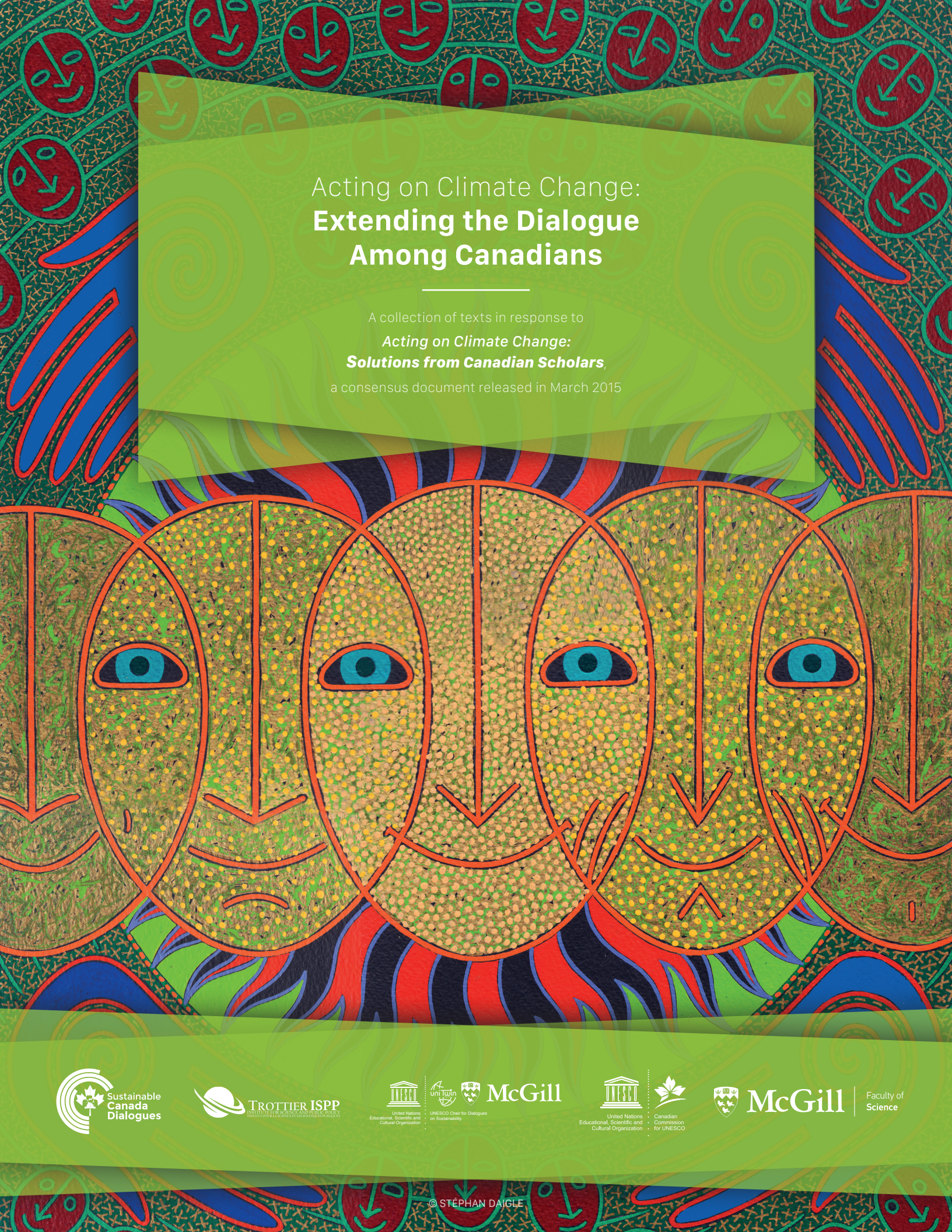

Acting on Climate Change:
Extending the Dialogue Among Canadians

A collection of texts in response to

Acting on Climate Change:
Solutions from Canadian Scholars,

a consensus document released in March 2015

Sustainable Canada Dialogues

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The Canadian Centre for Policy Alternatives is an independent, non-partisan research institute concerned with issues of social, economic and environmental justice. Founded in 1980, the CCPA is one of Canada's leading progressive voices in public policy debates.

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MARC LEE SPEAKING AT THE CANADIAN CENTRE FOR POLICY ALTERNATIVES' RECENT CONVERSATION ON CLIMATE JUSTICE, A FOUR-DAY DELIBERATIVE EXERCISE WORKING WITH ORDINARY CITIZENS IN DIALOGUE

Contributed by

MARC LEE

Envisioning a Good Green Life in British Columbia:

Lessons From the Climate Justice Project

Introduction

This paper highlights some key findings and directions from six years of research, spanning 30 publications, by the Climate Justice Project[1]. The Climate Justice Project (CJP) is a collaboration among researchers in academia, environmental NGOs, trade unions and a wide range of other community and advocacy organizations[2].

The CJP's research agenda has aimed to better understand the linkages between climate action and social justice, primarily using British Columbia as a case study, and with a view towards developing more inclusive and effective policies. We see extreme and growing inequality as the other inconvenient truth. If policies don't take into account inequalities and differing resources, they will likely make things worse for vulnerable people who have done the least to contribute to the problem.

In addition to commenting on social justice aspects of climate action, we suggest that measures outlined by Sustainable Canada Dialogues' 2015 *Acting on Climate Change: Solutions from Canadian Scholars* report are not sufficient to achieve the target of 80% reduction in emissions by 2050. In particular, the Sustainable Canada Dialogues report does not wrestle with the concept of a global carbon budget, and the key implication that a large majority of fossil fuel reserves need to be kept in the ground. Below we sketch out the linkages between climate, industrial and labour market policies as a program aimed at achieving a "green industrial revolution" [3].

Fair and Effective Carbon Pricing

A well-designed carbon tax can be the engine of a green industrial revolution – it can propel climate action from public and private sectors because it both raises the cost of emitting carbon dioxide and other greenhouse gases (GHGs), and provides the revenues needed

1 All publications available at: https://www.policyalternatives.ca/publications/reports/climate-justice-project

2 See full list of partners and collaborators at: https://www.policyalternatives.ca/projects/climate-justice-project/about/partners

3 Lee, M. and Card, A. (2012). A Green Industrial Revolution: Climate Justice, Green Jobs and Sustainable Production in Canada. Canadian Centre for Policy Alternatives, Ottawa https://www.policyalternatives.ca/publications/reports/green-industrial-revolution

to make public investments that reinforce climate action.

A key equity challenge is that taxes on consumption like the carbon tax are regressive in their distribution — lower-income households pay a larger share of their income to the tax, even though they have the smallest carbon footprints. Indeed, the carbon footprint of the richest 20% of Canadians is almost double that of the poorest 20%[4]. This is due to richer Canadians having bigger houses, more cars and travel, and greater overall consumption.

To address this problem, we argue that half of carbon tax revenues be used to fund a broad-based credit that would flow to low- to middle-income households (instead of personal or corporate income tax cuts). Specifically, we model a system (based on the Canada Child Tax Benefit model) that would provide a carbon credit to the bottom 80% of households, with the bottom half of households receiving more in credits, on average, than they would pay in carbon tax[5].

Sustainable Canada Dialogues noted the revenue-neutrality of BC's carbon tax as a possible option. We disagree with revenue-neutrality. In particular, the other half of carbon tax revenues should be used to support climate action initiatives. Top priorities include: support for public transit expansion and new infrastructure; retrofit programs for residential, institutional and commercial buildings; education and training programs for green job development; clean energy infrastructure; and forest conservation initiatives. Sustainable Canada Dialogues clearly recognizes the need for such green public infrastructure in its first report, yet does not identify a revenue source.

A challenge in moving away from fossil fuels is that companies are putting billions of dollars on the table for their investments. We argue that the carbon tax is an ideal source of revenues to support alternative investments in needed services and infrastructure.

Shifting to 100% Clean Energy

We generally support Sustainable Canada Dialogues' emphasis on new clean electricity generation to displace coal and gas-fired plants, and development of an east-west power grid. However, we are concerned about potential for privatization in the transition, and prefer new generation to be in the public sector[6].

Like carbon taxes, electricity pricing must take into account the impact on low- to middle-income earners, who pay a greater share of their income in energy/electricity costs[7]. Low-income households are also far more likely to rent their housing and to live in poorer quality housing. As tenants, they typically are not in a position to make major decisions with respect to energy efficiency improvements in their homes. To the extent they exist at all these days, most home energy retrofit programs tend to be geared toward homeowners, and so benefit the most affluent.

4 Lee, M. (2011). Who Occupies the Sky? Canadian Centre for Policy Alternatives, Vancouver.

5 Lee, M. (2011). Fair and Effective Carbon Pricing: Lessons from BC. Canadian Centre for Policy Alternatives, Vancouver, https://www.policyalternatives.ca/publications/reports/fair-and-effective-carbon-pricing. While BC has a low-income credit as part of its revenue-recycling regime, it accounts for only a small portion of revenues and is not sufficient to compensate for the regressive impacts of the tax on low-income households.

6 Calvert, J. and Lee, M. (2012). Clean Electricity, Conservation and Climate Justice in BC: Meeting our energy needs in a zero-carbon future. Canadian Centre for Policy Alternatives, Vancouver, https://www.policyalternatives.ca/electricity-justice.

7 Lee, M., Kung, E. and Owen, J. (2011). Fighting Energy Poverty in the Transition to Zero-Emission Housing: A Framework for BC. Canadian Centre for Policy Alternatives, Vancouver, http://www.policyalternatives.ca/energy-poverty

District energy (centralized production of thermal energy for heating and hot water) has a long history in urban areas, and should have a greater profile in the transition. Modern, hydronic systems offer a green infrastructure platform to reduce carbon emissions from buildings. The City of Vancouver's Neighbourhood Energy Utility is a leading example, providing heating and hot water to new buildings in Southeast False Creek, with 70% of energy demand met through recapture of waste heat from the sewer system[8].

Transportation and Complete Communities

We generally support Sustainable Canada Dialogues' directions towards a low-carbon transportation system, including electrification, active transportation and public transit. We note that several other external costs are present in transportation: air and noise pollution, time lost due to congestion, accidents leading to injury and death, other environmental costs of extracting and processing fuel, and opportunity costs of parking spaces[9]. This suggests that well-designed transportation investments have potential to improve quality of life in a variety of ways, which may have more direct relevance to Canadians, while also reducing GHG emissions.

With decent, dedicated funding for transit expansion, more efficient and higher-capacity transit networks could be built throughout Canada within a decade. Existing public transit infrastructure could be more efficiently utilized if funding is made available and accompanied by measures to discourage private vehicles by reducing available road and parking space. There is much room for performance improvement and economic benefits by investing in new infrastructure to speed up transit connections, if there are both sufficient demand and supportive land use policies[10].

Our long-term vision is of "complete communities" that emphasize walking, biking and transit, supplemented by car-sharing, with much greater proximity of homes to work, shops, entertainment, parks and public services[11]. Such a shift is already evident in parts of Canadian cities, with the City of Vancouver recently reporting that half of all trips are now by bike, walking or transit[12]. Complete communities level the playing field for seniors, youth, people with disabilities, and low-income families so they can live and move easily – even if they are not able to drive or cannot afford a car.

Affordable housing must be integrated into complete communities, including minimum affordable housing percentages in new developments and purpose-built rental[13]. The need for new housing for a growing and aging population provides an opportunity for redevelopment plans that reinforce complete communities. For our growing ranks of seniors, a range of smaller residential homes and supported care units, close to commu-

8 Lee, M. (2015). Innovative Approaches to Low-Carbon Urban Systems: A Case Study of Vancouver's Neighbourhood Energy Utility. Future Economy Project, EcoTrust and E3 Network.

9 These external costs are estimated to be three times vehicle operating costs by Litman, T. (2010). Evaluating Transportation Economic Development Impacts: Understanding How Transport Policy and Planning Decisions Affect Employment, Incomes, Productivity, Competitiveness, Property Values and Tax Revenues. Victoria Transport Policy Institute.

10 Ibid.

11 Condon, P., Doherty, E., Dow, K., Lee, M. and Price, G. (2010). Transportation Transformation: Building complete communities and a zero-emission transportation system in BC. Canadian Centre for Policy Alternatives, Vancouver, https://www.policyalternatives.ca/transportationtransformation

12 http://www.vancouversun.com/news/Transit+cycling+walking+together+rival+Vancouver+travel/11050346/story.html#ixzz3a3T58rYa

13 Lee, M., Villagomez, E., Gurstein, P., Eby, D. and Wyly, E. (2009). Affordable EcoDensity: Making Affordable Housing a Core Principle of Vancouver's EcoDensity Charter. Submission by Canadian Centre for Policy Alternatives to the City of Vancouver, https://www.policyalternatives.ca/publications/reports/affordable-ecodensity

nity health centres, would reduce mobility challenges. Public sector investments can help anchor redevelopment, with libraries, childcare, and community health centres.

Closing the Loop

"Closing the loop" refers to the shift from a linear economic model – where materials are extracted, produced into consumer goods, then trashed – towards a resource recovery model where materials cycle through the economy[14]. Upstream, proactive solutions include aggressive materials reduction, re-design, and re-use before recycling and composting. The object is dramatic reductions in the volume of materials that flow through the economy, and therefore the amount of energy used and carbon emissions from resource extraction, processing and transportation.

Incineration is promoted (as waste-to-energy) as a way of generating heat and electricity, and gives the perception of making waste disappear. However, incineration only transforms materials into different forms, releasing GHGs and other toxic compounds like dioxins and furans into the air, while still contributing solid waste (toxic ash) that must still be landfilled. Incineration also wastes the embodied energy in products that result from resource extraction and processing, product manufacture and transportation.

A wide range of innovative economic activity is possible with well-designed policies, including dematerialization, support of sharing economies, and new leasing models for various services. Re-use policies could apply "beer bottle" deposit-and-return systems to all beverage containers, containers from the grocery store, packaging from consumer electronics, etc. This would help eliminate the single-use plastics that comprise half of all the plastic produced.

Well-designed re-use policies can support local economic development and the creation of new green jobs by increasing local capacity to manage and add value to materials that are recovered. Federal and provincial governments could help build this capacity through their procurement policies and by setting minimum recycled content standards for the marketplace.

Shifting to Green Jobs

As can be seen above, there is lots of work that needs to be done, and this should be embraced as part of a national project. We advocate divestment from fossil fuels and re-investment in green infrastructure and services. Importantly, green investments tend to be more labour-intensive, and so yield anywhere from three to 30 times more direct jobs than equivalent investments in fossil fuel infrastructure. Thus, a well-designed transition plan should have a net positive impact on employment.

In addition to the areas mentioned above, a green jobs agenda should support investments in:

- Local and sustainable food systems, which will be needed in the face of climate impacts on other parts of the world, such as California's drought[15].

14 Lee, M., Legg, R., Maxwell, S. and Rees, W. (2013). Closing the Loop: Reducing Greenhouse Gas Emissions Through Zero Waste in BC. Canadian Centre for Policy Alternatives, Vancouver, http://www.policyalternatives.ca/publications/reports/closing-loop. Note that carbon dioxide is BC's single largest waste by weight—more than 49 million tonnes in 2010, compared to five million tonnes of solid waste generated –– even though carbon pollution goes into the atmosphere not a landfill.

15 Lee, M., Barbolet, H., Adams, T. and Thomson, M. (2010). Every Bite Counts: Climate Justice and BC's Food System. Canadian Centre for Policy Alternatives, https://www.policyalternatives.ca/everybitecounts

- Other low-carbon services, such as early learning and childcare, and seniors' care, including home and residential care.

- Enhanced apprenticeship and training opportunities for traditionally disadvantaged populations.

We will also need to ensure a "just transition" strategy for resource industry workers. The costs of adjustment should not be shouldered by those most impacted by them. In past resource busts, families have faced extreme instability due to lost incomes, including drug and alcohol addiction, increased domestic violence, and divorce[16]. Active public management should seek to stabilize production levels in the transition period, averting the boom and bust dynamics that plague resource communities in Canada. Over the course of three decades a smooth transition off of fossil fuels that is also fair to workers is not unreasonable.

16 Cooling, K., Lee, M., Daub, S. and Singer, J. (2015). Just Transition: Creating a green social contract for BC's resource workers. Canadian Centre for Policy Alternatives, https://www.policyalternatives.ca/publications/reports/just-transition

ABOUT THE INITIATIVE

SUSTAINABLE CANADA DIALOGUES

This contribution is part of a collection of texts, *Acting on Climate Change: Extending the Dialogue Among Canadians*, stemming from interactions between Sustainable Canada Dialogues, an initiative of the UNESCO-McGill Chair for Dialogues on Sustainability, and business associations, First Nations, non-governmental organizations, labour groups, institutions, organizations and private citizens.

Sustainable Canada Dialogues is a voluntary initiative that mobilizes over 60 researchers from every province in Canada, representing disciplines across engineering, sciences and social sciences. We are motivated by a shared view that putting options on the table will stimulate action and is long overdue in Canada.

Together, the contributions enrich the scope of possible solutions and show that Canada is brimming with ideas, possibilities and the will to act. The views expressed in *Acting on Climate Change: Extending the Dialogue Among Canadians* are those of the contributors, and are not necessarily endorsed by Sustainable Canada Dialogues.

We thank all contributors for engaging in this dialogue with us to help reach a collective vision of desired pathways to our futures.

FOR MORE INFORMATION, VISIT OUR WEBSITE

sustainablecanadadialogues.ca/en/scd/acting-on-climate-change