whether governments and politicians could be trusted to deliver fair, effective, and competently implemented policies—even when they acknowledged that public policy was a necessary part of the solution. Speakers noted how profoundly flawed all proposed Canadian climate-change policies have been so far, and worried about future policies being marked by incompetence, revenue and power grabs under the guise of green virtue, and arrogant disregard for the burdens of policy and those suffered from them.

“This place is rich, but bad climate-change policy—or even good policy applied clumsily or too fast—could turn it around very quickly. Investment money would flow out very fast and put many Calgarians out of a job.”

“Stop looking at the oil sands as the bogey man.”

“Look at other industries, not just automobiles.”

“There is much less consensus in Canada than the US, and a lot of it hinges here in Alberta. Alberta is a third of Canada’s emissions and could be half in 50 years. Western alienation is deep, and has long historical roots. The issue is polarized along east-west lines. Some people here even think the science is wrong.”

“It’s important not to underestimate the regular people who are involved in the extraction industry -- they work hard and believe that this kind of thing could threaten their ability to work and therefore send their kids to school. The Calgary community is pretty threatened.”

“The main gap thus far has been between political rhetoric and action.”

“Our Kyoto targets are bogus and are unattainable. Nothing has been done because we are wasting our time arguing about how to meet this unattainable target. We have had multiple stalemates piled on top of each other, between the Feds and the Provinces and between the corporations and NGOs. We need a step-by-step plan, ignoring the Kyoto targets.”

“It’s hard to imagine a policy regime as dumb as the one we have now. We subsidize oil sands to the tune of \$1.4 billion per year!”

“The EU Emissions Trading System has made a ton of money for those who got generous allocations, and did nothing to change investment or behaviour. Politicians talk a good game, then they start bringing in the exemptions.”

Strategy 4: Mobilize public concern—to make policy possible, or force politicians to act.

While some speakers said that we need public policies and left it there, others argued that we can't get policies without support—both some measure of support or consent from key players who bear the burdens of policy, based on their getting confident enough that the proposed policies won't kill them and are being developed with their interests in mind; and some degree of large-scale public concern and mobilization.

Note that there are complex pathways of influence that loop around among these four theories and strategies. This one loops back to the first, with the difference that here you would appeal to the public not just to persuade people and business to change their own behaviour, but to gain their support for policies and laws that coordinate separate individual efforts and provide incentives.

This strategy says that government needs to act, but government can't act without enough public support, so mobilizing this support must precede advocating government action. Among all speakers, however, the inability of government to get ahead of public opinion is stated most strongly by those in government—just as the constraints and limits on what the private sector can do are stated most strongly by those in the private sector. While it would be too strong to say that everyone feels powerless, almost every speaker feels that the primary locus of power to solve this problem lies somewhere else, usually outside their domain. Perhaps this widespread view says something about the political complexity of the climate-change issue, on which so many groups are needed to get a coalition strong enough to support effective action.

Another theme expressed by several speakers provides a caution about public mobilization. There is concern that mass mobilization of public concern is a volatile, short-term force, which cannot address the details of specific policies or decisions. Consequently, policies driven or enabled by mass mobilization may be most at risk of being radical, excessively burdensome, or ineffective.

“In 1999-2000 there were consultations on how to reach Kyoto. Hundreds of measures were suggested. Then the Energy Ministers met and the federal government adopted a few of the weakest. I was naïve about the forces at play.”

“People don't know what the Government is really going to do on this issue, and they expect the bloody worst from Government.”

“Now we have a disempowered government, risk-averse, and with no boldness.”

“People say that they don't want choices made by governments, but I would rather have 300 specialists making these often largely technical choices than 300 million non-specialists. The desire to be green has launched a lot of expenditure, and most of it is wasted, for example on hybrids. The necessary knowledge is not there. The policies we have are not addressing the issues.”

“People think youth and the public are apathetic. They are not. They are interested in issues and active; they are just not interested in the formal system of politics.”

“We need to get the public engaged. Most are unaware of the issue or not engaged.”

“The danger we face is radical policies that don't work. I am not worried about abrupt climate change, but about abrupt climate policy.”

4. *Shaping the way forward: a few tensions and challenges*

How do we get from here to there? Throughout the conversations, a few points emerge—tensions between different views of how we need to proceed, or challenges to resolve and integrate these views. In this note, we highlight six of these.

1. Aspirational targets versus feasible, effective actions that can be implemented.

Many speakers pointed out that Canada has had many grand targets and declarations about what we will do on climate change—some no doubt opportunistic and less than fully honest, some sincere and naïve. At the same time, Canada has had little or no concrete actions that make real contributions and smooth the path toward these large and distant goals. At the same time, those who are trying to make progress are encountering millions of trivial institutional bottlenecks.

It's easy to resolve this dilemma in theory, by saying we need moderate actions and goals immediately, leading to more ambitious goals in the long term—but this doesn't answer the key practical question, which is how to connect these so the near-term actions take us where we need to go. Many speakers address one side or the other of this problem, but we still need to put it together. Some find a moral imperative in acting rapidly, others note all the factors that make rapid changes costly and destructive—if even possible. Many speakers express discouragement about the ability of present action to solve the problem, and refer to “youth”—either a next generation of citizens who, if appropriately educated, will see solutions or be able to take actions that today's decision-makers cannot; or a new generation of innovators, kids in garages somewhere, who will find the technological solutions that make hard choices less necessary. Others find this an abdication of our responsibilities today. They note that we can't be confident that if we fail to make progress on the problem, we would leave the next generation of citizens anything other than worse off, facing the same or harder problems in 20, 30, or 50 years. And no one knows who those future kids in garages are, or what they will be doing: if we choose to gamble on leaving the problem to them—and it is a gamble—the best we can do now is try to create conditions that will motivate and facilitate their success.

2. Wishful thinking versus despair in the face of a hard problem.

Many comments suggest a dichotomy in speakers between despair and wishful thinking. Many speakers express despair at the gravity

“There is optimism that we will find a way, but there is no reason for optimism at the moment. Technologies may be a false hope.”

“We have to decide whether, as a first step, we want real small reductions or fake big ones.”

“What I've learned is that most of the time the real bottlenecks are lack of skills and support mechanisms and templates for action. We face multiple trivial institutional barriers and nobody is tasked with dealing with these. What we need is a multi-pronged institutional, legal, financial, skills development front. The 3E Initiative needs to understand the challenge of implementation.”

“So the second inconvenient truth is that we are presently not capable of implementing the necessary transition.”

“Does the public understand the implications and costs of action to combat climate change?”

and difficulty of the climate-change issue and the scale of consequences at stake. But many also make comments suggesting either a belief or a hope that the problem could actually turn out to be easy—for example, if we experience strong technological progress, or if the public could be made to understand the gravity of the issue, or if people were willing to embrace sacrifice (or alternative, to revise their perception of changes in consumption so they do are not perceived as sacrifice, but as something desirable). Some of the most extreme of these comments suggest a belief that there are solutions to the issue in which everyone wins—either that such solutions are already before us, or that we could readily find them if we were just smart enough and public-spirited enough. Other comments suggest a recognition of the wide uncertainties—technical and social, even more than scientific—that characterize the issue: a recognition that technological innovation and sensible policy might make managing the issue turn out to be cheap and

3. Get beyond partisanship, or exploit it?

Nearly all speakers say that addressing the climate-change issue requires getting beyond partisanship, but a few express potentially conflicting views. They note that there is a strongly adversarial character in the line-up of interests at stake in the climate-change issue, and that divisiveness increases the likelihood of effective action by keeping the issue in the public eye and bringing pressure on governments to act: if it were otherwise, the issue would fall off public agendas, no matter how important its resolution is for the future of Canada.

4. Leadership within Canada: authority versus consultation and consensus-building

Many speakers perceive themselves and their peers as highly constrained to act in solving the problem. Business perceives they can't do much without public policy, but does not trust politicians to make sensible policy. Government perceives they can't do much without an aroused citizenry, and at least passive acquiescence to changes from business and industry. In this context, many speakers express a longing for an authoritative decision process that somehow takes the issue out of the political arena. Some express this as the need for a "benign dictator;" others express a more

"The way to make progress on climate change is not by talking about costs: costs of compliance or costs of government action. The only way to make progress is to talk about and work on the opportunities."

"The way forward is not to scare people, but to help them see that the life can be better with greater relatedness and competency and autonomy. We have to find a way to talk about changes in lifestyle without triggering a "sacrifice frame." We have to switch from focusing on what people have to give up to focusing on how we can get something we want."

"Governments keep changing, and where does it leave us? Why can't being clean become a non-partisan, cross-party truism in Canada? We have to make climate change and environment a real Canadian value."

"We need to have people contributing their personal rather than institutional perspectives. Ideally the process should be multi-partisan: it will release a lot of energy. Partisan framings hamper altruism. If it is partisan I will not attend."

"This issue is very divisive. This is good, because it keeps it visible. If we lose the divisiveness, it loses its newsworthiness."

"We get nowhere by trying to impose solutions; it didn't work with prohibition and it didn't work with cigarettes. We won't get anywhere on climate change until people see it as in their own economic interest."

"We will not get enough clarity or consensus in public opinion. We need policies to be imposed. I am more comfortable having the detailed policy choices, many of them primarily technical, made by 300 experts than by 300 million non-experts."

limited vision, as the need to place key policy choices for climate change in the hands of a “central bank.” Unfortunately, no speaker trusts any real politician or official they know to be that dictator (and to truly be, and remain, benign and competent). Nor does anyone proposing a central bank model identify the specific, technical policy decisions—analogue to the monetary policy levers that are delegated to central banks—that would have the breadth and power to solve the problem, yet be sufficiently well-defined, circumscribed, and technical that they could be delegated to a technical body without giving that body effective control over all public policy. One intriguing possibility might be that once a nationwide system of emission taxes or tradable permits is established, the subsequent decisions regarding changes to the tax rate (with appropriate lead time and in-built provisions for maintaining overall revenue neutrality), or adjustments to the number of permits, could be delegated to such a technical body.

5. Canadian leadership in the world: everyone wants it, but what does it mean?

Everyone who spoke explicitly about Canada’s position in world affairs said they wanted Canada to re-establish a position of international environmental leadership. There were, however, wide-ranging views about what “Canadian leadership” means: simply participating in and advocating international solutions, or serving as a neutral convener for international processes? If leadership just means these, then it is cheap and easy—but does not necessarily contribute much to solving the problem. Alternatively, does Canadian leadership mean spending real resources to generate good ideas, or accepting real costs in taking action, even moving ahead of others?

“It’s better to consult with people and then do otherwise than to do what people want without consulting them.”

“The basic politics of the Canadian situation is the power of the people who want to deal with the climate change problem against the power of the oil and gas and coal and especially the oil sands interests. And the economic power of these present interests is much larger than the power of dispersed future interests.”

“It is impossible to have real conservation in a democracy! What is needed is a benevolent dictator—globally, and in Canada.”

“People don’t change when they have to, they change when you make them. Something nasty has to happen to get real progress on this.”

“A Canadian ‘Climate Czar’ could put forward codes and standards without being politically tied down. The process of making decisions would not be political, and the operation would be independent, like the Bank of Canada.”

“We need a Royal Commission, to figure out a revenue-neutral carbon tax on a personal, provincial, and corporate level.”

“Canadian leadership can add something to the wider world. I’m ashamed of my country’s disengagement from international leadership. This is at odds with our conception of ourselves as good guys. There is a story here that can work. What could we do in Canada? We could join with California and others in the CAFE standards. We could radically improve the energy efficiency of the oil sands. We could get away from coal for electricity, using hydro and nuclear. We could develop alternative low-carbon fuels.”

“The smarter politicians will realize that there are a lot of no regrets options, and that not all the nations of the world have to act at the same time.”

There is a stark tension between those who advocate strong, substantive Canadian leadership and those who worry about aggressive policies impairing Canada's competitive position, especially vis-à-vis the United States. At its simplest level, this tension can be uninformative, a collision of the competing debating points "Canada must lead," and "Canada cannot lead if it impoverishes us." Perhaps a more promising re-framing of this tension is to characterize it in terms of a willingness to accept risks: Canadian leadership in climate change policy clearly does carry risks, but the actual consequences of these are uncertain, depending on how bets on specific innovations turn out, how market conditions develop, and—crucially—what emissions policies are taken by Canada's major trading partners. Under some of these conditions, the risks of international leadership can be small or can turn to significant advantages: under others, early leadership gets punished. Moreover, there are also risks of international non-leadership, particularly when living beside as large and volatile a trading partner as the US: the risks to Canada of being caught flat-footed by a rapid pivot of US climate-change policy in two or three years, designed to pass much of the burden through to America's trading partners, could well be larger than any risks associated with getting out in front. Here, as on other aspects of the issue, Canadian policy and decisions need to consider uncertainty.

6. Climate change and social transformation: the possibility of conscious social choice.

For many speakers, how Canada responds to the climate-change issue is a choice that touches many other aspects of society, a fork in the road where we choose between fundamentally different visions of society. Some speakers welcome this, in part because they see the choices leading to effective management of climate change as also promoting a better and more just society—for some speakers, a society that re-affirms old social values they feel have been lost; others reject this vast framing of the choices about climate change, in part because they fear that coupling the climate-change issue to the revolutionary transformation of society would ensure that no progress could be made on the climate-change issue.

"Right now, early actions are so far ahead of the game, they are going to be punished. We've already addressed the low-hanging fruit. Our baseline is lower to start. If I have a Prius and the other guy has an SUV, are we going to have to make equal reductions? If I pay five cents, will the world be better off, or will the other guy just ride my coat-tails?"

"China and other countries could quickly offset all the gains that Canada achieves."

"It's a tragedy of the commons, so Canada must work on getting others engaged."

"What Canada does on its own is pretty irrelevant in terms of global reductions—Canada's total emissions are less than China's increases each year—but Canadian action can be significant in terms of innovation."

"Canadians want everything—they just want their neighbours to pay for it. Everyone is self interested; everyone wants more for less. I think we are getting worse: good old Canadian values are disappearing."

"Lots of folks think climate change cannot be solved in conventional terms, and want to use the issue to re-tool our whole way of living, moving beyond capitalism to some Zen-like, post-industrial society. Climate change is to first order a problem of changing the energy system, of which a lot—maybe not all—can be achieved through technological changes alone. I do not want to tie solving climate change to a revolutionary transformation of industrial society. This is not because I don't sometimes wish for such a social transformation: it's because I really care about solving the climate change problem."

How have we as a Canadian society achieved what we wanted to so far? It didn't happen by accident, it happened by design. There was a deliberateness of creating a Canadian culture. There was a conscious moment when we said, "what kind of place do we want to live in?"

Environmentalists don't have an interest in solving environmental problems. They worry about the environment, of course, but they also want complete social re-engineering. Solving environmental problems would obstruct their larger mission, and moreover put them out of a job.

5. But what can this group accomplish? Objectives for the 3E Initiative.

Facing such rich diversity of insights and views as provided by the speakers, it is not obvious how to take the next step and identify what concrete initiatives such a group might undertake to contribute to solving the problem. One tempting response is to seek a grand synthesis of speakers' theories and proposals, of the form "these ideas all seem partly true, it's probably some combination of them", or "these actions all sound helpful, so let's do everything." For an action-oriented project such as this one, such a grand, theoretical synthesis might not be especially useful. As an early step, participants in this project need to decide what they can do that is likely to be most useful. One way to harness the richness of ideas presented in service of this objective might be to ask how do we identify key points of leverage? In view of these, are there ways forward that appear to be especially promising ways to deploy the limited time and energy that the people involved in the project can deploy?

Speakers engaged this question in some detail, proposing several alternative models of what the 3E Initiative could aspire to achieve and what the associated requirements and agenda would be. In this note, we gather the multiple proposals into four closely related clusters. These are not intended to be mutually exclusive alternative choices: hybrids or blends of them are possible, of course.

1. Agree principles

Seek agreement on a set of principles that should guide a Canadian climate-change strategy. Adopt, or modify as needed, the principles articulated in the recent Chief Executives' statement. But don't let statements of principle get unmoored from obligations for real action: if you stay at the level of principle, there is lots of room for hypocrisy.

"The 3E Initiative can be like the CCCE report or the Roundtable. It can be another place to forge common ground. It can support agendas that are already put forward. It should be familiar with the work of these groups and support them. It doesn't need to come up with another agenda. We already got businesspeople and put together a plan for building a winning economy that would be good for Canada. 3E should build on that platform."

“Start with high level principles, then move on to implementation. Get to the synopsis of the solutions then get into the problem and really roll-up your sleeves and get into it. This will take more than one shot! The recent report on climate change from the Canadian Council of CEOs is a good place to start.”

“The CCCE report was not widely admired. It wasn’t the statement that was bad, it was the inconsistency of some of the companies involved—with their behaviour, and with what they were saying as recently as one month earlier. There’s a lot of pious hypocrisy in that report.”

“My concern is that this will be the same people having the same old conversation. The conversation has been restricted to policy wonks. We NGO people are wired for arrogance and rigidity. We say, ‘I’m right and everyone else is wrong.’”

“There is a real danger of us being simply another lobby group. This is not useful.”

“An industry consensus on this would tip things politically. The obstacle is the Suzukis, who are ideologically unwilling to deal with the means because they are so focused on the ends. We are now beyond awareness-raising and into the means. At the recent CCCE meeting, one of the CEOs asked rhetorically how many people believe that climate change was real, and he was astounded when 80% of the people there raised their hands.”

2. Elite consensus on strategy

Start the process of building a consensus, principally among relevant elites, on the broad strategy Canada should follow in addressing this issue. This should not consider every detail of policy or action, but rather should develop a strategic framework that would provide a chance of effectively addressing the problem. This consensus-building should take place outside the political process, and should aim to having the consensus so widely and strongly held among the groups that matter that politicians have to act on it. Speakers find real promise for developing such a consensus, because all sides on the issue now realize they area going to have to change what they have been doing. Environmental groups know that they cannot win

“I want to join with others. We have to make this a political movement. People are waiting for leadership. I know how to lead from behind. What I would love to see happen is a broad, political, nonpartisan understanding that this is a damn serious problem. I think we need to paint a picture of what a scenario of a seriously low-carbon economy would look like. There will be winners as well as losers in this industrial revolution. We have to give it teeth and color, then to make it happen.”

“Done right, this process could create more permissions for governments and the economy to act.”

on this issue by protesting from outside; corporates know that they cannot just wish, or stonewall, this one away.

“The role of 3E is to say individually and collectively to the government to get things in place. We should offer recommendations to the government and support the uptake of these ideas in different industry sectors.”

“When I started working on environment and climate change it was seen in this company strictly as a damage control exercise. But it is moving closer to the center of the business.”

“This is no longer about the politics of protest. We environmentalists have to be a bit more sophisticated.”

“Always being in opposition, just talking about bad things you are against, wears you down and is not a viable long-term strategy. Companies are not all bad guys, it is not black and white. There is a maturation process that comes with the need to accomplish things, not just saying “I did my best and failed nobly.” The free market is very powerful, creative and motivational force. People no longer just think you can regulate the bad guy and get what you want. People want environment and economy. They are tired of rhetoric, and are willing to make some sacrifice—if they are confident it will work, and they’re not the only ones making the sacrifice.”

“We’ve been through several failed “executive forum” exercises, from which nothing has happened. In each case, we spent a lot of time and energy for nothing. These initiatives are usually all talk and no action. The movement, in other sectors and in government, has been glacial. Government sends mixed signals, because they’re not yet convinced the public cares, so they figure they don’t have to do anything about it. But when we do put out a concrete proposal or initiative—it’s attack, attack, attack.”

“My environmental activism has focused on getting business to understand what needs to be done, and giving them a pat on the back when they do it. But this goes against the old-school environmental activism approach.”

3. Strategic Planning, Contingency Planning, and Policy Analysis

The capacity for strategic thinking, contingency planning, and policy analysis on this issue in Canada has been greatly weakened over the past ten years. The project should conduct exercises that seek to expand the set of options under consideration, clarify the requirements for an effective Canadian climate-change strategy, and assess the associated costs and benefits, risks, and potential pitfalls. For example, the project might conduct exercises in developing scenarios of Canadian emissions that consider uncertainties, or exercises that assume a stringent mitigation goal and work through the requirements, challenges, and pitfalls of getting there.

4. Identify initial action steps—build toward a capability to cut a deal

Identify specific, near-term actions that can help lead to a solution. Put the emphasis particularly on actions and decisions that are within the capability of the participants in the project. More

“Climate change is now one of the two critical national debates. This presents us with lots of opportunities. The issue is moving into the mainstream, and so environmental organizations no longer own or can control this issue. For me, this is both liberating and terrifying: it’s like being a parent and watching your kids leave home.”

“We need to hang on to, or perhaps re-discover, our capacity to suspend disbelief.”

“We need to build a big surfboard, and wait for the wave.”

“Why don’t we assume that we have an agreement on a mitigation goal. Then we can talk about what it would take implement this goal. If we could agree on an aspiration, then how would we do it? What will the step be to achieving these goals? That’s where the benefits will be found.”

“There is a problem with the current government. There is no practice thinking through large changes and how they affect all government levels -- both political and bureaucratic. The public service used to have good procedures for exploring impacts of large policy changes, but now the bureaucrats are very afraid. The elected government is very controlling. No minister can make a speech without the Prime Minister’s office approving. There is also not much preplanning, it is getting more and more centrally driven—any process to change policy would have to get the green light from the Privy Council. All three sectors—energy, environment, economy, are all suspicious of government interference. There has not been good public policy leadership in these areas. If something is going to happen. It is going to come from a process like this.”

“The key is to get beyond “we see something needs to be done” and just get on with it.”

“The right place to start is to work with the people who see the win-win. But in order to make change you need “zero-sum” people. The project must include people from the oil patch.”

ambitiously, aim to expand participation of key players until the group is able to cut a deal.

“There has to be some sort of multiplier effect—something that self-replicates. There needs to be something viral.”

“Maybe we would make more progress if the environmentalists were not in the room.”

“Many industry players are prepared to move off the status quo, if they are protected from some of the downside—if they can pass through some of the costs or get some compensation from governments. It’s a matter of how much of this they need, and from what point they’ll count on the market to take care of the rest. Calgary needs its own pied piper. We don’t need a lot of finger wagging environmentalists.”

“The broad outlines of a deal that could work in Canada are pretty clear. You can only expect the West to suffer higher carbon prices if you give them something back. One obvious tool to do this is to work with the transfer payments.”

This synthesis of the interviews of the participants in the 3E Initiative sets the stage for the first meeting of the Initiative.

Persons Interviewed

M. Elyse Allan, General Electric Canada
Bruce Anderson, Harris/Decima
Shari Austin, RBC
Kathy Bardswick, The Co-Operators Group Limited
John Beck, Aecon
Mathieu Bouchard, Alcan, Inc.
Matthew Bramley, Pembina Institute
Scott Brison, Parliament of Canada
Stephen Bronfman, Claridge, Inc.
Michael Brown, Chrysalix Energy Management
André Caillé, Hydro Quebec (retired)
Morag Carter, David Suzuki Foundation
Joe Clark, Former Prime Minister
Louise Comeau, Government of British Columbia
Patrick Daniel, Enbridge Inc.
Stéphane Dion, Parliament of Canada
Hadi Dowlatabati, University of British Columbia
David Diamond, Headlines Theatre
Jim Dinning, Export Development Corporation
Stewart Elgie, University of Ottawa
(Richard) Dick Evans, Alcan, Inc.
Charlie Fischer, Nexen Inc.
John Godfrey, Parliament of Canada
Pierre Marc Johnson, Former Premier of Quebec
David Keith, University of Calgary
Mark Kielburger, Leaders Today
Avrim Lazar, Forest Products Association of Canada
Jack Mintz, Rotman School of Business
Ted Robertson, Magna International, Inc.
Wishart Robson, Nexen Inc.
Nancy Rosenfeld, Claridge, Inc.
John Roy, Roycom
Earl Saxon, World Conservation Union (IUCN)
Jim Schultz, Enbridge Inc.
Harry Swain, University of Victoria
Ralph Torrie, ICF Consulting
Don Walker, Magna International, Inc.
Jonathan Westeinde, The Windmill Group
John Wiebe, Globe Foundation