Moving Towards Climate Justice: Overcoming Barriers to Change

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1 I am greatly indebted to my long-time collaborators Marc Lee (CCPA-BC senior economist, and co-director of the Climate Justice Project) and Shannon Daub (CCPA-BC communications director), upon whose work of have drawn heavily. And thanks to Naomi Klein for her feedback on an earlier draft of this paper.
From the Abstract to the Applied: Climate Justice and the British Columbia Case Study

The present paradox, as ecological economist Bill Rees is fond of putting it, is simple yet profoundly troubling: “The ecologically necessary is politically infeasible, but the politically feasible is ecologically irrelevant.” How then do we grapple with the gap between, on the one hand, what the science of climate change is telling us, and on the other, the current political realities that err on the side of incrementalism at best and stubborn inaction all too often?

With this paper, we move from the theoretical to the practical; from a broad consensus on the climate imperative of our time, to the applied challenge of embracing structural/systemic change within one locale. This paper builds on the themes outlined in the Sustainable Economics panel at INET’s Bretton Woods conference (with Alex Evans, Bill Rees and Camilla Toulmin), and shares how one research alliance is wrestling with the twin (and interconnected) challenges of inequality and global warming within a particular jurisdiction.

That case study jurisdiction is British Columbia (BC) — Canada’s western-most province: geographically large, but sparsely populated (approximately 4.4 million ethnically-diverse people live mainly in the south-west corner); historically a staples economy based on the export of forestry products, minerals, and more recently natural gas, but where the keystone city of Vancouver now aspires to be “the greenest city in the world by 2020”; home to the largest income and wealth gaps in Canada (Vancouver is notorious for both astronomical housing prices, and for the desperation of the Downtown Eastside – the poorest postal code in Canada); and where politics is very rough and never short of surprises (power has swung between a populist free-market party that nationalized the electricity sector 50 years ago, to social democratic governments, and currently back to what is arguably one of the most neo-liberal regimes in Canada, with the notable and curious exception that it introduced North America’s first carbon tax in 2008).

Enter into this paradoxical mix the Climate Justice Project (CJP), a research and public engagement initiative co-led by the Canadian Centre for Policy Alternatives and the University of British Columbia. Our project embraces the old adage, “think globally, act locally,” and has chosen to tackle what we have dubbed “the two great inconvenient truths of our time” – rising inequality and global warming. Our research alliance takes the science of climate change as its starting point, and turns directly to the policy and political/cultural

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2 See http://ineteconomics.org/net/video/playlist/conference/bretton-woods/O
4 The Climate Justice Project is a five-year research project led by the CCPA-BC and the University of British Columbia (UBC). It brings together 25 academic collaborators from BC’s major universities and a unique collection of 40 community partner organizations, including environmental and social justice NGOs, the trade unions that will be most impacted by climate change, First Nations groups, and other think tanks. The CJP studies the social and economic impacts of climate change and develops innovative policy solutions that are both effective and equitable. The project is supported primarily by a grant from the Social Sciences and Humanities Research Council of Canada, with additional support from Vancity credit union, the Vancouver Foundation, the Pacific Institute for Climate Solutions, UBC, Simon Fraser University, the Bullitt Foundation, and other sources. For more see: http://www.policyalternatives.ca/projects/climate-justice-project

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challenge. It also takes as a given that, if our relatively wealthy jurisdiction is to do what we are ethically obliged to do within a global context of climate justice, our carbon budget allowance is fast depleting, and we must effectively get to carbon-zero by mid century. As such, the work of our project is guided by a single overarching question: what will our province look like when it has dramatically reduced its greenhouse gas (GHG) emissions, but done so in a manner that reduces inequality, and ensures that societal and industrial transitions are just and equitable? For even as we rise to the climate challenge, it is quite conceivable to imagine a scenario in which the policies pursued have the effect of exacerbating inequality.

The BC case study is opportune for a number of reasons. First, BC is home to stark inequality, the highest poverty rates in Canada, and a highly polarized labour market. Second, beginning in 2007, the province began to treat the reality of climate change seriously (although this has waned of late). As noted, BC introduced the continent’s first carbon tax (albeit a modest one) and has legislated GHG reduction targets (of 30% below 2007 levels by 2020, and of 80% by 2050). That said, in clear conflict with these goals, the province’s economic policy remains firmly focused on expanding the extraction and export of fossil fuels (natural gas and coal), and as yet there is no concrete policy plan to fully achieve the legislated GHG targets.

In what follows, I outline some of what the CJP has learned regarding the sources of resistance to transformative change, and some of the strategies we are pursuing to overcome these barriers.

**Understanding the Barriers to Change**

A mobilization paradox frustrates environmental NGOs, scientists, researchers and others concerned with the slow pace of climate action. On one hand, opinion research shows high levels of public awareness and concern about climate change; on the other, behaviour changes have failed to materialize at the levels needed to shift from social inertia to social action. An opinion poll commissioned by the CJP suggests that this paradox persists in BC. Respondents indicated high levels of concern and belief regarding anthropogenic climate change; strong support for public policies that would aggressively reduce GHG emissions; and the view that such policies should not take a back seat to economic concerns during a recession. Yet questions related to willingness to pay and take action produced much less positive responses.

Climate scientists tend to get very exercised about the continuing degree of public skepticism and lack of knowledge/understanding about that severity of the crisis we face.

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5 For more on the BC government’s climate action plan, see: http://www.env.gov.bc.ca/cas/cap.html
7 David Tindall, Shannon Daub, and Jodie Gates. Forthcoming, “What British Columbians Think About Climate Justice.” The poll was conducted for the CJP in July 2010 by Environics Research Group, using an availability sample from a panel of respondents who periodically participate in online Environics surveys. A total of 1,006 respondents participated.
Notably, however, our CJP opinion research indicates that climate confusion or even denial is not a core barrier to change (at least in BC).

Our poll results found that a slim majority of British Columbians (52%) can be characterized as climate-aware (they believe that the scientific evidence about climate change is conclusive, and that it is caused by human activity); a further third are climate-confused (they believe the science is conclusive that climate change is happening, but are unsure about its causes); and only 15% are climate-skeptics (they believe the scientific evidence that climate change is happening is not conclusive). These numbers are certainly worrisome in terms of climate literacy. Yet consider the following:

- A strong majority of respondents nevertheless recognize that we face an ecological crisis: 62% disagree with the statement, “the so-called ‘ecological crisis’ facing humankind has been greatly exaggerated”; 77% agree that “if things continue on their present course, we will soon experience a major ecological catastrophe.”

- Most recognize that there are limits to our consumption that have significant implications for how we live: 75% agree “there should be a maximum cap on everyone’s greenhouse gas emissions”; 68% disagree with the statement, “we should not limit anyone’s freedom to consume whatever they want to, even if there are environmental consequences to their actions”; 59% agree that “if we are going to solve global warming, we as a society have to give up the idea that everyone should own their own car.”

- Climate action is not perceived as a risk or threat: More than two thirds of respondents indicate the impact of “dramatic changes” to deal with climate change will have either a neutral or positive impact on their standard of living, jobs and the economy, and Canadians’ quality of life.

- Indeed, the vast majority believe climate action will have significant benefits, regardless of whether they view climate change as a serious threat: 86% agree that “even if global warming turns out to be less serious than scientists believe, many of the policies to combat it have economic and social benefits that are worth pursuing anyways”; and 89% agree that “Canadians as a whole will be better off if we can be less dependent on fossil fuels – regardless of whether or not global warming is a threat.”

- Strong majorities (between 80 and 95%) support a range of climate action policies for British Columbia, such as investments in mass transit, transition programs for workers in fossil fuel industries, and subsidies for home and building retrofits.

Even more striking, when our CJP analysts dug deeper into the numbers, they found that while there are statistically significant differences in responses to the above questions based on whether a person is climate-aware, climate-confused or climate-skeptic, a majority of them nevertheless conform to the overall pattern. For example, 75% of the climate-skeptics (compared to 86% of the overall sample) agree with the statement, “even if global warming turns out to be less serious than scientists believe, many of the policies to combat it have economic and social benefits that are worth pursuing anyways.”

In short, our poll found a large majority is prepared to accept climate action policies, notwithstanding the skepticism some harbor about the science. Moreover, a healthy majority believe that dramatic policy actions that move society towards a low-carbon
economy will improve their quality of life, regardless of whether they considered such actions necessary. Meaning, even if people think the pending climate catastrophe is overstated, they nevertheless see climate action policies as beneficial.

In BC, most people seem to understand that the concrete effects of climate change are already upon us, as manifested in destructive new realities such as the mountain pine beetle epidemic that has devastated much of the interior forest of our province (with profound ecological, social and economic consequences).\(^8\)

Broadly speaking, I think people understand that the status quo spells trouble, and our dominant culture’s focus on endless/mindless consumerism often leaves them feeling cold.

All of which is good news. So what then are the barriers to change? They are, in the main, political-cultural challenges or psycho-social ones, as well as policy ones:

1. **Inequality undermines trust that we are “all in this together”:**

   Many doubt that the task at hand will be undertaken in a manner that is fair and equitable, and the effect on public trust is corrosive. While we may not confront a values gap or even an insurmountable information gap with much of the public, we do face a “faith” gap: a lack of faith in our public institutions; a lack of faith in our collective capacity to rise to this challenge; a lack of trust that politicians are up to the task (or a belief that our governments are captive to corporate interests and “the 1%”).

   There is a “chump factor” at play. No one wants to feel like they may make great efforts to reduce their household GHG emissions, only to have wealthy households buy their way out of change, or similarly, that households overall will undertake such actions, only to have industry swamp their best efforts.\(^9\)

   Such feelings are understandable. At a broad level, Canadian household emissions have been slowly dropping in recent years, even as Canada’s overall emissions keep rising. The reason, primarily, is that the expansion of Alberta’s oil sands cancels out all other efforts to do the right thing. It is a reality that can reasonably lead people to give up trying in frustration.

   These sentiments also emerge from inequality between households. For example, research by CJP director Marc Lee notes that Canadian household carbon emissions are highly unequal.\(^10\) As his Figure 1 illustrates, the wealthiest 20% of Canadian income earners are responsible for almost double (1.8 times) the GHG emissions of those in the poorest quintile. Meaning, even if those in the richest quintile successfully reduce their household

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\(^8\) For more on the link between climate change and the pine beetle epidemic, see Ben Parfitt (2010), *Managing BC’s Forest for a Cooler Planet: Carbon storage, sustainable jobs and conservation*, Vancouver: Canadian Centre for Policy Alternatives.

\(^9\) BC pollster Angus McAllister made the “chump factor” argument based on research he has conducted with British Columbians. See Tom Barrett (2007, June 6), ‘Chump Factor’ Holding Us Back: People Ready to Sacrifice if They Don’t Feel Alone, TheTyee.ca, http://thetyee.ca/News/2007/06/06/Eco-chump/

emissions by 30% by 2020, they will still be emitting more than the poorest 20% of households do today. This surely exposes a fairness challenge, and suggests that higher-income households should bear a greater burden of reducing emissions.11

Issues of fairness and justice must also be effectively addressed in the design of climate mitigation policies. The BC experience offers an instructive example. As noted, in 2008 the province introduced a modest carbon tax (starting at $10 per tonne in 2008, and rising each year until it reaches $30 per tonne in the summer of 2012). Recognizing that the carbon tax (like any sales taxes), in isolation, is regressive (see Figure 2), the province introduced an accompanying low-income carbon credit to mitigate these negative distributional impacts (along with a small reduction in personal income taxes). The problem, however, is that while the carbon tax increased three-fold over a five year period, the low-income credit was held virtually flat. Consequently, as Marc Lee models,12 over the carbon tax’s implementation, a clear regressive distributional impact is evident (see Figure 3).

11 Conversely, among the many important findings in the work of British epidemiologists Richard Wilkinson and Kate Pickett, is that societies with less inequality are also more open to embracing environmental actions (see Wilkinson and Pickett (2009), The Spirit Level: Why More Equal Societies Almost Always Do Better, London, New York: Allen Lane).
12 For more on the distributional analysis of BC’s carbon tax, and a progressive alternative, see: Marc Lee (2011), Fair and Effective Carbon Pricing: Lessons from BC, Vancouver: Canadian Centre for Policy Alternatives.
Such policy design flaws should have been fixed, but the government refused. Consequently, a policy measure that should have benefitted from widespread support was instead a source of considerable resentment and political backlash, leaving politicians reluctant to take further (and necessary) bold action.

2. **A lack of a clear vision:**

We who appreciate the need for climate action are asking people to embrace dramatic change, and yet the picture of their new life remains fuzzy. It is difficult to imagine what our lives and wider society will look like under the kinds of transformative changes needed to mitigate and adapt to climate change. Compounding this challenge is the reality that most aspects of our everyday lives, the shape of our communities, and wider societal norms and structures are predicated on unlimited access to cheap oil. And in the current context of economic insecurity, stagnant real incomes, and longer working hours, asking people to consider possible sacrifices or increased uncertainty is a hard sell.
Given this challenge, a core task of those wanting people to overcome resistance to change is to bring the picture of a new good life into focus – a social life that people can imagine, relate to and even desire – and to answer for the general public some very basic and entirely reasonable questions:

- What will my home and community look like in this bold new world?
- How will I make a decent living for my family, and will the work be rewarding?
- How will I get around?
- Where will our food come from?
- Where will our energy & electricity come from?
- How will I play (can I still travel and enjoy my leisure time in an enjoyable and satisfying way)?
- How will we collectively pay for the huge public and private investments that will be needed to get us from here to there?
- Who decides? (Meaning, will we all be included in a fulsome deliberation on how we achieve the transformation needed, or with the policy agenda be imposed by governments will little appreciation for the economic security of those without political power?)

Issue by issue, the CJP has sought to answer these questions. The very first CJP report was entitled "Searching for the Good Life in a Carbon Neutral BC: Meeting BC’s greenhouse gas reduction targets with fairness and equity." As the title suggests, it sought to shift the focus towards quality of life, and broadly outlined the breadth of policy options, all through the lens of mitigating inequality. In the years since, the CJP has been slowly addressing most of the province’s major industrial sectors. Each report provides one more building-block in a more coherent vision, with reports produced thus far on: fair and effective carbon pricing, green jobs and industrial strategies, a new vision for transportation and urban design for “complete communities”, a sustainable low-GHG food system, zero-emission housing while confronting energy poverty, a dramatic new approach to forestry (emphasizing carbon storage), natural gas and hydraulic fracturing, and forthcoming studies on a future electricity system, zero waste, a just transition plan for workers in high-GHG industries, carbon-neutral rural resource communities, and more.

The function of this paper is not to provide a detailed presentation of the CJP’s policy proposals, but a few examples may be illustrative:

- Our work on carbon pricing models a $200 per tonne carbon tax (a level at which we would indeed see noticeable changes in behavior, consumption and investment). Such a tax would generate close to $8 billion per year in new revenues, half of which could go towards an expanded lower-income credit that would entirely offset the cost of the tax for virtually all low and modest-income households and partially offset it for middle-income households, and half the revenue could be directed towards public investments in transit, retrofits and a bold green jobs plan.

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13 2008, Searching for the Good Life in a Carbon Neutral BC: Meeting BC’s greenhouse gas reduction targets with fairness and equity, Vancouver: CCPA.

14 All published CJP reports can be viewed on the project’s website at: www.policyalternatives.ca/projects/climate-justice-project.

15 By way of context, BC’s GDP is approximately $200 billion.

Our work on zero-emission homes proposes that older homes and multi-unit rental stock be targeted for retrofits (using financing tied to property tax or utility bills); a plan that could produce 12,000 direct jobs, with a special focus on apprenticeship training for traditionally marginalized populations.¹⁷

Our work on transportation and building “complete communities” proposes a $2 billion per year investment in public transportation, and an approach to urban design that would minimize the need for long commutes.¹⁸

Our work on forestry (jointly published by three of the province’s leading environmental NGOs and all the forestry unions in BC – an unique occurrence) maps out a dramatically new approach to this core provincial sector (almost all of which occurs on Crown land). It proposes an innovative mix of increased conservation, longer growth periods, active management of tree plantations, intensive silviculture and re-forestation, and the increased use of value-added wood products that store carbon – all through the lens of maximizing carbon sequestering while stabilizing employment in the sector.¹⁹

Once the picture of the future is given greater clarity, it becomes easier for people to entertain how we move from here to there.

3. Individuals can’t do it alone:

Much of the public/popular education on how to tackle climate change has been highly focused on individual and household actions. Yet in truth, in the absence of structural and systemic changes, households are fairly limited in what they can do to lower GHGs. Unless new public transit options are available, communities are re-designed so people can live, work and find needed services in close proximity, energy systems are transformed, etc., the options available for individual change will only produce marginal improvements. Indeed, the emphasis on individual behaviour change without adequate accounting of structural barriers to action may in fact undermine mobilization efforts.²⁰ The challenge needs to be recast as a political and collective one, which in turn seeks to bring about core changes to our main industries and infrastructure.

A central challenge for climate mobilization efforts thus relates to the need to integrate calls for individual action within their wider structural contexts. Such integration must consider how to galvanize both personal “green behaviour” and collective action in support of public policy changes that can enhance quality of life and reduce GHG emissions. As Susanne Moser argues, “rather than inundate audiences with more information or scary images of a gloom-and-doom future, it is critical now for communicators to constructively engage and support individuals and communities by creating a sense of feasibility, collectivity, and urgency.”²¹

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¹⁹ See Ben Parfitt (2010), Managing BC’s Forests for a Cooler Planet, Vancouver: CCPA.


4. **People need hope:**

Facing the realities of climate change is scary for many people, and fear-based messages alone can be paralyzing. The answer is not to gloss over the seriousness of the situation, however. Rather, the answer is to engage in responsible truth-telling. Thus, the CJP has also sought to communicate that policy and technological solutions are plentiful and at hand. We have also endeavored to communicate that the task before us can be accomplished in stages.

In engagements with young people in particular, I have sought to introduce the notion that, "*We are the U-turn Generation.*" The concept is this: all of us who have the courage to look the science of global warming full-on wrestle with despair. A clear understanding of what the scientific studies are telling us is that wealthy industrialized societies must be carbon-zero by 2050. Even then, we will still face the challenge of pulling accumulated GHGs out of the atmosphere, in order to get global CO₂ parts per million (PPM) down to 350, if devastating ecological and social upheaval and harm is to be avoided. We are forced to live with the uncertainty of whether this Herculean global task can be accomplished. But for now, the task of this generation is the U-turn – to change the direction of the path we are on – to see global emissions slow, and over the next 30-40 years, drop to zero.

An alternative analogy sometimes invoked when explaining global warming is that of a bathtub; GHG emissions are the water coming out of the faucet, while the accumulated water in the tub represents PPM of CO₂ that has built up in the atmosphere. While most of our policy attention tends to focus on turning down the tap, it is the PPM accumulated in our atmospheric tub that is truly at the root of the problem with respect to climate change. Our task for now, however, is to turn off the tap; while it will fall to the next generation to figure out how to drain the bathtub. We can do no more, but we are obliged to do no less. Will it be enough? We do not know. It is the fate of this generation to live with this ambiguity. All we can do is rally to the task at hand, knowing that time is of the essence.

5. **Lack of a movement:**

In its origins, the environmental movement was just that (a genuine movement). It could muster bold action and a big crowd. But today, the environmental NGO sector has become very professionalized. Ironically, in the face of the climate challenge – arguably the most pressing issue to ever confront humankind, and with as much public support as any previous movement – large mobilizations have been rare. Even two years ago during the Copenhagen climate talks, when global attention was at its peak, truly large demonstrations were few.

There are notable exceptions to this, such as the work of 350.org, the Keystone XL pipeline protests last summer, and the Occupy movement of late, so perhaps social change leaders are re-learning the vital role of popular mobilization. But in the absence of a vibrant movement, political space for bold action is limited, and people’s desire and willingness to embrace dramatic change fails to find political expression, and instead, those views exist in isolation. People may indeed be willing to accept and indeed welcome change, but they

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mistakenly feel they are alone in harboring such sentiments. Thus, a key challenge is to build movements that can establish connections and break-down these feelings of isolation.

6. A economic (and political) system that is captive to the oil and gas industry and its rapacious hunger for growth and profits:

The oil and gas industry buys too many policy decisions. In Canada, the federal government actively advances the interests of the oil sands, notwithstanding what this “carbon bomb” means for climate change, or the irony that, like all states that suffer from Dutch Disease, this sector is artificially driving up the value of our currency and wreaking havoc on other industries. Even opposition leaders fear to speak truth to the oil and gas industry, afraid that its investment is too crucial to the economy, and that doing so will be too politically costly.

The dilemma is this: we need to manage the oil and gas sector for wind-down, in preparation for the time a few decades from now when we are done with these destructive industries. Yet being “managed” and “wind-down” are anathema to the profit-seeking sector in general, and to this industry in the extreme.

The alternative, perhaps, is to break with the presumption that only the private sector can undertake the work of this sector. In many states, of course, such a proposition is not at all unusual, but in North America it is considered heresy. Here in BC, we are wrestling with a deep contradiction: on the one hand, we tout natural gas as a clean, “green” transition fuel; and on the other, the sector is burgeoning, increasingly derived by means of shale gas “fracking” with GHG emissions equivalent to coal, and the gas is often destined to fuel the extraction of bitumen from the Alberta oil sands.23 Moreover, if all the gas BC purportedly has in untapped reserve were actually burned, the impact on the global carbon budget would be immoral.24 Clearly, this is not sustainable. Given this, can the private sector truly be left to manage the natural gas sector as a temporary transition fuel, or would that task be best entrusted to a public enterprise with a sunset clause built into its terms of reference?

**Concluding Lessons from the CJP: Keeping Everyone on the Bus**

1. Climate justice is not merely a plank in a new progressive economic vision or agenda — *Climate Justice is the platform.*

Confronting the climate crisis represents a new industrial revolution, and will impact all economic and social policies. Embracing climate justice means developing industrial and employment strategies for all sectors of the economy.

A particularly troubling casualty of the current economic crisis is a distressing drop in public support for climate action (noticeably so in Europe, which until the crisis led the world in climate action, but whose governments seem to have abandoned the field of late). The sense of climate urgency is waning, just when the planet is increasing its distress signs. At one level, this is not surprising. It has long been the case that public support for

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23 Ben Parfitt (2011), *Fracking up our water, hydro power and climate: BC’s reckless pursuit of shale gas*, Vancouver: Canadian Centre for Policy Alternatives.

24 For more on the GHGs embedding in BC’s fossil fuel exports and reserves, see Marc Lee (2010), *Peddling GHGs: What is the carbon footprint of BC’s fossil fuel exports*, Vancouver: CCPA.
environmental action is a "fair-weather friend"; when the economy is strong, public concern about the environment registers high, and conversely, when the economy sours and economic insecurity increases, environmental issues fade from the public radar.25

The climate crisis, however, can no longer abide such ebbs and flows in public attention. Thus, a vital challenge is to link economic security and climate action. The task for opinion leaders and policy-makers who appreciate the dual economic/inequality and climate crises before us is to advance an integrated plan, one that ties a needed economic recovery program to a bold climate agenda.

2. The growth/de-growth debate is largely a distraction.

The challenge is to focus on what matters — reducing inequality, enhancing well-being / quality of life, ending poverty, low unemployment and good jobs, hard caps on GHG emissions that lower steadily over time, and limitations on the extraction of natural resources to ensure sustainability and protect biodiversity. Perhaps the result will be slow or even zero GDP growth. However, perhaps the investments needed to accomplish the above tasks will be so large that GDP will continue to rise for another few decades. Ultimately, this is not the central problem. The key is that governments should no longer be judged on the basis of the GDP record under their watch, but rather, on the basis of how well they accomplish the higher-order tasks just mentioned.

Clearly, there is an ecological imperative with which progressive economists must fulsomely grapple. Ecological limits necessitate that we see a drop in material throughput, waste and emissions. But this may or may not result in a drop in GDP/ income growth.

If we are to rise to the challenge of climate change, we would expect to see a decline in Consumption (less consumer spending on useless things, and a great deal of redistribution, with higher income households spending less and poor households spending more); and a decline in Net Exports (as we replace GHG-generating trade with more local production). However, in all likelihood, the task will require a substantially larger role for Government (as governments spend more on meeting our core needs together, and on GHG reduction measures such as building retrofits, public transit improvements, inter-city high speed rail, etc.); and likely an increase in Investment (as the private sector spends on new technology and capital equipment that allows it to capture and lower emissions). The net result of these shifts may well be that GDP still remains positive (at least for a few decades), given the scope of the task at hand.

The point is that while GDP may still grow, we would see a dramatic shift within the component parts of the GDP equation. An analogous example would be the experience of many countries re-tooling their economies during WWII: societies saw large reductions, indeed rationing, of consumer goods, and a redirection of resources by government and the private sector. People certainly changed their priorities, virtually overnight. But overall GDP increased. The challenge of climate change will ultimately require a societal effort and re-direction of resources on a similar scale.

25 For more on this inverse relationship between unemployment and climate action support, and how this is playing out in both the US and Europe in the current economic context, see: Lyle Scruggs and Salil Benegal (2012), “Declining public concern about climate change: Can we blame the great recession?” in Global Environmental Change (in press).
To state the obvious: fundamental to achieving this sustainable rebalancing of GDP is a great deal more re-distribution of income, higher taxation, and much more regulation/planning of the economy. What we cannot sustain is growing inequality, with some households spending dramatically more than they need, while others are barely making ends meet. And environmental leaders would be well advised not to deny this reality and appear Pollyanna in communicating that only minor changes are needed.26

3. Policies must be seen to be fair.

As our research on GHG emissions by income level (discussed above) demonstrates, inequality is not only a moral problem — it is a practical one in terms of getting to carbon-zero. Runaway wealth is associated with runaway emissions. High levels of inequality also undermine social cohesion and promote social divisions, rather than building the social and political trust needed if we are to chart a future based on a sense of shared fate.

If climate policies are not perceived as fair, public support will not be sustained, and political will/determination will shrink accordingly. Poverty and inequality will be exacerbated by climate policy, unless this reality is explicitly taken into account and inequality mitigation measures are built into the design of climate action measures.

Almost all climate policies, taken in isolation, have the effect of increasing prices, with a regressive distributional impact. This is not a reason not to proceed. Rather, it means that redistribution measures – both within and between states – must be core to climate action agendas.

4. The challenges we face are primarily ones of political culture, not technological ones.

The focus of climate policy and communications ought rightly to be on structural changes, through the lens of equity, and on building a vibrant movement and collective action. That is why the CJP is not merely a research project, but an alliance that focuses equally on communications and public engagement.

Technological solutions that would move us almost entirely off fossil fuels are known, as are the policies needed to take us to a low-carbon economy. What is lacking is a clear vision, courageous political leadership, and effective mobilization; all necessary ingredients for the public to fully embrace dramatic societal transformation.

5. The public needs to be included in deliberations on the way forward.

The false starts and stumbles in BC’s road towards climate action tell us that we need to have a fuller democratic conversation. We all have a right to participate in visioning a carbon neutral future, and in deciding how to enact that future. If the path to climate action is not democratic and inclusive, policy action is likely to meet with resistance.

As noted by the Rees quote at the outset, necessary bold action is currently deemed politically unsellable. But perhaps only for a time. If this past year -- marked by the Arab Spring and the fall arrival of the Occupy movement -- has taught us anything, it is that we never know when historic moments come. And when they do, that which seemed politically impossible is suddenly in play. As the science of climate change becomes more evident and destructive weather events more apparent, the public demand for change will shift, and we may well see dramatic policy change at a pace that we cannot quite imagine today.

The urgent task is to prepare for these tipping points. To lay the policy groundwork. To seed the public discourse with bold ideas, in anticipation of these moments – and they are coming – when the seemingly impossible is suddenly inescapable. There will be a transformation – a response to the climate crisis – and whether it occurs in a manner that is just and fair or unjust and repressive remains an open question. Past industrial revolutions have cast aside whole populations on the scrapheap of history. Another is coming. Our challenge is to ensure this one unfolds differently.